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Investigating the Effectiveness of Digital Storytelling in Developing Learners' Emotional Intelligence

A Case Study of Third Year LMD Students of English at Abdelhamid Ibn Badis University

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Abstract

Digital storytelling (henceforward DST) refers to the idea of mixing the traditional art of storytelling with a variety of technological and digital devices. It is considered as one of the most effective teaching and learning techniques. The proponents of DST believe that this technique can enhance students' engagement, achievement and motivation. In this perspective, this instructional innovation has revolutionized the traditional educational practices with its incontrovertible role in developing learners' competencies especially emotional intelligence (henceforward EI). This study attempts to unveil the effectiveness of digital storytelling at Abdelhamid Ibn Badis University. Its main objective is to investigate the effects of this innovative technique on developing English as foreign language (henceforward EFL) learners' emotional intelligence. It further seeks to enquire into learners' and teachers' attitudes towards the integration of DST in the teaching/learning process. Accordingly, a mixed method design was adopted in order to validate or invalidate our hypotheses and to cover the main elements and queries of the research. We used an experiment that lasted for four weeks, a classroom observation, an emotional intelligence test for learners, and questionnaires for both teachers and students. The results illustrate a significant development in learners' emotional intelligence due to the DST project process realisation. The majority of teachers and learners support the integration and incorporation of DST technique in the learning/teaching process at Abdelhamid Ibn Badis University.

Keywords: Digital storytelling, emotional intelligence, social-emotional learning, 21st century education.

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Dedication

To my mother

To my grandmother

To all those who believe in the power of digital storytelling as a means of change

I dedicate this work

List of Abbreviations

CDS: Center for Digital Storytelling

DST: Digital Storytelling

EI: Emotional Intelligence

EQ: Emotional Quotient

IQ: Intelligence Quotient

EFL: English as a Foreign Language

ICT: Information and Communication Technology

ISTE: International Society for Technology in Education

SEL: Social-Emotional Learning

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General Introduction

Over the past few years, many practitioners and active teachers around the world have attempted to apply in their educational process new teaching and learning techniques using information and communication technologies (henceforward ICTs). The latter has immensely changed the usual educational norms from traditional to technology-based. Digital storytelling (henceforward DST) is one new technique used in education to promote learning. It is an instructional paradigm which draws on an existing pedagogy that is traditional storytelling. It is widely known as an entraining and powerful pedagogical tool that can bring about several benefits for learning and teaching that engages both teachers and learners (Incikabi, 2015; Walters L.M., Green, Walters T.N., & Wang, 2015). Along the same line, digital storytelling is able to provide an effective social and emotional learning (henceforward SEL) atmosphere that helps in enhancing students' learning. In this perspective, as digital storytelling is facilitated through the use of multiple digital tools and multimedia, it brings together an amalgamation of script, music, pictures and audio narration that assist learners to present their collected information through the medium of technology.

To be more specific, in the Algerian context, the fashion of digital storytelling in education is not recognised by most teachers and learners; hence, few of them are wonted with this trend that has prevailed in the educational environments. Along the same vein, this study is further motivated by the several gaps that exist between the skills students learn at university and the skills they need in order to operate successfully in the 21st century. In that, traditional learning falls short of providing them with the competencies and knowledge they need outside the classroom. Thence, digital technologies could transform the way people learn and the nature of work and social-emotional relationships. To this end, emotional intelligence (henceforward EI), decision-making, information sharing, innovation, creativity, collaboration are all deemed to be important in the 21st century. Digital storytelling, therefore, is considered as a new instructional tool that would assist learners in honing the required skills for effective operation in nowadays society (Robin, 2008). A need for change is justified as teachers have to adopt new ways of teaching in order to help their students develop various competencies. Additionally, the old-fashioned methods and approaches are depicted as a prevaricator approach that equivocates and does not provide learners with the necessities of the 21st century (Darling-Hammond, 2008).

Hence, the purpose of this study is to investigate the effects of implementing digital storytelling in English as a foreign language (henceforward EFL) context; higher education, and to what extent it helps students develop their emotional intelligence. This research work also aims at raising both teachers' and learners' awareness towards the importance of emotional intelligence and instilling the culture of digital storytelling. It further attempts to scrutinize teachers' and learners' attitudes towards the incorporation of digital storytelling in the learning and teaching processes. Therefore, the main issues raised in this study are as follows:

- Can digital storytelling assist EFL students in developing their emotional intelligence competencies?
- What are EFL students' attitudes towards the incorporation of DST in the teaching/learning process?
- What are EFL teachers' attitudes towards the incorporation of DST in the teaching/learning process?

