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“The Influence of Digital Storytelling in EFL/ESL Students’ Writing Skills”

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Autores:

Juan José Novillo Sarmiento

CI: 0105259949

juanjonovillo3@gmail.com

Grace Elizabeth Pesántez Jiménez

CI: 0105502363

gracepesantez@hotmail.com

Directora:

Lcda. María Verónica León Vélez, Mgs

CI: 0104056593

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## RESUMEN

Digital Storytelling (DS) es una herramienta tecnológica que se ha implementado en la educación del inglés como lengua extranjera y como segunda lengua en los años recientes. En efecto, los investigadores han comenzado a explorar profundamente cómo este instrumento mejora las habilidades de escritura de los estudiantes. Al recopilar, analizar e interpretar veinte estudios primarios, esta síntesis de investigación tiene como objetivo determinar la influencia de DS en la producción de textos escritos en contextos de inglés como lengua extranjera y segunda lengua. Además, este trabajo examina las percepciones de instructores y alumnos y los beneficios que tiene DS en las micro habilidades de escritura. Por lo tanto, solo se consideraron para la investigación los estudios escritos en inglés, publicados a partir del año 2014 y con un enfoque pedagógico en el contexto de inglés como lengua extranjera y segunda lengua. Los resultados han revelado efectos positivos al aplicar DS en la producción escrita de los educandos. De hecho, los hallazgos demuestran que es un instrumento que ayuda a corregir errores de puntuación, gramática, vocabulario y otros. Asimismo, esta síntesis de investigación adopta el análisis de estudios cualitativos, cuantitativos y mixtos, con mayor relevancia a los cualitativos, con el propósito de interpretar las percepciones de los aprendices y profesores sobre DS. En consecuencia, DS es considerada una herramienta que mejora las macro y micro habilidades de escritura de los aprendientes a través de la motivación, a la vez que facilita, el proceso de enseñanza-aprendizaje del inglés en sus contextos de lengua extranjera y segunda lengua, respectivamente.

**Palabras clave:** Narrativa digital. Motivación. Percepciones. Inglés como lengua extranjera. Inglés como segunda lengua. Habilidad de escritura. Tecnología.

## ABSTRACT

Digital Storytelling (DS) is a technological tool which has been implemented in English as a Foreign Language and as a Second Language (EFL, ESL) educational field in recent years. Indeed, researchers have deeply begun to explore how this instrument improves and enhances students' writing skills. By collecting, analyzing, and interpreting twenty primary studies, this research synthesis aims to determine the influence of DS on the production of students' written texts in EFL/ESL contexts. Additionally, this work examines the instructors' and pupils' perceptions and the benefits DS has caused in writing micro-skills. Therefore, only studies written in English, published from 2014 onwards, and with a pedagogical approach in an EFL/ESL context were considered for proper research. The results have revealed positive outcomes by applying DS in students' written production. In fact, findings show that it is an instrument that aids in correcting mistakes in punctuation, grammar, vocabulary, and others. Moreover, this research synthesis adopts the analysis of qualitative, quantitative, and mixed studies with greater relevance to the qualitative ones to interpret learners' and teachers' perceptions regarding DS. Consequently, DS is considered a tool that improves students' writing macro and micro-skills by means of motivation and facilitates the teaching-learning process in an EFL, ESL context.

**Keywords:** Digital storytelling. Motivation. Perceptions. English as a foreign language. English as a second language. Writing skills. Technology.

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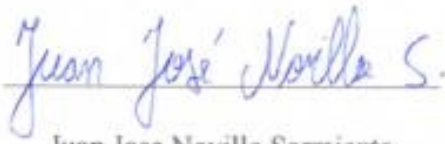
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C.I: 0105259949

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Cuenca, 02 de septiembre de 2022



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Grace Elizabeth Pesántez Jiménez

C.I. 0105502363

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## DEDICATION

*First of all, to God, who has been the one who pushed me in my most difficult moments. To my father, my star in the sky, I promised I would make it. To my mother, Miryam, the person who has been supporting me every day significantly in the most loving way possible. Thanks for being the best mother in the world. To my brother, Carlos, and my sisters, Karla and Marna, who were the ones that motivated me emotionally and economically throughout these years. Thanks a lot for all your support. To my soulmate, Nicole, who has been patient with me on this journey. Thank you for all your love; this is also yours. To my dogs, Chester and Iris, who have accompanied me in each sleepless night, have taught me how difficult life is, and how easy it is to get ahead. They have shown me the purest and most authentic love. To my friends, family in general, and work colleagues for being part of this process and helping me improve every aspect of my life.*

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*Juan José Novillo*

## DEDICATION

*This project is wholly devoted to my dear parents, Jimena and Julio, who have always been my greatest source of support and comfort in tough situations, and whose example has motivated me to become a better person. To my grandmother, Germania, whose unwavering affection inspires me to keep up the good job. To my siblings, Sofía and Alejandro, for being my greatest inspiration. To all of my family members, whose love, support, and assistance have helped me to never give up. To the loving memory of my grandfather, Paito, who would have really loved seeing me accomplish this. To my devoted friends, thank you for your support and belief in me. Lastly, I want to thank my pets, Luismi, Chiqui, Panelita, and Haru, for being the most loving creatures I have had in my life and for accompanying me on this journey.*

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## INTRODUCTION

Technology has been developed deeply in the last decade and has supported students with essential learning tools that facilitate the learning process by offering exciting alternatives to expand their language skills by means of experimentation (Al-Sharqi & Abbasi, 2020). Accordingly, in terms of EFL instruction, Digital Storytelling is conceived as an educational tool that has enhanced learners in their path to achieving academic writing excellence (Kasami, 2018). Moreover, researchers have focused on how this device improves students' writing skills by concerning the different patterns that influence the students' skills, particularly the micro-writing ones (Kasami, 2020).

Therefore, this research synthesis aims to gather, synthesize, and analyze data from twenty primary studies to examine the influence of DS on the production of learners' written texts. Furthermore, this study addresses the following research questions: 1) What factors of DS influence students' writing skills?; 2) What writing micro-skills are the most developed through the use of DS?; and 3) What are students' and teachers' perceptions regarding the use of DS as an educational tool?

This research synthesis contains six chapters which are considered of paramount importance for the understanding of the paper, stated as follows: the first chapter describes the research and addresses the background, problem statement, rationale, research questions, and objectives. The second chapter includes the theoretical framework, which argues the different theories and concepts necessary for understanding the study. The third chapter embraces the literature review and synthesizes the findings of the twenty primary research studies. The fourth chapter covers the methodology used in the research, including the inclusion and exclusion criteria designated. In the fifth chapter, the findings of the research studies are analyzed, categorized, and

discussed to answer the research questions. Lastly, the sixth chapter incorporates the conclusions, limitations, and recommendations that are of preponderant significance for comprehending the proposed work.



## CHAPTER 1

### Description of the Research

#### 1.1 Background

Recently, the use of technology has increased; whether in our daily routines to communicate, be informed, or even as an entertainment tool, we constantly rely on it. This growth has had a significant impact on all of the fields of our lives, and education is not an exception. According to Singh (2021), "the integration of digital technology in education is to transform teaching and learning into an enriching process for both teachers and students" (p. 21). Indeed, the influx of technology inside classrooms is to enhance students' learning in a meaningful way as there is a notable difference between traditional teaching methods that focus on the memorization of content rather than the development of critical thinking and the correct use of language in digital classrooms (Fu, 2013). In this sense, digital classrooms use computers and technology in learning and teaching so that students may be more involved in the creation of their own knowledge (Singh, 2021). These digital classrooms do not only introduce technology when teaching, but also create an environment where the learning process becomes something students can take advantage of. In order to benefit from technology, the teacher should use these tools and integrate them according to the curriculum, trying to create situations in which students become the center of the learning process, and instructors only guide them through the acquisition of knowledge (Zolfaghari & Reza, 2011).

Similarly, literacy has evolved within the past years from a classic process that includes writing on a paper to one that involves technological tools such as the internet, platforms, social networks, and others. The American Library Association's digital literacy task force defines digital literacy as "the ability to use information and communication technologies to find, evaluate,

create, and communicate information, requiring both cognitive and technical skills" (as cited in Heitin, 2016, p. 5). This change in literacy has brought the necessity for teachers to include new strategies which may allow students to improve their skills while applying the emerging technologies. A strategy that is part of digital literacy is known as digital storytelling (DS).

This strategy has always been a powerful tool in communication since it helps individuals share knowledge and experiences in a natural form (Smeda et al., 2014). This process has also evolved with technology; in fact, many applications and platforms have arisen to make these experiences more appealing and more accessible to people.

This evolution leads the way to digital storytelling, which is defined as the creation of narratives blended with any multimedia elements such as images, music, voice, and even social media to tell a story (Robin, 2016). According to Robin (2008), "digital storytelling allows computer users to become creative storytellers through the traditional processes of selecting a topic, conducting some research, writing a script, and developing an exciting story" (p. 222). Indeed, this can provide two ways in which students may learn. The first one happens when teachers are the ones who create stories and use them as instructional materials for the class, and the second one occurs when teachers supply students with items that help them develop their own narrative stories (Robin, 2008). Truly, the second one is more effective than the first one as individuals take the initiative to construct their own learning. Additionally, DS has many tools that allow learners to immerse themselves in the writing process. One main difference between the traditional methodology in writing and the technological one is the group of steps involved in creating the story and the possibility of interaction between readers and students' literary works. Every platform has a different procedure; some might let pupils select the images first, and others might allow them to write first and then create the image they will use for their narratives.

Furthermore, learners can give access to other students and creators to see their work by sharing a link. This feature grants students the opportunity to be involved in a cooperative learning experience feeling more confident and comfortable doing their assignments (González, 2020). According to Byrne (1988), when writing, students make use of sounds to become later words that need to be arranged following a specific order to create understandable sentences; this process needs individuals to have a certain level of grammar, vocabulary, and mechanics (Anita, 2016). In this sense, DS contributes to attaining such elements as, "students are asked to research a topic, look for materials, and finally construct their stories" (as cited in Zakaria & Aziz, 2019, p.321).

Mousazadeh (2018), on his own, conducted a study that applied pre and post-tests to analyze in-depth DS effects. The study was split into two phases: during the first phase of the study, all the participants did their assignments without any DS tool, while during the second phase, Storyjumper was incorporated. Results indicated that integrating technology into writing tasks has numerous positive effects. For instance, creating their own stories engaged learners, which led to a rise in pupils' motivation and confidence. Moreover, another study conducted by Chiang (2020) mentions that the use of DS in writing-related self-efficacy on University students increased through the use of Storybird. It also suggests that communication and purpose-driven self-efficacy could be strengthened if the participants have long periods of practice with the tool. Likewise, the researchers Rahimi and Yadollahi (2017) analyzed DS's impact on students' literary works. According to the Common European Framework of Reference for Languages (2001), the participants were female high school students whose English proficiency level was elemental. The research used a control group and an experimental one. The experimental group worked with Storyjumper to create their tasks while the control group used PowerPoint. Both groups followed the same procedure in their creation process: pre-writing, writing, response providing, revising,

editing, post-writing, and evaluating. The researchers concluded that digital stories, which incorporate online platforms, improved English literacy compared to the integration of an offline program such as PowerPoint.

Besides, digital storytelling use has many positive effects on students' creativity, communication, motivation, and overall writing skills (Abdel-Hack & Helwa, 2014). Nevertheless, it does not mean that DS is the only technological tool that may help improve these skills. Additionally, it must be recognized that its outcomes do not only rely on the proper use of technology inside a classroom, but also depend on the teacher and the atmosphere they generate within that space (Mousazadeh, 2018).

Since teaching is such a complicated procedure, new techniques and methods are created to help language learning become more effortless every day. Therefore, DS combines technology with the art of telling stories (Robin, 2016) to make writing tasks more appealing to individuals, which favors the increase of their language literacy.