Attempting to answer the questions above, we hypothesize that DST can be of a great asset for EFL students as it promotes social and emotional learning atmosphere through providing a safe and relaxed environment as well as encouraging interaction and collaboration between learners. In this vein, digital storytelling may help learners develop and boost their emotional intelligence. Also, we conjecture that EFL students and teachers may show interest towards the utilization and incorporation of DST in the teaching/learning process.

This research work lays focus on the effectiveness of digital storytelling in developing and ameliorating learners' emotional intelligence. As a matter of fact, this study is of high significance as it provides insights into the importance of incorporating digital storytelling into the teaching and learning process. In particular, since DST offers a plethora of benefits to the educational terrain, learning and teaching community, this study enquires into the various emotional intelligence competencies to be consolidated and enhanced during the creation of digital stories. Conjointly, it scrutinises learners' and teachers' attitudes and motivation towards the incorporation of digital storytelling in the classroom practices. In this respect, this research will be helpful for teachers and students as they will consequently become aware of such a technological innovation and its various advantages on learners' emotional intelligence development.

To analyse the use of digital storytelling to improve and develop learners' emotional intelligence, a mixed method design is adopted using an experiment and different data collection instruments including a classroom observation, an emotional intelligence test and questionnaires to permit researching the issues addressed in this work on the one hand and to give evidence for the hypotheses on the other hand. The participants of this study are third year EFL licence students at the department of English language, Abdelhamid Ibn Badis University.

The work is divided into three main parts. The first chapter presents an overview of related literature on digital storytelling and emotional intelligence. In the second chapter, we provide the reader with some details on the research design, methodology and the analysis of the research methods; whereas, the third chapter is devoted to the discussion of our research findings. To conclude, by interpreting the responses of the participants, we will have been able to come to a set of suggestions and conclusions, regarding the use and incorporation of DST in the teaching/learning process.

1. Introduction

The present chapter displays the literature that is relevant to the understanding and the development of this research work. In particular, this part of the dissertation sheds light on the basic components of digital storytelling, its various types and features along with its benefits and implementation process. It explicates the theories underpinnings the efflorescence of this instructional digitalized art of telling stories followed by a consistent analysis of several studies that tackle the effects of DST. It also presents a thorough analysis of the relationship between emotional intelligence and digital storytelling. Finally, the last section provides an in-depth description of the 21st century learning requirements as well as the significance of emotional intelligence for the 21st century learners.

1.1. Storytelling, Going Digital

Modern technology has reshaped the ancient art of storytelling. The mixture of the time-honoured narrative of campfires with digital technology has resulted in the emergence of digital storytelling. In this respect, an in-depth understanding of the concepts storytelling and digital storytelling is warranted.

1.1.1. Storytelling

It is a form of art in which a storyteller uses spoken words and paralinguistic features to convey both mental and emotional images to a given audience. Storytelling is a cultural and social activity that implies narrating stories, often with ad-libbing or embellishment. It is used as a means of entertainment, education, moral values, etc. It is also defined as “The art of using language, vocalization, and/or physical movement and gesture to reveal the elements and images of a story to a specific, live audience” (Haven, 2000, p.215). It “reflects all literatures and cultures, fiction and nonfiction, for educational, recreational, historic folkloric, entertainment and therapeutic purposes” (Livo & Rietz, 1986, p.6).

1.1.2. Digital Storytelling

Digital storytelling is generally described as the process of commingling and weaving one’s narratives with digital sources such as music, audio, and text in order to construct a short animated video. Digital storytelling is regarded as akin to web soaps, narrative-based video games, hypertext stories, and other self-produced media such as podcasts and blogs (Alrutz, 2014; Banaszewski, 2005). It can be screened on different websites for instance on

YouTube, Vimeo, Social Networking Sites, etc. True digital stories improve our understanding of the world through an individual's attitudes towards a specific experience or issue. Digital storytelling incorporates writing, drama, reading, and digital technologies as it borrows some elements from the ancient art of storytelling and blends it with a palette of digital items (Gakhar, 2007).