## **1.2 Problem Statement**

English is one of the most spoken languages worldwide (Patel & Jain, 2008), so it is an essential pillar for the students of Ecuador since it is perceived to improve opportunities to get a job and help students communicate with people from other parts of the world (British Council, 2015). However, the level of proficiency established in the national curriculum, which is a B1 (Ministerio de Educación, 2016a), has yet to be achieved. In 2020, the International Education Organization Education First (2020) published an English proficiency index in which Ecuador's rank was above the category 'low' and positioned number 93 out of 100. All these problems lead us to the conclusion that Ecuadorian students cannot improve their English skills because of a poor educational system organization and its lack of technology. For that reason, it has become a

quantitative process that focuses more on numbers, statistics, and ratings rather than the true essence of teaching (Fajardo, 2016).

On the other hand, writing is considered one of the most difficult skills to learn in a second/foreign language since it is not a natural process and needs specific rules or instructions (Aronoff & Rees- Miller, 2007). In our context, since Ecuador is a Spanish-speaking country, students most of the time speak and interact by using their mother tongue. This continuous use of their first language can interfere in English writing, and they will most likely end up translating word by word to produce academic texts (Cabrera et al., 2014). One reason students employ this technique could be the lack of motivation when creating texts in English (Ministerio de Educación, 2016b). Also, the deficiency of technology does not help students to avoid this problem. Digital storytelling is considered an educational tool due to its multimedia features that help learners to increase their abilities in writing texts (Dogán & Robin, 2009). However, if students do not have access to this tool, or if they require paying for accessing this device, it would be complicated to enhance their writing skills, especially in the Ecuadorian context in which most of the learners cannot afford that privilege.

As mentioned above, English as a Foreign Language (EFL) and English as a Second Language (ESL) students have a significant issue when they are asked to write about something specific. Also, they have this predicament when they are required to develop a text based on certain categories or a particular context. This could be a problem due to the lack of imagination and motivation some learners may have. According to Robin (2008), “Digital Storytelling can be a powerful educational tool for students at all ages and grade levels who are tasked with creating their own stories” (p.18). Creating something involves a mixture of many abilities, including imagination and creativity. Pupils cannot succeed in their writing tasks because they are not

engaged in the activities, and they cannot reason because of the absence of the previous issues. Thus, digital storytelling might increase students' abilities to write academic texts by giving them the benefit to think and resonate on their own and set up their instruction by imagining situations that would improve their knowledge (Cheng & Chuang, 2018).

Therefore, the use of technology in education should be a priority, as it favors students' learning since it provides new ways to practice the language (Dudeney & Hockly, 2008). Nonetheless, Ecuador has a long way to go when implementing information and communication technologies (ICTs) in their education; neither students nor teachers are ready for a drastic change in improving education with the implementation of technological tools within the classroom nowadays. A reason this may happen is the lack of instruction on essential devices for teachers. Indeed, according to some studies, they feel burdened and find it difficult to introduce these new tools to their classrooms (Solano et al., 2017). In the same line, according to Sadik (2008), "Although research emphasizes the importance of integrating technology into the curriculum, the use of technology can only be effective if teachers themselves possess the expertise to use technology in a meaningful way in the classroom" (p.78). Furthermore, the institutions may not provide enough technological resources students and teachers need to work with. This might force the use of traditional methods or, less frequently, implementation of ICTs (Solano et al., 2017).

As a result, digital storytelling can be used inside classrooms to enhance students' creativity, motivation, and writing skills (Lim & Md Noor, 2019). However, the lack of preparation/knowledge presented by teachers and institutions with emerging technologies has significantly hindered the proper use of DS.

### **1.3 Rationale**

When teaching English as a foreign language, writing plays a vital role in students'

performance as it fosters them to express their ideas and develop a communicative competence that is so much needed in today's education. At present, writing has helped students to develop their self-expression, and this has allowed them to express their thoughts clearly (Dogan & Robin, 2009). For this reason, educators should be completely committed to the teaching-learning process and facilitate knowledge to their students by using an approach that might motivate, enhance, and make pupils build their abilities to reach meaningful learning (Rubio, 2009). Also, it is crucial that students work on building their own motivation to improve their writing skills. Indeed, teachers are the ones in charge of helping students to achieve it; however, they are not responsible for that. DS is great to help with this issue and collaborate with the previous aim.

Currently, students are getting more interested in helping each other thanks to the increment of digital tools which enhance their reading and writing skills (Bromley, 2012). In this vein, DS may help students to open themselves and try to participate in a communicative environment.

Additionally, digital storytelling brings many positive aspects when used as an educational tool. In terms of Frazel (2010), DS creates a fun and motivating environment to learn while incorporating technology. This works as a bridge between the school and the community, and it is helpful for visual and auditory learners, especially. Moreover, giving students the opportunity to create their own stories with a DS tool, engages learners which leads to a rise in their motivation and confidence according to Mousazadeh (2018). In writing, DS also enables students to commit fewer grammatical mistakes, which makes them feel more motivated to write and enjoy the process of creating by themselves their own tales (Soler, 2014).

As a result, DS may help learners to construct their identities as well as experiences and context. Students can make a story of the backgrounds of their cultures and histories by developing a composition by means of digital storytelling. Thus, constructing literacy identities becomes a

matter of context, and it works properly by implementing digital storytelling within a classroom (Foley, 2013; Vasudevan et al., 2010).

Besides, the wide range of technological tools this new era has brought allows teachers to try something new in their lessons. DS, although not being the only methodology that creates a joyful environment in which students can learn, grants instructors a combination of an engaging writing procedure and a motivating environment to enhance learners' literacy abilities. Thereby, DS can be considered a meaningful technological tool in the educational system as this improves learners' motivation and upgrades students' skills.

When students are able to obtain their required data successfully by using technological tools, the efficacy of technology becomes important in the development of the learning process (Schmitt, 2002). That is why digital storytelling not only helps students to increase their oral abilities, but also their written ones as this tool aims to mix features of both skills (Ulusoy & Yamaç, 2016). According to Frazel (2010), "Multimedia storytelling is the modern expression of an old art" (p. 61). For that reason, it is essential for Ecuadorian learners to know how to write and improve their skills in the production of written texts with the help of their educators through the use of DS in the classroom.

Many researchers have pointed out the fact that DS can help in many ways to EFL and ESL learners to consider these educational strategies as important and call teachers around the world to enhance their classes by implementing them. Some of these investigations reveal that "digital storytelling enriches learning environment, curriculum, and learning experiences; enhances learning motivation and problem-solving capacities; makes students gain self-confidence, and strengthens the sense of voice, story organization, multimedia literacy skills and writing skills" (as cited in Ulusoy & Yamaç, 2016, p.61).



Since this research synthesis aims to provide an overview of DS in students' writing skills and their motivation, it enables teachers to access information of a technological tool, and it helps them understand how DS has been employed inside classrooms. This last one inspires learners to create English texts, increase their autonomy, and accomplish significant skills (Chiang, 2020). Moreover, this synthesis facilitates knowledge about DS and its advantages and disadvantages. It also presents a general review of how it can improve students' literacy skills. Lastly, it can be used as an introductory guide to teachers in Ecuador in order to understand better the different applications technology can provide in an educational context as well as encourage them to implement it in their classes.

## **1.4 Research Questions**

This research synthesis aims to answer the following questions, as reported by the pertinent literature:

1. What factors of DS influence students' writing skills?
2. What writing micro-skills are the most developed through the use of DS?
3. What are students' and teachers' perceptions regarding the use of DS as an educational tool?

## **1.5 Objectives**

### ***1.5.1 General Objective:***

1. To analyze the influence of digital storytelling on EFL/ESL students' writing proficiency and performance.

### ***1.5.2 Specific objectives:***

1. To describe the influential factors of digital storytelling on students' writing skills.
2. To identify the micro-skills that are developed in students' writing proficiency and

performance through the use of DS.

3. To analyze students' and teachers' perceptions of DS as an educational tool.

## CHAPTER II

### Theoretical Framework

#### 2.1 Introduction

This chapter entails the theoretical aspects that need to be considered to comprehend what primary studies encompass in the literature review. Thus, this section contains vital concepts related to ICT definitions and their role in the EFL/ESL learning process, the integration of technological methods in English skills, specifically in writing, digital storytelling programs and their advantages and disadvantages in the educational process, and the writing stages, respectively.

#### 2.2 ICT in the EFL/ESL learning process

Information and communication technology (ICT) has become of paramount importance in the field of education. The use of ICT has been defined as a multiple set of technological tools that help individuals to communicate, create, and manage different sources of information to improve their necessities (Pardede, 2020). This tool has become of relevant significance in education as these new technologies make the learning materials accessible for both teachers and students whenever they want and wherever they are (Pardede, 2020). ICT has developed its advantages in general teaching and learning instruction, but it has also revolutionized the EFL environment.

One reason why ICT collaborates in the EFL/ESL learning process is that besides the fact that teachers can find the required information for their classes easily to create a more engaging, motivating, and pleasant course for their pupils, ICT also enhances instructors to use different tools that help them improve the language use beyond the classroom (Boukhechba & Bouhania, 2019). Furthermore, these tools positively affect the learning

domain, improve student interaction, increase the learning process quality, and upgrade the teaching execution in varied educational fields. Indeed, the educational community has been positively affected by ICT implementation according to Shaaban and Shawish (2019) as it allows the integration of new devices and methods, thus enhancing students' chances to develop their skills accurately. For instance, platforms or e-courses can be a way in which students develop specific skills such as listening and reading based on the application of diverse interactive and dynamic tasks and activities (Shaaban & Shawish, 2019).

Moreover, Pardede (2020) reports that "ICT integration to the class can boost student participation, promote a student-centered model, and improve the majors' language skills: reading, listening, speaking, and specifically the students' writing performance" (p. 144). In this regard, writing skill is defined as transmitting knowledge about a specific domain into words to communicate a written message to someone (Utami & Rais, 2011). This ability is the most challenging among the other skills because it encompasses cognitive strategies and previous knowledge about the target language in terms of gender, culture, and values (Yüce & Aksu Ataç, 2019). The use of technology in writing tasks can be of essential significance as students may be engaged in the activity, making it easier for both instructors and learners. As writing is mandatory in schools and high schools, students may see it as a tedious and complex procedure. Notwithstanding, in the context of a digital world with the increase of many technological tools that can enhance students' abilities, their implementation to improve writing skills should be considered. Actually, the widespread use of digital devices, such as computers, programs, and smartphones highly motivates learners and engages them in the development of these kinds of tasks (Almenarez et al., 2020).

Therefore, the importance of implementing different technological tools or methods

to an EFL/ESL writing class is still prevalent and should be applied frequently. One of the instruments that assist teachers are online tools to assess student writing. By using them, instructors might gain much time and allow formative assessment and feedback for their pupils, and the grading criteria might also become more effective (Law, 2019). Furthermore, in the educational field, there are some tools which may help students improve their writing necessities, such as Padlet, Grammarly, and Digital Storytelling. On the other hand, the traditional method of teaching how to write initiates with the instructor as the center of the classroom, however, this setting has slowly been replaced by ICT tools; for example, the implementation of DS instead of teacher's traditional instruction seems to be effective towards students' assessment of their learning process and improvement in their writing skills (Jong & Tan, 2021). For the above, implementing ICT in EFL/ESL classrooms might benefit students' writing performance and facilitate teachers' assessment practices.

### **2.3 Digital Storytelling as a new writing tool**

Digital Storytelling has been presented as the use of computers, editing programs, and digital cameras to create a short multimedia film (Meadows, 2003). Nonetheless, this definition has changed and evolved into something more complete. Hessler and Lambert (2017) delineate it as a genre that uses social media and involves everyday people in its creation. Robin and McNeil (2019) wrote a more comprehensive portrayal of DS. They define it as a device that combines technology and narratives, allowing people to create their own stories by using images, sounds, text, video clips, and even adding their own voice to create a more emotionally appealing text. All of these definitions have something in common: technology and narratives; therefore, we can define DS as a tool that uses technology and social media to narrate a story.

Nowadays, this instrument can be found in the form of many websites and programs; indeed, some of these are paid while others are free. Paid programs such as Storybook and Pixton provide users additional images, videos, and audio to work with. In contrast, free programs such as Storybird, Storyjumper, and Slidestory have more compact options for the creation of stories; they all are great resources for the design of chronicles. Although there may be some variations in these programs and websites, Lambert et al. (2010), pioneers in the use of DS, have proposed six elements that should be part of it, stated as follows: Owning your emotions, which answers the following question: what feelings do you want to show the audience, and how will you portray them in the story?; Finding the moment, when should you provide your insight of the story?; Seeing your story, what visuals and sounds will you use in the creation process?; Hearing your story, how will you tell the narrative?; Assembling your anecdote: this component refers to the writing of a first draft; finally, the last element is Sharing your story which talks about reviewing the work and correcting mistakes to publish it on a website eventually. In sum, all of these make DS a device that, if used correctly, may positively affect learning.

## **2.4 Digital Storytelling: Advantages and disadvantages in the educative field and writing instruction.**

As antecedently alluded, DS can serve as a writing tool in the educational process, which if applied correctly, may help teachers and pupils effectively. Therefore, Van Gils (2005) identified six primary advantages this instrument can have on education. The first one is the variation: DS offers students something new, different from the traditional methods they are used to. The second one is personalization: pupils have the opportunity to create tales and narratives by adding their own experiences and thoughts to them; this feature

helps them become more active in their learning. The third one is compelling: DS makes it easier for teachers to approach a topic by boosting students' interest. The fourth one is real-life situations: the educator can introduce specific problems, issues, lexicon, and more requirements for the story learners will write. The fifth one is engagement: the thought of producing a text of any topic results in a fascinating idea for students. Finally, the sixth one is active learning: when selecting the topic, images, and audio, the person who writes the narrative will be immersed in its creation and so more involved in its learning process.

As recently placarded, DS can be helpful to impart classes; furthermore, it can have an impact on students' writing skills. In fact, the ability to write seems to be of high importance in the process of learning a language, nevertheless, learning English might become a difficult task because of this skill. Most ESL/EFL learners avoid writing in English for several reasons: one of them is the lack of vocabulary they have; another is the poor engagement they undergo to complete the task; and lastly, the laziness of writing due to it is a dull and complex activity (Lestari et al., 2019). As a result, DS can become useful to engage students in the writing process, and at the same time, make it something enthralling (Skinner & Hagood, 2008). Additionally, learners improve in writing, committing fewer grammatical mistakes, feeling more motivated, and enjoying the process of selecting images for their tales and narratives (Soler, 2014). As a matter of fact, writing is a skill that may help students improve their vocabulary; it can be taught appropriately if teachers adequate the real-world context with learners' necessities to increase their desire to write (Lestari et al., 2019), and lastly, DS is considered a flexible tool which can be used by the educator to introduce the topics in class by using real-life situations.

The previously mentioned advantages apply when individuals adhere to the

following DS writing stages (Jakes & Brennan, 2005): First, students begin by writing a draft of the topic they choose for their assignment. Then, they develop a script for the draft they had already revised with the teacher or the help of another student. Afterwards, pupils use the platform or website the class has decided to work with; commonly by means of it, they organize their drafts in panels. Next, learners locate and search the proper multimedia, searching for realistic images, videos, or photographs for their work. Subsequently, they create their digital storytelling by blending all the elements they have prepared for their tales and/or narrations. At this stage, learners usually receive feedback from their friends to finally conclude their story with the publication of the final work.

Even so, DS also holds several educational disadvantages that should be taken into consideration, as follows: First, DS is a very time-consuming activity as students are required to create drafts, look for images and audios, record themselves, and other steps to complete their assignment, which holds lots of effort. Second, students may not feel comfortable sharing their stories as they will feel vulnerable to their classmates' comments and even be afraid of them pointing out some mistakes. Third, DS needs the guidance of the teacher at every stage of it; indeed, this is necessary for the constant feedback and assessment provided. Fourth, DS may not be a tool that works for every learning style of learners.

Once again, it is consequential to keep in mind that when programs include the use of technology, some problems may arise in the writing activity: students may not be familiar with them, or connectivity issues can happen when writing. Furthermore, learners can feel frightened or uncomfortable with this kind of assignment; therefore, it should be noticed that these websites and programs are not the only platforms that can be considered to improve and enhance students' writing skills.



## 2.5 Conclusion

This chapter has covered different concepts, presumptions, and perspectives from authors who have discussed independent topics, such as ICT implementation, writing skills, and digital storytelling. This theoretical framework is considered of paramount importance due to its contribution to the further understanding of the paper and its guidance to enhance the development of the upcoming chapters in this research synthesis.

## CHAPTER III

### Literature Review

#### 3.1 Introduction

This chapter addresses significant findings and descriptions of the 20 studies reviewed. The literature that has supported this project centers on using Digital Storytelling to improve students' writing skills. Therefore, the articles have been classified into four categories: a) The use of DS programs to enhance English writing skills, b) Writing micro-skills evolved through DS, c) Learners' and teachers' perceptions of DS in English texts and narratives, d) DS role in students' writing motivation.

#### 3.2 The use of DS programs to enhance English writing skills

In the last decade, the impact of technological tools in EFL contexts has been of paramount importance. Hence, the development of English writing skills has been directly affected by using specific platforms such as DS, namely in improving this competence.

After using the DS tool, Lim and Noor (2019) conducted a study centered on the significant difference in students' writing skills. The study was carried out with 15 secondary school students who were learning EFL. In order to collect data, four stages were implemented. For each of them, students had to produce a five-page story with a minimum of 15 words per page in the DS application named “Storybird” Then, learners were asked to write the stories on that platform based on a specific topic given beforehand. They were bestowed two hours to complete the task. Likewise, teachers were getting ready to assess the digital stories created by using some analytic rubrics. Findings demonstrated that the elements of DS tools and the application of Storybird promoted students' writing skills for two main reasons: First, the effort of improving the observation checklist and rubrics to

achieve the research objective by teachers was significant, and students' results were notable since they achieved the significant analytic terms in each of the rubrics. Second, learners acquired new vocabulary and expressions that were effectively applied in meaningful and appropriate contexts, which teachers struggled with before using DS. For these reasons, the authors argued that the usage of DS by operating the specific application Storybird would bring a positive effect on teaching-learning writing instruction.

These findings are similar to those reported by Soler (2014), who revealed other beneficial aspects of the employment of DS to enhance students' writing skills. In his study, 21 students in the third year of the EFL major at the University of Valencia participated in an intervention, whose objective was the application of the “Photostory” program. On the one hand, the implementation of this platform, which was relatively new for students, was applied to the control group of the research only. On the other hand, the experimental group did not use this program to write. The results showed that the control group was more eager to write than the experimental one. Additionally, fewer grammatical mistakes were committed due to more accurate writing. Using pictures and describing them was the main factor that improved students' writing ability through this DS program.

In vein with what was mentioned, there are different factors and programs that influence English writing skills. Many studies have shown these aspects. A case in point is Balaman (2018), who stated that one particular reason why DS programs enhance students' writing skills is that they meet today's students' needs and expectations by opening up a new way for them to express themselves in diverse modalities and contexts. According to his study, 43 EFL intermediate level students were assorted into two groups: one experimental and one observative. The experimental group was exposed to another DS program called

“Toontastic”, in which they were disported to five-hour writing instruction, mainly based on learning divergent paragraph types by using the program.

Nevertheless, the author mentioned that it was difficult for students to get used to the program initially; therefore, learners did not show interest when they started to write. Even so, after a couple of lessons, some of the findings demonstrated that the use of this program presented a significant effect on learners' writing performance by the end of the course.

Turning now to Mousazadeh (2018), the purpose of his research was to investigate if the program "Storyjumper," which functions as a computer-assisted application, promotes the development of EFL learners' writing ability. The participants of this study were 15 EFL students of intermediate proficiency level, who were part of two extended periods. The first one consisted of writing stories in the traditional paper style, and the second one was about writing by using the Storyjumper program to compare the differences in learners' tasks.

Consequently, the results showed that the second period was more successful than the first one due to the enactment of Storyjumper as it attracts learners' interest in writing in many different ways and makes students express their ideas and beliefs in a greater way.

In sum, this section reckoned the diversity of programs that educators can employ to enhance learners' writing abilities. In addition, it recounted research centered on aspects that may improve scholars' faculties in this particular domain. As a result, according to the studies analyzed, DS programs can improve students' writing skills effectively.

### **3.3 Writing micro-skills evolved through DS**

It has been mentioned in previous chapters that writing is probably the most complex skill when learning EFL. In consequence, some authors have rendered their research on how

to develop writing skills, specifically the micro ones. Accordingly, DS may be considered an illustrious alternative to upgrade this ability as it might become much more helpful for specific types of writing, such as persuasive, expository, descriptive, and narrative. The latter may be the one that would be evolved the most since the purpose of DS is to tell stories.

In line with the aforementioned, Kim and Lee (2017) studied the value of DS in the production of narrative texts and the development of some writing micro-skills. The researchers used two groups: one control and one experimental, with 50 participants in two modes: in-class by means of traditional storytelling and through DS. Each group was required to develop a story by recording their voices and writing its script as a narrative text. Findings suggested that the experimental group presented a more academic and complex script than the control group due to the use of technology. In other words, we can interpret these results in two ways: First, the use of vocabulary increased significantly in the DS group since the words and content were closely related to the availability of the multimedia element. Second, the production of the narrative script was sharpened because students' feelings were shown positive towards the use of DS. Similarly, Robin (2008) concluded that the emergence of this technological tool was an advantage for his actors in the teaching-learning process. In addition, he demonstrated that this device substantially improves certain aspects of narrative writing, such as vocabulary, punctuation, and spelling, which are essential micro-skills in academic writing.

In a similar vein, Guvey (2020) employed a case study design with qualitative data focused on the digital folktale writing activity performed by 92 pre-service teachers attending a state university in Turkey. The Storyjumper application was used to collaborate with this research. Among the participants, 22 groups were formed to be interviewed in order

to obtain validated information about how the use of a Digital Storytelling application could improve some writing micro-skills. As a result, the participants expressed that Storyjumper undoubtedly improved their grammar and vocabulary eloquently. In addition, they argued that their micro-skills of spelling and punctuation also improved significantly since this computer-assisted platform helped students learn new things about the meanings of the words by learning how to write each morpheme correctly. Thus, their lexis increased.

Likewise, Galvan (2020) conducted a study to determine the effectiveness of using DS in writing tasks, but in younger learners. The participants were seven female and male students aged 9-10, taking online classes due to the pandemic situation. A questionnaire on students' perceptions of the writing process while using the technological tool was administered at the beginning of the intervention. The study was divided into two main stages, so the researcher got two main results: The first one was that students improved appropriateness, their desire to write increased, and the correct spelling of words boosted significantly with the implementation of DS. Second, scholars narratively used the English language effectively as they gathered their ideas by brainstorming them in a pre-writing stage to later reach an agreement on the story plot, characters, and setting. Of course, all the vocabulary and grammar structures were moderated according to their level of English; notwithstanding, through this device, they clearly increased their narrative writing skills.

Other authors, who were concerned about the development of writing micro-skills by means of DS, were Yamac and Ulusoy (2016). Their research centered on two main aspects: The first one was how the process of DS affected third graders' writing performance, and the second was how this tool influenced the process of narrative writing. The investigators administered an interview design over the second semester of 2013-2014 academic years in

a village to obtain the desired data. The total number of participants was 26 students. In this study, learners were exposed for the first time to DS. After some analyses and interviews, Yamac and Ulusoy revealed the following: a) The lack of editing strategies was noticeable before the implementation of DS; nevertheless, once students interacted with the applications, they improved their spelling, punctuation, and self-assessment abilities. In fact, they learned the purpose of editing their texts and the types of editing they were supposed to do; as a result, their writing micro-skills were exceptionally enhanced. b) Students' knowledge in regard to narrative texts was not proficient. After the intervention and respective analysis, learners started mastering narrative texts and their components. Consequently, they were able to organize their ideas and include critical narrative elements, such as characters, environment, problem, plot, main idea, and conclusion. Researchers provided this data and concluded that both writing micro-skills and narrative elements were highly potentiated.