The term digital story can be used to highlight a vast body of digital compositional activities; for instance, students can create either a PowerPoint presentation using pictures and texts or an animated video clip using specific software to be uploaded and shared on YouTube, Dailymotion, Facebook, etc. (Wang, 2013). This wide chain of activities has become a conventional practice for teachers who want to digitalize their educational/teaching processes. Moreover, digital storytelling is also considered as a cultural practice and a form of a dialogue (Rudnicki, 2009) as it has "its own historical trajectory of development and is associated with an identifiable network of persons, documents, activities, tools, and institutions, often carried out within a framework with well-articulated conceptual, practical, epistemological, and ontological claims" (Wang, 2013, p.9).

1.1.2.1. Types of Digital Storytelling

There is a large array of digital storytelling types but Robin (2006) has provided a laconic list that is composed of three major groups: personal narratives, historical documentaries, and stories that inform or instruct the viewer about a particular content area.

a. Personal Narratives

Personal narratives are very popular as they revolve around a significant event in the storyteller's life (Robin, 2008). In this DST type, Lambert and other researchers identify various subcategories which "include stories that honor the memory of specific people and places, or deal with life's adventures, accomplishments, challenges, and recovery" (Robin, 2008, p.224).

b. Historical Documentaries

Historical documentaries are another type of DST that the storytellers generally choose to create stories that deal with historical events. In these digital narratives, the narrators generally examine important pieces of information taken from archive documents and real past incidents (Robin, 2008).

c. Stories that Instruct or Inform Us

Stories that inform or instruct people are well-suited to educational settings as they can be related to a particular field of inquiry such as math, health, literature, science, physics, chemistry, education, and educational technology (Robin, 2006).

1.1.2.2. Characteristics of Digital Storytelling

The most prominent feature of digital storytelling is that it does not align with the agreed upon conventions of storytelling. It is characterised by its capability of creating a cohesive story from a combination of images, audio, music and text using new technologies. According to Rudnicki (2009), "many digital storytelling practitioners and educators agree on one essential characteristic of digital storytelling: Technology is secondary to the story…the story is the focus of the digital story, not the technology" (p. 36). It is argued that digital storytelling has the same structure as the traditional one but its technological features are one of the elements that differentiate it from the old version. Its presentation, its formats, and the modes of its distribution all contribute to the uniqueness of DST and aggrandize its pragmatic dimension (Gregori-Signes, 2008). Furthermore, Miller (2008) has provided a list of characteristics of DST in her book *Digital Storytelling: A Creator's Guide to Interactive Entertainment*. She argues that digital stories include dramatic events and characters which are controlled by artificial intelligence. They are also "interactive" "non-linear" "deeply immersive" "participatory" "navigable" (Miller, 2008, p.17-18).

1.1.2.3. Elements of Digital Storytelling

Lambert (2002) was among the first researchers who developed the elements of digital storytelling in order to facilitate the process of constructing digital narratives. In this vein, Díaz and Gregori-Signes (2013) claim that the elements of DST that Lambert (2002) has developed can be considered as its building characteristics. In clearer terms, digital storytelling is a narrative that contains a personal tone in which the audience is asked a dramatic question that is accompanied by descriptions, pictures and soundtrack. Díaz and Gregori-Signes (2013) further illustrate that there are seemingly infinite ways of constructing a digital story; nonetheless, they strongly believe that these elements are effective and useful for students as they help them create well-organised, treasured and meaningful digital stories (Robin, 2006). The following table provides a clear description of these elements:

The Seven Elements of Digital Storytelling
1. Point of View – what is the perspective of the author?
2. A Dramatic Question – a question that will be answered by the end of the story.
3. Emotional Content – serious issues that speak to us in a personal and powerful way.
4. The Gift of your Voice – a way to personalize the story to help the audience understand the context.
5. The Power of the Soundtrack – music or other sounds that support the storyline.
6. Economy – simply put, using just enough content to tell the story without overloading the viewer with too much information.
7. Pacing – related to Economy, but specifically deals with how slowly or quickly the story progresses.

Table 1: The seven elements of digital storytelling (Robin, 2006, p.710)

1.2. The Emergence of Digital Storytelling in Education

The enormous developments of digital technologies have changed the art of storytelling, giving birth to a movement called digital storytelling. As digital media becomes part of humans' life with its ever-changing format of images, applications, and hardware, it allows us to change the way we tell stories and their aims in our evolving cultures. Narrowing the scope to an educational context, the beginning of the use of digital storytelling in education is related to Lambert and Atchley creation of the Center for Digital Storytelling[1] (henceforward CDS) in 1996 which is still active worldwide today i.e. the spread of DST is due to CDS as it collaborates with miscellaneous schools and universities to lead digital storytelling projects (Banaszewski, 2005). Moreover, with the publication of Lambert's book; *Digital Storytelling: Capturing Lives, Creating Community* (2002) and his development of the seven elements of DST, teachers became aware of this educational technique and how it can be used in the classroom.