The literature presented in this section established that Digital Storytelling had a positive effect and impact on learners' writing performance. According to what was analyzed in this segment, not only the micro-skills of writing were intensified, but also the knowledge respecting the types of writings, precisely the narrative one which increased analogously.

### **3.4 Learners' and teachers' perceptions of DS in English texts and narratives**

Investigation on learners' and teachers' perceptions with respect to DS in the development of English texts and narratives has become valuable to educational fields as it helps the educative community comprehend how this tool is appreciated and welcomed inside classrooms. Hence, the following information has been taken from research which examines scholars' and educators' insights and attitudes regarding the implementation of DS

in their writing process.

In line with what was mentioned, Azis and Husnawadi (2020) developed a study on the efficacy of DS as a collaborative task-based method to teach writing in English. One of the critical questions they tried to answer in this research was how students perceived DS in their writing development, motivation, and engagement. The findings of reflective journals and interviews indicated that learners felt more engaged in and outside the classrooms because the tool's characteristics allowed pupils to be more involved in the task. Similarly, Mousazadeh (2018) and Tanrikulu (2020) carried out akin research papers in which they mentioned DS promoted students' engagement. In fact, the individuals participated more in the class task and became aware of their writing mistakes, considering their narratives would be published later.

Besides, Chiang (2020) conducted a study to know in-depth how students in their writing class perceived Storybird, taking into account that this platform lets learners receive feedback and publish their work online; indeed, this app boosts enthusiasm, writing self-efficacy, and motivation. As a result, learners evidenced an increment of creativity in their writing production. Forbye, Zakaria and Aziz (2019) implemented an experimental research study to identify how the application of DS in a secondary school could change ESL students' writing/narrative skills. The researchers used pre and post-tests to determine if there was any improvement in those areas or not. Also, a semi-structured interview was administered to detect learners' perceptions. Participants were divided into two groups: the control and the experimental. The experimental group applied a DS approach to create their stories while the controlled one used a traditional method. Students mentioned that DS made generating ideas more accessible and lexicon was enhanced.



Correspondingly, Hava (2019), Mousazadeh (2018), and Tanrikulu (2020) ascertained after analyzing some surveys, interviews, reflective journals, and satisfaction scales that students found it easier to be creative and come up with ideas by using DS. This phenomenon occurred because the images provided by the applications and websites facilitated the writing assignment.

Following erstwhile studies, Abdel-Hack and Helwa (2014) performed an investigation whose primary purpose was to analyze the effects of DS on learners' critical thinking and writing skills. The participants were 40 third-year students enrolled in English at a University in Egypt, and the programs Storybird and Storyboard were employed to create their English narratives. Researchers applied a questionnaire, a test, a critical thinking scale, and an unstructured interview to collect data, in which students reported their English skills had improved, so they felt more confident to write. Cognate findings were disclosed by Mousazadeh (2018) and Zakaria and Aziz (2019), who stated that assuredly pupils denoted the collaborative nature of DS, and the assignment generated a sense of authority and authorship that developed their self-confidence in their narratives. Likewise, a study carried out by Tanrikulu (2020) focused on recognizing EFL students' perceptions of DS as a writing tool in a collaborative environment. Partakers wrote a diary about their opinions regarding the learning process to collect the data. Additionally, the investigator used focus group interviews to know the learners' ideas in depth. The study was split into two stages: In the first one, participants wrote an individual story, received feedback, and presented the work in class. In the second stage, students wrote a story collaboratively in groups from two to three, received feedback, and presented their final tale. Findings reflected that DS improved students' writing skills as learners reported being more aware of their mistakes and spelling

rules. Conjointly, pupils organized the texts easier, and the employment of multimedia helped them connect their ideas more logically.

Nevertheless, some learners have also provided adverse opinions concerning DS. One study carried out by Hava (2019) analyzed digital storytelling's effect on EFL students' motivation and satisfaction. In his study, 60 undergraduate students, between 18 and 21 years old, took part of a workshop regarding Digital Storytelling and certain applications such as Openshot, Windows Movie Maker, and others to create three stories related to diverse themes. A motivation scale and satisfaction questionnaire were applied to know the effects these tools could provoke on students. The results indicated that DS had little impact on learners' motivation, self-confidence, and attitude. As a matter of fact, a number of sixteen individuals described it as unnecessary and time-consuming. Besides that, Azis and Husnawadi (2020), Chiang (2020), and Mousazadeh (2018) revealed pupils found the programs difficult to use; guidance from the teacher or the instructor was always required; poor internet connection did not let students write effectively; and the inflexibility of programs did not let them use various illustrations from certain artists.

On the other hand, to grasp teachers' perspectives, Castillo et al. (2021) enacted research that sought to ferret out the impact of DS on EFL pre-service teachers' writing skills. The participants were 101 students of the English Major at a university in Ecuador. They were classified into a control and an experimental group; the instruments included a pre-questionnaire, a pre-test, a post-questionnaire, and a post-test. The data collected showed that participants considered DS a motivational learner-centered approach and encouraging tool which increases students' autonomy, self-confidence, and active learning. Furthermore, a similar study held by Tiba et al. (2015) explored pre-service teachers' perceptions of

potential benefits and barriers to DS uptake during in-service practice. The individuals indicated DS might be used inside classrooms to engage, motivate, and promote learners' self-expression.

Along with it, Rahimi and Yadollahi (2017) investigated the effects of online Digital Storytelling compared to offline Storytelling in the literacy skills of ELF students. The participants were female high school learners who were categorized into a control group and an experimental one. The experimental group implemented Storyjumper, a digital storytelling tool, to create their tasks, while the control group used PowerPoint for the same purposes.

Both groups followed the same procedure in their creation process: pre-writing, writing, response providing, revising, editing, post-writing, and evaluating. At the end of the intervention, teachers found positive perceptions of the effectiveness of technologies on both their students' writing habits and their role as educators.

Over and above that, Özüdoğru (2021) employed a semi-structured interview to reveal teachers' opinions about the use of DS. The participants were 38 educators who were taught DS history, function, and components as a technological tool. As a result, educators connoted DS would work effectively to attract students' attention, increase class participation, teach the English subject easily, and provide permanent learning instruction. Notwithstanding, in spite of the previously mentioned positive traits DS could have, educators also manifested that time, resources, students' software knowledge, and technological issues could refrain teachers from implementing this tool in their classes (Özüdoğru, 2021; Tiba et al., 2015).

## 3.5 DS role in students' writing motivation

Motivation plays an essential role in the EFL/ESL teaching-learning process. The impact of Digital Storytelling on students' impulse to write has become valuable to educational fields. Thus, the prior studies have collected data to understand better the role DS may have in motivation.

Some of the previously analyzed studies have already mentioned an increase in pupils' motivation when writing narratives by means of DS; this motivation can be divided into intrinsic and extrinsic motivation. In the words of Hennessey et al. (2015), intrinsic motivation is the one that comes from within the doer. Once the task is completed, the learner feels satisfaction. Meanwhile, extrinsic motivation is generated from external social factors; in the case of education, it can be a good grade, time limits, rewards, among others.

In the pre-research, learners showed an increase of intrinsic motivation since DS platforms and websites evoked interest in the writing task and raised engagement on it (Abdel-Hack & Helwa, 2014; Azis & Husnawadi, 2020). Similarly, pupils enjoyed their creative narrative process and were willing to keep using the program.

Accordingly, extrinsic motivation was uttered by participants from several studies. For instance, González (2020) implemented a research study to comprehend how DS and narratives boost literacy practices. The participants were eleventh graders at a private school in Mosquera, Colombia. They wrote a diary on their perspectives of DS and participated in a questionnaire at the end of the investigation. Data illustrates that individuals were acutely motivated by DS since the program was exciting, fun, and different from previous classes.

Indeed, pupils felt more engaged in the writing process for their tales would be published, and the idea of people reading their work made them put more effort into it

(Balaman, 2018; Chiang, 2020; Mousazadeh, 2018; Rahimi & Yadollahi, 2017). Lastly, Lim and Md Noor (2019) suggested that motivation was enhanced through the influence of words and digital pictures, which abetted learners' writing performance.

### **3.6 Conclusion**

Digital Storytelling seems to play a considerable role in the English teaching process since it could be beneficial in EFL/ESL contexts. Research has attempted to show how DS might aid and improve learners' language skills, particularly writing narratives.

Additionally, there has been interest in exploring the perceptions students and teachers have towards using this tool in their English classes and the manner DS motivates students to write. Thus, in this section, literature has been revised in accordance with the effects of using DS in EFL/ESL classes, the impact of DS on the writing skills, the perceptions learners and educators have exhibited on its implementation, and writing motivation.

## CHAPTER IV

### Methodology

A research synthesis can be defined as a mechanism of several types of analytical process to benefit researchers to improve the different dilemmas that arise in literature reviews. (Chong & Plonsky, 2021) In this vein, this type of research integrates several types of learning across primary research studies. These investigations need to pass over different processes, identification, selection, and categorization in order to appropriately synthesize the matter of debate (Hammond et al., 2020). Thus, the data in this paper were selected from primary research studies which encompass inclusive criteria as detailed below.

- All the articles reported only on empirical studies due to the necessity of having reliability and validity in the findings.
- The considered articles included quantitative, qualitative, and mixed methodological approaches. This criterion was considered because the methodology used in the articles according to the mentioned approaches was of great help for the development of the research questions of this research synthesis. For instance, the qualitative data examined more participants' perceptions, comments, and feelings; whereas the quantitative data focused more on the effects, causes, strategies, and results.
- The articles focused only on English since this is the target language of the students and teachers.
- The articles analyzed information used inside EFL/ESL classrooms to examine how teaching English happens in diverse contexts where it is not the native language.
- All of the studies used DS as an educational tool, as it is the main focus of this paper.

- The papers were based on students' writing performance and proficiency to provide a broader view of the effectiveness of DS. This criterion was established since this research synthesis aims to know more about the influence of DS on students' writing production, so writing micro-skills were also considered.

- The articles discussed students' and teachers' perceptions of the use of DS inside the EFL classroom. This criterion was set because the perceptions about a tool that enhances language development may vary among different people in the educational system, thus by learning all these perceptions, both teachers and students can build on the advantages and disadvantages of their teaching-learning process (Febriyanti, 2018).

- The publication date of the articles was from 2016 and onwards. This criterion was established as a way to analyze updated and current information.

On the other hand, the criteria that were not considered for the analysis were the following: 1) non-primary research (e.g., literature reviews; government reports; etc.) since this paper aims for reliability. Thus, these studies became part of the annexes list. 2) non-peer-reviewed studies as those do not give the researchers a process of quality control or validity. Ultimately, there were no other types of exclusion criteria in this research synthesis.

Additionally, diverse articles and books were studied to better understand the research topic. These were obtained in academic databases, such as *Google Scholar*, *ERIC*, *Taylor & Francis Group*, and *Research Gate* as they provide reliable information for the development of this work. The keywords used to search for the necessary data and documents were the following: (a) digital storytelling, (b) EFL/ESL classroom, (c) writing skills, (d) motivation, and (e) storytelling.

Furthermore, the following journals were examined for this research synthesis:

Educational Research Journal, London: Education Intelligence, English Language Teaching, IAFOR Journal of Education: Language Learning in Education, International Journal of Interactive Mobile Technologies, International Association for Development of the Information Society, International Journal of Education and Literacy Studies, Digital Education Review, Higher Education for the Future, Digital Education Review, Teaching English with technology, Education Week, and Theory into Practice. Lastly, some codes were used to categorize the 20 articles according to particular criteria that emerged during the research analysis.