1.3. Theories Underpinning Digital Storytelling

Digital storytelling proponents believe that this pedagogical innovation is undoubtedly embedded in social constructivism and social-emotional learning theory as its characteristics are grounded in these two approaches. This implies an understanding of the relationship between these theories and digital storytelling.

[1] Center for Digital Storytelling is the most important institution in the movement of DST as it is considered as the father founder institution. It was commenced in 1996 by Dana Atchley and Joe Lambert (Banaszewski, 2005).

1.3.1. Social Constructivism

Social constructivism theory is based on a core principle which is that knowledge is constructed and negotiated socially (Bruner, 1990; Fosnot, 1996; Lave & Wenger, 1991; Vygotsky, 1978). This theory supports collaboration and meaning construction in learning that occurs through social interaction. The concept of collaboration is purely rooted in Vygotsky's sociocultural theory that claims that learning occurs and cannot be disconnected or detached from the social context (Vygotsky, 1978). According to Vygotsky, learners construct knowledge collaboratively which involves students working together to solve problems in the real world. In collaborative learning, learners want to reach a common goal and they are highly responsible for their own and other's learning. In this way, learners develop social, management and organisational skills as well as responsibility and leadership.

Digital storytelling values past experiences and reinforces reflective learning; therefore, it aligns with the Vygotskian perspective which views learning as a social and collaborative journey (Vygotsky, 1978). In framing DST process, it can be said that this tool is profoundly well appropriate and adequate to the social constructivist classroom where learners are willing to reflect on their own learning process. In this vein, learners generally reflect on their experiences when "selecting a story topic, conducting research on the topic, writing a script, collecting images, recording audio narration and using computer-based tools" (Robin, 2016, p.20) in order to create a digital story and construct new pieces of information. In this prospect, Barrett (2006) suggests that DST supports social learner-centred environments as it promotes deep reflection in the learning process. In the process of creating digital storytelling, learners are going to establish a relationship between themselves and their world. This process leads or most expressively obliges the creator to join the social world and construct knowledge from the outward world.

1.3.2. Social and Emotional Learning

Social and emotional learning is described as a "process of integrating thinking, feeling, and behaving in order to become aware of the self and of others, make responsible decisions, and manage one's own behaviours and those of others."(Brackett & Rivers, 2013, p.4). It is how learners acquire the required skills and knowledge to manage their emotions, set and achieve their goals, ameliorate empathy skills, regulate their relationships, and make responsible decisions. Arguably, social and emotional learning supports the amelioration of

emotional intelligence and boosts it to higher levels of efficacy. It allows students to develop their EI as they become able to control, manage and express their emotions and feelings that occur in their academic and social lives (Basu & Mermillod, 2011)

The proponents of digital storytelling have acquiesced that digital storytelling has the power to emotionally relate learners to the content leading to a profound connected social-emotional and personalized learning. Emotions are deemed to be reclaimed cognitively; thus, this process of learning and engagement permits learners to write their DST discourses that comprise and contain their personal perspectives in relation to an academic community (Daily, 2005). Conjointly, the ability to position oneself, to be engaged with a problem on a personal level may push learners to leave their emotional comfort zone; therefore, they will be able to take intellectual and emotional risks. In this vein, DST gives students a voice to speak out their emotions as well as empathize with others' emotions and perspectives. It also addresses learners' emotional dimensions through the use of images and music (Jamissen & Skou, 2010). The creative digital storytelling process encourages strong social-emotional learning due to the environmental aspects that it provides through different story circle activities and through the discussions that students have with each other. It is a social pedagogy that approaches the journey of learning as a collaborative process (Benmayor, 2008). Digital stories are seen as a liaison between the affective and cognitive (Oppermann, 2008) especially when learners participate in social and cultural activities in which they are bestowed with an opportunity to be totally engaged and activate their agency as well.