## CHAPTER V

### Data Analysis

#### 5.1 Introduction

In this research synthesis, 20 studies were selected and discussed for the analysis to answer the proposed research questions. From this selection, different categories arose. These were the research focus, the location of the studies, the research methodological approaches, Digital Storytelling factors that influence students' writing skills, and students' and teachers' perceptions of DS as an educational and motivational tool. In addition, the findings were shown in diverse tables to ameliorate their comprehension.

#### 5.2 Research Focus

Research on the study of Digital Storytelling as an educational tool in the EFL context has focused chiefly on developing the primary skills of this language.

Therefore, over the last years, writing has been considered the most challenging skill for students to learn and for teachers to teach (Phuket & Othman, 2015), so DS has been analyzed as a tool to improve the way of instruction regarding the writing skill.

Nonetheless, as modern technology has significantly developed worldwide, researchers have emphasized the perceptions students and teachers have by using this tool for teaching and learning. Moreover, investigators have opened their minds to find out which tools and programs have become more beneficial to help DS reach its primary goal, which is helping learners and instructors achieve their desired objectives, being one of them, the enlargement and improvement of the writing process. Thus, table 1 illustrates the research focus of each of the analyzed articles. It was crucial to divide the studies in accordance with their research focus to have a greater understanding of the purpose of

this research synthesis and to organize the information in order to build on the categories in the upcoming tables.

**Table 1**

*Research Focus*

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Focus	N° of studies	(%)	Authors/year
The use of DS to develop the writing skill	7	35	Abdel-Hack, E., & Helwa, H. S. (2014); Balaman, S. (2018); Galván, B. (2020); González Mesa, P. A. (2020); Rahimi, M., & Yadollahi, S. (2017); Yamac, A., & Ulusoy, M. (2016); Zakaria, M. A., & Aziz, A. A. (2019).
The perceptions of teachers and students using DS	9	45	Azis, Y. A., & Husnawadi, S. (2020); Castillo-Cuesta, et.al. (2021); Guvey, E. (2020); Hava, K. (2019); Kim, H., & Lee, J. H. (2017); Mousazadeh, Z. (2018); Özüdoğru, G. (2021); Tanrikulu, F. (2020); Tiba, A., Condy, J., Chigona, A., & Tunjera, N. (2015).
DS tools and programs that enhance the micro writing skills of students	4	20	Chiang, M. H. (2020); Lim, P. R., & Md Noor, N. (2019); Robin, B. R. (2008); Soler, B. (2014).

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Note. N= 20

Table 1 shows the research focus of the revised studies. All 20 articles were divided into three categories centered on the use of DS as an educational tool in EFL to a) develop the writing skill, b) see the perceptions of teachers and students, and c) analyze the different tools and programs to enhance learners' micro writing skills. For the first category, seven studies focused their aim to research more on the direct way in which DS affects and improves writing skills in students. Indeed, researchers focused on this aspect because writing is considered the

most challenging skill. Hence, the need to improve the instruction seemed to be of paramount importance, and with the rise of technology, DS was a great alternative to begin this process. The second category contains nine studies that focused on the teachers' and students' perceptions of the use of DS in an EFL class. In fact, to understand how a technological tool works either improperly or adequately, it is crucial to identify the feelings and perceptions that instructors and learners have about it. Lastly, there were four articles in the third category. They had a base on the different DS tools and programs that can be used to enhance the micro writing skills of students. Similarly to the last category, it is essential to recognize which tools and programs may or may not be helpful for students, and one way to discover that is by looking at the development of micro writing skills.

From the analyzed data, the research focus which has received the most attention was related to the perceptions of teachers and students towards the use of DS as an educational tool. Guvey (2020) suggests that the increment in teachers' desire to use technology within an EFL class is the primary reason why researchers are now focusing on exploring the perceptions and feelings that individuals from the educational context have. Similarly, researchers Azis and Husnawadi (2020); Özüdoğru (2021); and Tanrikulu (2020) argue that it is vital to understand what teachers and students think about the use of this tool in order to apply it appropriately within the EFL classroom.

Moreover, despite the attention of the perceptions, researchers also focused on the development of the writing skill and its micro-skills through the use of DS regarding its tools and programs. In that vein, researchers Balaman (2018) and Galván (2020) mention that one main factor in improving students' writing skills by using this tool is the motivation learners have when using this application; therefore, they argue that the more they use DS, the more

motivated they are and the more they improve their writing skills. Likewise, Lim and Noor (2019) and Soler (2014) suggest that an excellent way to maintain that motivation is by using different tools and programs, so students can interact with a comprehensive alternative of options and, on the same path, have more remarkable development of the writing skill.

### 5.3 Location of the Studies

**Table 2**

*Location of the studies*

Continent	N° of studies	(%)	Authors/year
Africa	2	10	Abdel-Hack, E., & Helwa, H. S. (2014), Tiba, A., Condy, J., Chigona, A., & Tunjera, N. (2015).
Asia	7	35	Azis, Y. A., & Husnawadi, S. (2020); Chiang, M. H. (2020); Kim, H., & Lee, J. H. (2017); Lim, P. R., & Md Noor, N. (2019); Mousazadeh, Z. (2018); Rahimi, M., & Yadollahi, S. (2017); Zakaria, M. A., & Aziz, A. A. (2019).
Europe	8	40	Guvey, E. (2020); Hava, K. (2019); Özüdoğru, G. (2021); Robin, B. R. (2008); Soler, B. (2014); Tanrikulu, F. (2020); Yamac, A., & Ulusoy, M. (2016).
America	3	15	Castillo-Cuesta, L. M., Quiñonez-Beltran, A., Cabrera-Solano, P., Ochoa-Cueva, C., & Gonzalez-Torres, P. (2021); Galván, B. (2020); González Mesa, P. A. (2020).

Note. N=20

Table 2 displays the location where the analyzed studies took place. This table indicates that eight out of the twenty articles were done in Europe, seven in Asia, three in America, and two in Africa. It is of paramount importance to mention the location of the studies in this analysis to a) analyze the exact places where DS has been taken into consideration, b) try to

find gaps where further research can be done, and c) understand why some places take more advantage of digital tools than others.

Consequently, the articles held outside Asia and Europe, considered the most technologically developed continents, were three in America and two in Africa. The five studies have focused on implementing DS to enhance teachers' and students' writing skills and their achievable perceptions. Researchers Castillo et al. (2021), Galvan (2020), and González (2020) argue that little attention has been paid in America and Africa to DS due to technological tools that have just started to rise. In the same vein, investigators Abdel-Hack and Helwa (2014) declare that in the two last-mentioned continents, thinking about the use of DS is an ambition for a future season.

Nevertheless, researchers in Asia and Europe mentioned the positive outcomes of implementing this tool in EFL classrooms. Balaman (2018) states that if the world is advancing in any way, in this case, in technology, English classes must advance on the same path.

Similarly, Chiang (2020) states that countries like China, Japan, and most European nations have been paying more attention to these tools because technology there has reached the maximum point; whereas, in other parts of the world, like Africa and America, it has not even reached the middle of the way. The positive aspect is that research on DS use has started in these two continents. Hence, the application of this tool in an educational field has briefly started and has reasonable projections for the future. However, more research would be necessary to understand clearly what is expected to be achieved.

## 5.4 Research Methodological Approaches

**Table 3**

*Research Methodological Approaches*

Focus	N° of studies	(%)	Authors/year
Quantitative	3	15	Balaman, S. (2018); Robin, B. R. (2008); Soler, B. (2014).
Qualitative	10	50	Castillo-Cuesta, L. M., Quiñonez-Beltran, A., Cabrera-Solano, P., Ochoa-Cueva, C., & Gonzalez-Torres, P. (2021); González Mesa, P. A. (2020); Guvey, E. (2020); Lim, P. R., & Md Noor, N. (2019); Özüdoğru, G. (2021); Rahimi, M., & Yadollahi, S. (2017); Tanrikulu, F. (2020); Tiba, A., Condy, J., Chigona, A., & Tunjera, N. (2015); Yamac, A., & Ulusoy, M. (2016). Zakaria, M. A., & Aziz, A. A. (2019).
Mixed-Method	7	35	Abdel-Hack, E., & Helwa, H. S. (2014); Azis, Y. A., & Husnawadi, S. (2020); Chiang, M. H. (2020); Galván, B. (2020); Hava, K. (2019); Kim, H., & Lee, J. H. (2017); Mousazadeh, Z. (2018).

Note. N=20

Table 3 demonstrates that ten out of twenty studies adopted a qualitative method to collect data. Seven studies focused on a mixed-method technique, whereas only three adopted a quantitative method. A point of interest in this table is that fifty percent of the analyzed studies chose a qualitative approach. As one of the research questions for this research synthesis is the perceptions of teachers and students, a qualitative way of collecting data is the best alternative. In addition, the mixed-method approach also helps not only to understand the perceptions, but also to interpret them. For instance, researcher Özüdoğru (2021) reveals that using a qualitative method is better to analyze the data more in detail. In fact, he conducted research by using multiple sources of information to bring an in-depth understanding of real-

life, the current system, or a situation at a particular time by using digital storytelling. For that reason, analyzing the data by using a qualitative approach was easier for the author. On the other hand, the mixed-method studies show great importance in the analyzed articles as thirty-five percent of the studies focused on this approach. Researcher Chiang (2020) states that one of the most effective ways to measure results in school settings is to have both quantitative and qualitative results to interpret and correlate the information effectively. Likewise, Hava (2019) argues that contrasting and comparing numbers in a quantitative approach with perceptions, ideals, and beliefs in a qualitative approach is of utmost importance when drawing conclusions and recommendations.

## 5.5 Digital Storytelling Effects on Students' Writing Skills

**Table 4**

*Effects of DS on Students' Writing Micro-Skills*

Author/ Year <sup>ab</sup>	Text/sentence structure	Organization	Grammar and punctuation	Vocabulary	Others
Abdel-Hack & Helwa (2014)	✓	✓	✓	✓	✓ Paragraphing
Castillo et al. (2021)				✓	
Galván (2020)	✓		✓	✓	
Guvey (2020)		✓	✓	✓	
Hava (2019)			✓	✓	
Kim & Lee (2017)		✓			
Lim & Md Noor (2019)	✓	✓	✓		

Soler (2014)		✓	✓	
Tanrikulu (2020)	✓	✓	✓	
Yamac & Ulosoy (2016)	✓	✓		✓
Zacaria & Aziz (2019)			✓	✓

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Note. N= 11

<sup>a</sup>Only studies that mentioned the improvement of students writing micro-skills were considered.

<sup>b</sup>Studies are counted in more than one category.

Table 4 illustrates the effects of DS on students' writing micro-skills. To comprehend this section, it is vital first to understand that each skill, in this case, writing, contains micro-skills. Furthermore, the considered micro-skills for this research synthesis are text/sentence structure, organization, grammar and punctuation, vocabulary, and others.

To begin with, grammar and punctuation have been analyzed in most studies as the most relevant micro-skills in writing. In the bargain, the effects of DS have been analyzed differently according to the focus of the studies. For instance, researchers Abdel and Helwa (2014) demonstrated that learners had a vague notion of punctuation before implementing DS as an instructional tool. Consequently, students started to react to punctuation due to systematic technological support when using the application positively. So, the researchers manifested that they were eager to punctuate sentences correctly. In a similar vein, researcher Galvan (2020) stated that punctuation had been one of the most complex tasks for students when learning EFL. However, she affirmed that using DS genuinely enhanced learners' abilities in terms of punctuation. Regarding the grammar micro-skill, researchers Guvey (2020), Hava (2019), Lim and Noor (2019), Soler (2014), and Zakaria and Abdul (2019)



argued that the assisted corrector that some technological tools possess, including DS, helped students significantly as the corrector underlines different types of errors such as wrong written affixes, subject-verb agreement, among others. Therefore, this assisted tool benefits learners in identifying their mistakes. For that reason, they concluded that DS has potentially developed learners' grammar skills.

In the case of text/sentence structure and organization, five and seven studies respectively reported relevance to the topic. That is why researchers Yamac and Ulusoy (2016) showcased that with the aid of DS, students both comprehend the organization of stories throughout the processes of reflection and organization and have a deeper understanding of the text and sentence structure. In the same way, Soler (2014) explained that improving organization was a process of self-development. In other words, students explored and improved their micro-skills while doing their digital storytelling project.

In terms of vocabulary, table 4 reflects that seven studies out of eleven demonstrated this outcome. Guvey (2020) and Hava (2019) performed similar studies that analyzed students' micro-skills developed by means of DS; however, a greater focus fell on vocabulary. According to the researchers, motivation played an essential role in applying technology in the classroom. Hence, students felt more motivated by using DS, which was reflected in how they started learning words significantly. Hava's study demonstrated that the students believed that they had developed their English writing skills, increased their vocabulary, and gained digital skills) during this digital process.

Table 4 also contains a section of "Others." This section was included due to one specific study in which some minor micro-skills were considered. As a result, they mainly found

paraphrasing, critical thinking, and paragraphing as three issues that should be considered.

Thus, they stated that DS positively affects the previously mentioned micro-skills because of the assisted computer program. Indeed, thanks to technology, students can develop their critical thinking, paraphrasing, and paragraphing abilities.

## 5.6 Digital Storytelling Factors that influence Students' Writing Skills

**Table 5**

*Factors of DS on Students' Writing Skill*

Author/ Year <sup>a</sup>	Multimedia	Audience Effect	DS-integrated instruction	Feedback	Others
Azis & Husnawadi (2020)				✓	
Balaman (2018)		✓	✓	✓	
Chiang (2020)				✓	
Galván (2020)			✓		
Guvey (2020)					Technology help ✓
Kim & Lee (2017)		✓			
Mousazadeh, Z. (2018)	✓				
Soler (2014)				✓	
Tanrikulu (2020)	✓	✓		✓	
Yamac & Ulosoy (2016)	✓	✓	✓	✓	
Zacaria & Aziz (2019)	✓			✓	

Note. N= 11

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<sup>a</sup>Only studies that mentioned specific factors involved in the improvement of students writing skills were considered.

<sup>b</sup>Studies are counted in more than one category.

First and foremost, as previously mentioned in the definition of DS, Robin and McNeil (2019) acknowledged that this tool is primarily composed of technology. In that sense, multimedia, such as images, audio, and video, plays an essential role in the creative process of DS. In fact, four out of eleven studies found that this specific factor boosted students' writing skills as it helped them in their brainstorming or the organization of their stories, as mentioned by Zacaria and Aziz (2019).

Similarly, the last element of DS, *sharing your story*, as noted by Lambert et al. (2010), had positive effects on learners' writing skills. One factor that helped this process was feedback provided by the students' classmates, teachers, and even unknown people who complimented their works once they were published (Azis & Husnawadi, 2020; Balaman, 2018; Chiang, 2020; Soler, 2014; Tanrikulu, 2020; Yamac & Ulosoy, 2016; Zacaria & Aziz, 2019). In the same way, learners went through an audience effect in which they put extra effort into their writing texts since other people apart from their friends, classmates, and the teacher would read their narratives. For instance, Tanrikulu (2020) distinguished participants would go through this audience effect since they would pay more attention to spelling rules, which led to fewer spelling errors in their works. Moreover, in the case of DS-integrated instruction, which refers to the elements of DS already explained in chapter II, Balaman (2018) mentioned that by requiring learners to traverse back and forth among writing steps, such as drafting, editing, revising, and sharing the end-product, DS-integrated instruction strengthens the writing process.

Lastly, the final DS factor that had an effect on pupils' writing skills was disclosed by

Guvey (2020) who noticed his participants perceived some programs had a grammar checking tool. It eventually became an important feature for their assignments since it helped them correct mistakes and be aware of them.

## 5.7 Students' and Teachers' perceptions of DS as an Educational and Motivational Tool

**Table 6**

*Students' and Teachers' perceptions of DS as an Educational and Motivational Tool*

Positive Perceptions	N° of studies <sup>a</sup> <sub>b</sub>	Authors/Year
Creativity	6	Castillo et al. (2021); Chiang (2020); Hava (2019); Mousazadeh (2018); Tanrikulu (2020); Zakaria & Aziz. (2019)
Planning and structure	2	Abdel-Hack, E., & Helwa, H. S. (2014); Tanrikulu, F. (2020)
Confidence	4	Abdel-Hack, E., & Helwa, H. S. (2014); Azis, Y. A., & Husnawadi, S. (2020); Castillo et al. (2021); Mousazadeh, Z. (2018)
Interesting/enjoyable activity	5	Abdel-Hack, E., & Helwa, H. S. (2014); Castillo et al. (2021); Mousazadeh, Z. (2018); Tanrikulu, F. (2020); Zakaria & Aziz (2019).
Others: Spelling rules and punctuation Teacher role as an educator	2	Tanrikulu, F. (2020)  Rahimi and Yadollahi (2017)
Negative perceptions	N° of studies <sup>a</sup> <sub>b</sub>	Authors/Year
Time-consuming	3	Hava (2019); Özüdoğru (2021); Tiba et al., (2015)
Need of Guidance	5	Azis and Husnawadi (2020); Chiang (2020); Mousazadeh (2018); Özüdoğru (2021); Tiba et al., (2015)

Poor internet connection and inflexibility of programs	3	Azis and Husnawadi (2020); Chiang (2020); Mousazadeh (2018)
Attitudes	N° of studies <sup>a b</sup>	Authors/Year
Engagement	6	Azis and Husnawadi (2020); Castillo et al. (2021); Mousazadeh (2018); Tanrikulu, F. (2020); Tiba et al. (2015); Özüdoğru (2021)
Motivation	8	Abdel-Hack, E., & Helwa, H. S. (2014); Azis and Husnawadi (2020); Balaman (2018); Chiang (2020); Lim Md & Noor (2019); Mousazadeh (2018); Rahimi & Yadollahi (2017); Zakaria & Aziz (2019).

Note. N=13

<sup>a</sup>Only studies with a research focus on the perceptions of students and teachers about DS were considered.

<sup>b</sup>Studies are counted in more than one category.

Table 6 depicts students' and teachers' positive and negative perspectives and attitudes concerning the use of DS as an educational and motivational tool. In order to analyze it, thirteen studies were selected as they intended to explore the ideas and thoughts of students and teachers concerning DS, in addition to their respective research focus. As a result, thirteen investigations were classified in table 6.

In the first instance, this table was divided into three sections: Positive perceptions, negative perceptions, and finally, the attitudes learners and educators had towards DS. The first point, positive perceptions, denotes five categories: Creativity, planning and structure, confidence, interesting/enjoyable activity, and others.

Concerning creativity, six of thirteen research papers displayed individuals' constructive thoughts. Chiang (2020) used an open-ended survey and a focus group interview to know participants' perceptions of integrating Storybird into their writing class. Actually, students expressed that DS helped them become more creative when writing their stories.

Something similar happened in Hava's (2019) study since individuals claimed that DS was helpful in their imaginative development. Furthermore, Castillo et al. (2021), Mousazadeh (2018), Tanrikulu (2020), and Zakaria and Aziz (2019) reported complimentary comments in which DS made it simple to come up with ideas for writing assignments, such as tales, narratives, and texts.

Following the next point, planning and structure, only two out of thirteen studies described students' thoughts concerning the organization of their writings. Abdel and Helwa's (2014) study results disclosed that DS helped participants write their ideas in a more planned and structured way. In the same study, it was also proclaimed an improvement in confidence; akin data was provided by Azis and Husnawadi (2020), Castillo et al. (2021), and Mousazadeh (2018). Conjointly, learners from these research studies expressed coinciding ideas on DS being primarily an interesting and enjoyable program because of the pictures DS offered students.

Finally, two studies discovered something different from the previous points. Tanrikulu (2020) revealed that individuals paid more attention to their writing and avoided committing spelling errors. In line with the aforementioned, Rahimi and Yadollahi (2017) noted that teachers had positive perceptions regarding the effectiveness of technology in their role as educators.

Concerning now the negative perceptions of the use of DS, there were three main categories in which both teachers and students found this tool difficult to include in their classes. First, DS is a time-consuming tool. Hava (2019) implemented a motivation scale and a questionnaire to understand participants' perceptions. The results indicated that some learners did not like DS since they found DS meaningless and that it used a lot of time from their classes. Analogous results were mentioned by Özüdoğru (2021) and Tiba et al. (2015) as

their participants felt they needed more time to create their narratives. Additionally, it was discussed that educators had to spend most of the lessons guiding students on the use of DS apps and websites, such as in the case of Azis and Husnawadi (2020), Chiang (2020), and Mousazadeh (2018). Lastly, some unfavorable points like poor internet connection and inflexibility of programs were found in participants' journals and interviews (Azis & Husnawadi, 2020; Chiang, 2020; Mousazadeh, 2018).

Succeedingly, two significant points, motivation and engagement, were disclosed regarding the students' and teachers' attitudes on implementing DS for their writing assignments. In fact, six out of the thirteen studies showed that participants felt more engaged in the creation of their stories in and outside the classroom (Azis & Husnawadi, 2020; Castillo et al., 2021; Mousazadeh, 2018; Tanrikulu, 2020; Tiba et al., 2015; Özüdoğru, 2021). Furthermore, eight research studies denoted a rise in individuals' motivation since they perceived the writing assignment as more fun and different from the traditional (Abdel & Helwa, 2014; Azis & Husnawadi, 2020; Balaman, 2018; Chiang, 2020; Lim Md & Noor, 2019; Mousazadeh, 2018; Rahimi & Yadollahi, 2017; Zakaria & Aziz, 2019).

## 5.8 Conclusion

Based on the previous data, it can be concluded that using DS in EFL/ESL contexts improves students' writing micro-skills, particularly text/sentence structure, text organization, grammar and punctuation, vocabulary, paragraphing, and paraphrasing. In point of fact, these micro-skills were enhanced through some DS factors, specifically multimedia, the audience effect, DS's integrated instruction, and feedback. In addition, the analyzed data portrays that the countries that used DS productively in their educational fields are the ones who have developed their technological tools the most; thereby, Asian and European nations have

effectively applied DS to students' writing skills. Moreover, the main research focus of the studies was teachers' and students' perceptions of using DS. Subsequently, qualitative approaches were mainly employed to achieve reliable results. Indeed, learners have mainly shown positive feelings and attitudes about DS-based assignments as five positive categories were found in different research papers in contrast to three negative perceptions. As a result, the findings in this section suggest that DS is a beneficial tool that can help EFL learners improve their writing skills through motivation and practice. Lastly, all the analytical categories have contributed to addressing the research questions and achieving the research goals.



## CHAPTER VI

### Conclusions and Recommendations

#### 6.1 Conclusions

This section discusses the findings accounted for in the previous chapter.

As mentioned in the prior segment, the 20 studies were grouped and coded into six categories that were aimed to answer the three research questions: a) What factors of DS influence students' writing skills?; b) What writing micro-skills are the most developed through the use of DS?; and c) What are students' and teachers' perceptions regarding the use of DS as an educational tool? After the analysis was developed, the following conclusions can be stated.

Regarding the first question, the findings were split into five categories: multimedia, audience effect, DS integrated instruction, feedback, and others. In the first category, multimedia was named in four research papers as an essential factor in the development of students' writing skills (Mousazadeh, 2018; Tanrikulu, 2020; Yamac & Ulosoy, 2016; Zacaria & Aziz, 2019). In fact, participants stated that the employment of images, videos, and audio on their writing assignments helped them brainstorm their stories since they provided a source for imagination, and it also served as a guide in the organization and structure of their tales. This goes in accordance to research about DS as an educational tool and the features that help the development of writing texts (Dogan & Robin, 2009).

Following the next category, the audience effect was introduced in four studies (Balaman, 2018; Kim & Lee, 2017; Tanrikulu, 2020; Yamac & Ulosoy, 2016). Indeed, learners pointed out that they became especially cautious of committing punctuation and spelling mistakes on their creations because these would be uploaded on a website where many people would read them. Moreover, the audience effect helped pupils introduce new words and use

them as sequencers creating a clear structure the readers could easily follow.

In terms of DS integrated instruction, the least-mentioned category was discussed in three research studies (Balaman, 2018; Galván, 2020; Yamac & Ulosoy, 2016). Admittedly, people who took part in these studies considered the writing process DS comes with a massive benefit for their writing skills because it helped them comprehend the organization of a story as well as avoid punctuation and spelling mistakes. Galván (2020) mentioned that their participants analyzed and monitored their writing tasks which allowed them to create more accurate English sentences.

In respect of feedback, it was the most specified category as it was found in seven different studies (Azis & Husnawadi, 2020; Balaman, 2018; Chiang, 2020; Soler, 2014; Tanrikulu, 2020; Yamac & Ulosoy, 2016; Zacaria & Aziz, 2019). As a matter of fact, the collaborative nature of DS increased students' awareness of their writing assignments. Indeed, most learners mentioned that the feedback they received from their teacher, classmates, and unknown people that commented on their work permitted them to become better at writing.

In fact, students specified an improvement in their grammar and punctuation. Moreover, Yamac and Ulosoy (2016) referred that students became "role models" for other students and learned new writing skills, strategies, and literacy competencies.

Finally, concerning the last category, Guvey (2020) reported that pupils found that when writing on a computer, some words or phrases were corrected instantly, or sometimes they were underlined, and with just a click, a list of possible correct options for that misspelled word appeared making it easier for them to write. This category was defined as technology help as it is something that, even though not mentioned in all studies, happens to be in all the processes of DS; which is directly associated with the results Dudeney and Hockly (2008) cited in the

literature review.

Continuing with the second question, findings revealed that some learners' writing micro-skills were improved by means of DS. These micro-skills are text/sentence structure, organization, grammar and punctuation, vocabulary, and others. In fact, five studies mentioned that pupils became better at identifying and writing their tenses in English (Abdel-Hack & Helwa, 2014; Galván, 2020; Lim & Md Noor, 2019; Tanrikulu, 2020; Yamac & Ulosoy, 2016); these results could have been linked to DS's integrated process and the collaborative learning environment it contributed to. Furthermore, this boost in the improvement of texts and sentence structures is closely related to enhancing the organization of stories.

Unarguably, seven studies acclaimed these participants had become better at organizing their narratives (Abdel-Hack & Helwa, 2014; Guvey, 2020; Kim & Lee, 2017; Lim & Md Noor, 2019; Soler, 2014; Tanrikulu, 2020; Yamac & Ulosoy, 2016). Assuredly, as explained by researchers Yamac and Ulusoy (2016), DS writing steps let learners become aware of the writing process. In point of fact, the revising, feedback, and adjustments students make to their works give them a broader overview of how to tell a story correctly.

Besides these results, an amelioration in students' use of grammar and punctuation was also noticed. Surprisingly, this category was the most mentioned one, as eight out of eleven studies specified it (Abdel-Hack & Helwa, 2014; Galván, 2020; Guvey, 2020; Kim & Lee, 2017; Lim & Md Noor, 2019; Soler, 2014; Tanrikulu, 2020; Zacaria & Aziz, 2019). In effect, Guvey (2020) portrayed these results could happen because of the computer-assisted platform that allowed students to know what were their grammar and punctuation mistakes as they worked on their assignments. In a similar vein, pupils sensed they learned new words while working with DS; vocabulary acquirement was linked with the engagement DS brought up to their class; since

students felt the need to look for specific words to create a better story (Abdel-Hack & Helwa, 2014; Castillo et al., 2021; Galván, 2020; Guvey, 2020; Hava, 2019; Yamac & Ulosoy, 2016; Zacaria & Aziz, 2019). At last, Abdel-Hack and Helwa (2014) disclosed paraphrasing as a writing micro-skill participants in their study became better at; the study did not mention a specific reason this improvement happened.

Moving forward with the third question, both teachers' and students' perceptions of DS as an educational tool had different points of view on what was positive and negative about this tool.

The positive perceptions were divided into five categories: creativity, planning and structure, confidence, interesting/enjoyable activity, and others. In the first instance, creativity was the most mentioned category by educators and learners (Castillo et al., 2021; Chiang, 2020; Hava, 2019; Mousazadeh, 2018; Tanrikulu, 2020; Zakaria & Aziz, 2019). As a matter of fact, participants stated they felt that coming up with ideas for their tales was a lot easier; this mainly happened because DS programs/websites make use of images to attract the readers' attention. While looking through these images, individuals suddenly had a creative rush for their writing tasks. Furthermore, two research studies (Abdel-Hack & Helwa, 2014; Tanrikulu, 2020) noticed that participants thought DS aided them to organize their works and structure them in a way that was easy to follow for their audience. Admittedly, this can be related to DS's integrated instruction point from the previous analysis, which refers to students' series of steps to create their narratives. Besides, four research studies (Abdel-Hack & Helwa, 2014; Azis & Husnawadi, 2020; Castillo et al., 2021; Mousazadeh, 2018) revealed that students underwent a process in which they developed confidence in their writing; this happened because DS gave them a sense of authorship. In addition, most researchers noticed that participants conceived DS as an

entertaining and interesting activity. Assuredly, DS was a tool that combined two different things learners were not used to applying in their English class: technology and a different way to write their assignments; these results go in hand with Shaaban and Shawish (2019) who implied ICTs play an important role on students' development of English specific skills. Lastly, Tanrikulu (2020) remarked that individuals, who took part in his study, perceived they became better at spelling rules and punctuation; this fact can be conjoined with results from table 4 since the audience effect boosts individuals' attention to the writing form of their tales. Additionally, a study made by Rahimi and Yadollahi (2017) pointed out a specific positive perception educators had of the use of DS. In point of fact, teachers heeded their role as educators was enhanced because they became guides that were present in all the stages of DS, aiding their students. Consequently, studies have revealed a significant correlation between DS and EFL/ESL learners' engagement and motivation in class.

Contrarily to what has been analyzed, teachers and pupils had negative comments on the employment of DS in their classes:

1. DS was described as a time-consuming activity because of the writing steps it involves: brainstorming, writing a draft, searching images, and others.
2. Teachers had to spend time with learners while they were writing their work as questions related to the proper use of the website/application could arise during the task.
3. The inflexibility of specific programs and the lousy internet connection made it difficult for students to write smoothly without pauses.

## 6.2 Recommendations

This research synthesis concludes by addressing certain recommendations and observations. To begin with, as the investigation revealed, using DS writing tasks in EFL/ESL classrooms has aided students in improving their writing skills; however, little research has been done on the effects of DS on the writing micro-skills that can be developed in EFL/ESL students, more research could be conducted. Second, the majority of the studies examined were conducted in European and Asian contexts. As a result, further research is needed in Latin America, particularly in Ecuadorian EFL classrooms, to assess the usefulness of DS in our own culture and collect data from a more familiar setting. Third, additional studies could epitomize in-depth teachers' perceptions and attitudes regarding DS being used inside their classrooms since many papers focused on students' perceptions and there was a minimum number of research on educators' thoughts and beliefs.

Finally, the findings of this study are intended to raise awareness of the applicability of Digital Storytelling as a teaching/learning tool to encourage its use in EFL/ESL classrooms. As a result, the current findings urge Ecuadorian EFL teachers to use DS in their lessons as the study displayed favorable effects in terms of growing and improving EFL/ESL students' writing skills. Additionally, learners might also use DS to boost their motivation and make use of their target language.

## References

- Almenarez, F., Calixto, A., Chiappe, A., & Patiño, J. (2020). ICT-driven writing and motor skills: A review. *International Electronic Journal of Elementary Education*, 12 (05), 489-498. doi:10.26822/iejee.2020562139
- Al-Sharqui, L., & Abbasi, I. (2020). The influence of technology on the English language and literature. *English Language Teaching*, 13(7), 1.  
<https://doi.org/10.5539/elt.v13n7p1>
- Anita, R. (2016). Using “Storybird” for teaching narrative writing. *Proceeding of the Fourth International Seminar on English Language and Teaching (ISELT-4)*, 230–239
- Aronoff, M., & Rees-Miller, J. (2007). *The handbook of linguistics*. Oxford: Blackwell.
- Boukhechba, H., & Bouhania, B. (2019). Adaptation of instructional design to promote learning in traditional EFL classrooms: Adobe captivate for E-learning content. *International Journal of Education and Development using Information and Communication Technology (IJEDICT)*, 15 (4), 151-164.  
<https://doi.org/10.1344/der.2014.0.74-84>
- British Council. (2015). English in Ecuador: An examination of policy, perceptions and influencing factors. *London: Education Intelligence*, 1-57.
- Bromley, K. (2012). "The future of reading and writing." In (Eds.) J. Cassidy, S. Grote-Garcia, E. Martinez, & R. Garcia. What's hot in literacy 2012 yearbook (4-9). *San Antonio, TX: The University of the Incarnate Word*. Retrieved from  
[http://www.texasreaders.org/uploads/8/6/6/5/8665759/literacy\\_summit\\_yearbook\\_2012\\_-\\_final.pdf](http://www.texasreaders.org/uploads/8/6/6/5/8665759/literacy_summit_yearbook_2012_-_final.pdf).

- Byrne, D. (1988). *Teaching Writing Skills*. London:Longman.
- Cabrera Solano, P. A., Gonzalez Torres, P. F., Ochoa Cueva, C. A., Quinonez Beltran, A. L., Castillo Cuesta, L. M., Solano Jaramillo, L. M., & Arias Cordova, M. O. (2014). Spanish interference in EFL writing skills: A case of Ecuadorian senior high schools. *English Language Teaching*, 7(7), 40-48.
- Cheng, M., & Chuang, H. (2018). Learning processes for digital storytelling scientific imagination. *EURASIA Journal of Mathematics, Science and Technology Education* 15 (2), 1-17. <https://doi.org/10.29333/ejmste/100636>
- Chong, S. W., & Plonsky, L. (2021). A primer on qualitative research synthesis in TESOL. *TESOL Quarterly*, 55(3), 1024-1034.
- Cooper, H., & Hedges, L. V. (2009). Research synthesis as a scientific process. In *The Hand. of Res. Synthesis and Meta-Analysis, 2nd Ed.* (3-16). Russell Sage Foundation.
- Council of Europe (2001). Common european framework of reference for languages: Learning, teaching and assessment – Guide for Users. J. Trim (Ed.). *Strasbourg: Language Policy Division*.
- Dogan, B., & Robin, B. (2009). Educational uses of digital storytelling: Creating digital storytelling contests for K-12 students and teachers. *In Society for Information Technology & Teacher Education International Conference* (633-638). Association for the Advancement of Computing in Education (AACE).
- Dudeney, G., & Hockly, N. (2008). *How to teach English with technology*. London: Longman.



- Fajardo, T. (2016), Teacher disempowerment in the education system of Ecuador. *World Journal of Education*. 6 (3), 82-89. <http://dx.doi.org/10.5430/wje.v6n3p82>
- Febriyanti, E. R. (2018). Investigating English department students' perceptions about a good English language teacher. *International Journal of Language Education*, 83–95. doi: <https://doi.org/10.26858/ijole.v2i2.6378>
- Foley, M.L. (2013). Digital storytelling in primary-grade classrooms. *Doctoral Dissertation*. Retrieved from ProQuest LLC (3560250).
- Frazel, M. (2010). *Digital storytelling guide for educators* (Vol. 4). International Society for Technology in Education. <https://doi.org/10.12691/education-4-14-1>
- Fu, J. (2013). Complexity of ICT in education: A critical literature review and its implications. *International Journal of education and Development using ICT*, 9(1), 112-125.
- Hammond, J. W., Moss, P. A., Huynh, M. Q., & Lagoze, C. (2020). Research synthesis infrastructures: Shaping knowledge in education. *Review of Research in Education*, 44(1), 1–35. <https://doi.org/10.3102/0091732x20907350>
- Heitin, L. (2016). What is digital literacy. *Education Week*, 36(12), 5-6. <http://www.edweek.org/ew/articles/2016/11/09/what-is-digital-literacy.html>
- Hennessey, B., Moran, S., Altringer, B., & Amabile, T. M. (2015). Extrinsic and intrinsic motivation. *Wiley encyclopedia of management*, 1-4.
- Hessler, B., & Lambert, J. (2017). Threshold concepts in digital storytelling: Naming what we know about storywork. *Digital Storytelling in Higher Education*, 19–35. doi:10.1007/978-3-319-51058-3\_3.

- International Education Organization Education First. (2020). *EF English Proficiency Index*. Retrieved from: <https://www.ef.com/wwen/epi/>.
- Jakes, D. S., & Brennan, J. (2005). *Capturing stories, capturing lives: An introduction to digital storytelling* Retrieved January 18, 2021, from [http://www.jakesonline.org/dstory\\_ice.pdf](http://www.jakesonline.org/dstory_ice.pdf)
- Jong, B., & Tan, K. (2021). Using padlet as a technological tool for assessment of students' writing skills in online classroom settings. *International Journal of Education and Practice*, 9 (02), 411-423. doi: 10.18488/journal.61.2021.92.411.423
- Kasami, N. (2018). Advantages and disadvantages of digital storytelling assignments in EFL education in terms of learning motivation. *Future-proof CALL: language learning as exploration and encounters – short papers from EUROCALL 2018*, 130–136. <https://doi.org/10.14705/rpnet.2018.26.825>
- Kasami, N. (2020). Individual versus collective digital storytelling in EFL education in terms of student perceptions. *CALL for widening participation: short papers from EUROCALL 2020*, 149–155. <https://doi.org/10.14705/rpnet.2020.48.1180>
- Lambert, J., Mullen, N., Paull, C., Paulos, E., Soundararajan, T., Hill, A., & Weinshenker, D. (2010). *Digital storytelling cookbook*. Digital Diner Press. <https://wr.d.as.uky.edu/sites/default/files/cookbook.pdf>
- Law, S. (2019). Using digital tools to assess and improve college student writing. *Canadian Center of Science and Education*, 9 (02), 117-123. doi:10.5539/hes.v9n2p117.

- Lestari, W., Kareviati, E., & Mawaddah, U. (2019). The influence of discovery learning and snowball throwing method in improving writing skills of high school students. *Professional Journal of English Education*, 2 (03), 331-339.
- Meadows, D. (2003). Digital storytelling: Research-based practice in new media. *Visual communication*, 2(2), 189-193.
- Ministerio de Educación. (2016a). *Currículo de los niveles de educación obligatoria*. Retrieved from <https://educacion.gob.ec/wpcontent/uploads/downloads/2016/03/Curriculo1.pdf>
- Ministerio de Educación. (2016b). *English as a foreign language for subnivel bachillerato*. Retrieved from <https://educacion.gob.ec/curriculo-lengua-extranjera/>
- Pardede, P. (2020). EFL secondary school students' perception of ICT use in EFL classroom. *Journal of English Teaching*, 6 (03), 246-259.
- Patel, M. F., & Jain, P. M. (2008). *English language teaching*. Sunrise Publishers and Distributors.
- Phuket, P. R. N., & Othman, N. B. (2015). Understanding EFL students' errors in writing. *Journal of Education and Practice*, 6(32), 99-106.
- Robin, B. R. (2016). The power of digital storytelling to support teaching and learning. *Digital Education Review*, (30), 17-29. <https://doi.org/10.1344/der.2016.30.17-29>
- Robin, B. R., & McNeil, S. G. (2019). Digital storytelling. *The International Encyclopedia of Media Literacy*, 1–8. doi:10.1002/9781118978238.ieml0056
- Rubio, C. M. (2009). Effective teachers-professional and personal skills. *Ensayos: Revista de la Facultad de Educación de Albacete*, (24), 35-46. Retrieved from <http://www.uclm.es/ab/educacion/ensayos>

- Sadik, A. (2008). Digital storytelling: A meaningful technology-integrated approach for engaged student learning. *Educational Technology Research and Development*, 56(4), 487-505. doi: 10.1007/s11423-008-9091-8
- Schmitt, C. (2002). Technology in schools: Suggestions, tools, and guidelines for assessing technology in elementary and secondary education. *US Department of Education, Office of Educational Research and Improvement, National Center for Education Statistics*.
- Shaaban, S., & Shawish, J. (2019). Integration of ICT in EFL/ESL teachers' training and self-efficacy beliefs as perceived by the trainers. *Humanities & Social Sciences Reviews*, 7(04), 863-875. <https://doi.org/10.18510/hssr.2019.74115>.
- Singh, M. N. (2021). In road of digital technology in education: Age of digital classroom. *Higher Education for the Future*, 8(1), 20–30. <https://doi.org/10.1177/2347631120980272>
- Skinner, E.N., & Hagood, M.C. (2008). Developing literate identities with English language learners through digital storytelling. *The Reading Matrix*, 8(2), 12–38.
- Smeda, N., Dakich, E., & Sharda, N. (2014). The effectiveness of digital storytelling in the classrooms: a comprehensive study. *Smart Learning Environments*, 1(1). <https://doi.org/10.1186/s40561-014-0006-3>
- Solano, L., Cabrera, P., Ulehlova, E., & Espinoza, V. (2017). Exploring the use of educational technology in EFL teaching: A case study of primary education in the south region of Ecuador. *Teaching English with technology*, 17(2), 77-86.
- Soler, B. (2014). Digital storytelling: A case study of the creation and narration of a story by EFL learners. *Digital Education Review*, 26, 74-84.

- Ulusoy, M., & Yamaç, A. (2016). The effect of digital storytelling in improving the third graders' writing skills. *International Electronic Journal of Elementary Education*, 9 (1), 59-86.
- Utami, S., & Rais, A. (2011). Improving students' writing skill using a four-phase technique. *Sebelas Maret Institutional Repository*. 1-14.
- Van Gils, F. (2005). Potential applications of digital storytelling in education. In *3rd twente student conference on IT (Vol. 7, No. 7)*. University of Twente, Faculty of Electrical Engineering, Mathematics and Computer Science Enschede.
- Vasudevan, L., Schultz, K., & Bateman, J. (2010). Rethinking composing in a digital age: Authoring literate identities through multimodal storytelling. *Written Communication*, 27(4), 442-468.
- Yüce, E., & Aksu Ataç, B. (2019). Peer editing as a way of developing ELT students' writing skills: An action research. *Journal of Language and Linguistic Studies*, 15 (4), 1226-1235. doi: 10.17263/jlls.668377
- Zolfaghari Mashhadi, V., & Reza Kargozari, M. (2011). Influences of digital classrooms on education. *Procedia Computer Science*, 3, 1178–1183.  
<https://doi.org/10.1016/j.procs.2010.12.190>

## Annexes: Annex 1

### List of Primary Studies for Analysis

Abdel-Hack, E., & Helwa, H. S. (2014). Using digital storytelling and weblogs instruction to enhance EFL narrative writing and critical thinking skills among EFL majors at faculty of education. *Educational Research Journal*, 5(1), 8–41.

<https://doi.org/10.14303/er.2014.011>

Azis, Y. A., & Husnawadi, S. (2020). Collaborative digital storytelling-based task for EFL writing instruction: Outcomes and perceptions. *The Journal of AsiaTEFL*, 17(2), 562–579. <https://doi.org/10.18823/asiatefl.2020.17.2.16.562>

Balaman, S. (2018). Digital storytelling: A multimodal narrative writing genre. *Journal of Language and Linguistic Studies*, 14(3), 202-212.

[www.jlls.org/index.php/jlls/index](http://www.jlls.org/index.php/jlls/index).

Castillo-Cuesta, L. M., Quinonez-Beltran, A., Cabrera-Solano, P., Ochoa-Cueva, C., & Gonzalez-Torres, P. (2021). Using digital storytelling as a strategy for enhancing EFL writing skills. *International Journal of Emerging Technologies in Learning (iJET)*, 16(13), 142. <https://doi.org/10.3991/ijet.v16i13.22187>

Chiang, M. H. (2020). Exploring the effects of digital storytelling: A case study of adult L2 writers in Taiwan. *IAFOR Journal of Education: Language Learning in Education*, 8(1), 65-82. <https://doi.org/10.22492/ije.8.1.04>

Galván, B. (2020). Digital storytelling as tool to promote writing and creativity in kids' courses. *Digital Storytelling as Tool to Promote Writing and Creativity in Kids' Courses*. Retrieved from: <https://www.academia.edu/44781720>

- González Mesa, P. A. (2020). Digital storytelling: Boosting literacy practices in students at A1-Level. *HOW Journal*, 83–104. <https://doi.org/10.19183/how.27.1.505>
- Guvey, E. (2020). Writing a folktale as an activity of written expression: Digital folktales with StoryJumper. *Educational Policy Analysis and Strategic Research*, 15 (3), 159-185. doi: 10.29329/epasr.2020.270.8
- Hava, K. (2019). Exploring the role of digital storytelling in student motivation and satisfaction in EFL education. *Computer Assisted Language Learning*, 1–21. <https://doi.org/10.1080/09588221.2019.1650071>
- Kim, H., & Lee, J. H. (2017). The value of digital storytelling as an L2 narrative practice. *The Asia-Pacific Education Researcher*, 27(1), 1–9. doi:10.1007/s40299-017-0360-3
- Lim, P. R., & Md Noor, N. (2019). Digital storytelling as a creative teaching method in promoting secondary school students' writing skills. *International Journal of Interactive Mobile Technologies (iJIM)*, 13(07), 117-128. <https://doi.org/10.3991/ijim.v13i07.10798>
- Mousazadeh, Z. (2018). The Effects of computer-assisted mediating prompts on EFL learners' writing ability. *International Journal of Education and Literacy Studies*, 6(1), 64-71. <http://dx.doi.org/10.7575/aiac.ijels.v.6n.1p.64>
- Özüdoğru, 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>

Rahimi, M., & Yadollahi, S. (2017). Effects of offline vs. online digital storytelling on the development of EFL learners' literacy skills. *Cogent Education*, 4(1), 1-13.

<https://doi.org/10.1080/22331186X.2017.1285531>

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

Soler, B. (2014). Digital storytelling: A case study of the creation and narration of a story by EFL learners. *Digital Education Review*, 26, 74-84.

<https://doi.org/10.1344/der.2014.0.74-84>

Tanrikulu, F. (2020). Students' perceptions about the effects of collaborative digital storytelling on writing skills. *Computer Assisted Language Learning*, 1–16.

doi:10.1080/09588221.2020.1774611

Tiba, A., Condy, J., Chigona, A., & Tunjera, N. (2015). Digital storytelling as a tool for teaching: Perceptions of pre-service teachers. *The Journal for Transdisciplinary Research in Southern Africa*, 11(1). <https://doi.org/10.4102/td.v11i1.33>

Yamac, A. & Ulusoy, M. (2016). The effect of digital storytelling in improving the third graders' writing skills. *International Electronic Journal of Elementary Education*, 9 (1), 59-86. Retrieved from <https://eric.ed.gov/?id=EJ1126674>

Zakaria, M. A., & Abdul Aziz, A. A. (2019). The impact of digital storytelling on ESL narrative writing skill. *Arab World English Journal (AWEJ) Special Issue on CALL*

(5). 319- 332. <https://dx.doi.org/10.24093/awej/call>