1.4. The Benefits of Digital Storytelling

It is clear from the outset that digital storytelling owns a large chain of potentially powerful advantages. In better terms, DST technique can promote engagement, motivation, autonomy, collaboration, higher level thinking skills (Sandra, 2015) in addition to other benefits that may assist the teacher in creating a motivating and authentic learning/teaching atmosphere. Lynch and Fleming (2007) further elucidate that "The flexible and dynamic nature of digital storytelling, which encapsulates aural, visual and sensory elements, utilises the multitude of cognitive processes that underpin learning-from verbal linguistic to spatial, musical, interpersonal, intrapersonal, naturalist and bodily-kinaesthetic"(as cited in Nazma & Chigona, 2015, p.8).

In an attempt to discover digital storytelling's advantages, many studies have been conducted to investigate its effectiveness in many disciplines including higher education. For

example, in English as a foreign language course, digital stories produced by three parties were utilized to help other learners understand English as a second language. The findings of the research have revealed an overall students' appreciation of the use of DST in teaching and learning. They also confirm that the performance of the treatment group was notable as compared to control group's realization (Verdugo & Belmonte, 2007). Along these lines, Kearney and Schuck (2003) conducted a study that investigates DST usefulness for elementary and high school students. The K-12 students were required to design their own digital stories and perform the peer-peer evaluation. Digital storytelling led students to build confidence between them when working collaboratively in which they could achieve higher levels of learning and achievement (Hung, Hwang, & Huang, 2012).

The findings of a research directed by Smeda (2014) about the potential of DST in creating a constructivist classroom showed that students' outcomes were better when working collaboratively on creating digital stories. Similar ideas were echoed in Standley's research (2003) in which it was clarified that the creation of digital stories encourages collaborative learning and that group work leads to the enhancement of various skills and the learning experience (as cited in Smeda, 2014). Also, Solverg (2003) has reported in his research about computer-related beliefs and motivation that students enjoyed using the computers and software in addition to collecting music, pictures that suit their digital stories. He has also declared that DST can provide a positive environment for risk-taking and engagement; therefore, this technique should not be avoided by teachers. As noted by Figg, McCartney and Gonsoulin (2009), "the process of creating digital stories provides learners with opportunities to use the elements of language arts to become agents of social change" (p. 36).

Furthermore, Robin (2006) believes that digital storytelling creation process leads to interest and attention generating. Students will develop a cooperative spirit as a result of group work, criticizing, and assessing their own and their peers' digital stories. It also "provides value in enhancing the student experience through personal ownership and accomplishment" (Robin, 2006, p.712). From another angle, many teachers create their own digital stories and show them to their learners. In this respect, DST serves as a hook and a motivator that will boost students' interests and push them to create their digital stories. Robin (2006) indicates that teacher-created digital stories can be utilised to facilitate the learning of certain lesson's instructions or other conceptual content. Clearly, students will be also able to improve all six standards set by the International Society for Technology in Education (henceforward ISTE) namely: 1. creativity and innovation; 2. communication and

collaboration; 3. research and information fluency; 4. critical thinking, problem solving, and decision making; 5. digital citizenship; 6. technology operations and concepts (2007).

From a neuropsychological perspective, researchers have found out that storytelling can trigger the release of important neurochemicals like oxytocin[2], dopamine[3], and endorphins[4] that lead to empathy, focus, motivation, trust and long-term memory (Phillips, 2017). Dr. Paul Zak; a professor in neuroscience and psychology, published an article in which he found that storytelling leads to and causes oxytocin production (2014), especially stories that are character-driven. Conjointly, cliffhanging and mysterious stories lead to dopamine synthesis as the audience start creating imaginary situations to overcome the suspense of the story's emotionally charged events. A funny story is also beneficial in the sense that it provides the audience with endorphins which is the hormone responsible for relaxation (Phillips, 2017).

1.5. Digital Storytelling Implementation

As any other technology-based technique, digital storytelling incorporation process requires investigating the different models that can facilitate this process. Several models for creating and integrating digital storytelling in the classroom have been introduced since the emergence of DST in education (Smeda, Dakich & Sharda, 2010). Hence, for successful DST incorporation, several steps should be carefully followed.

1.5.1. The Planning Process

It has been arguably construed that accurate planning is a prerequisite and compulsory to efficiently implement digital storytelling in education. Successful technology integration refers to students' ability to decide on the tools that they need to continue the learning activity in an effective, efficient and organized manner (Harris, 2005). Moreover, teachers should identify the problems and challenges that students may encounter in the process of creating digital stories as well as the deadline and how much time is needed for story completion.

[2]Oxytocin is a powerful hormone and a neurotransmitter that regulates social interaction and is often called "love hormone" (Oxytocin, 2017). It is often related to empathy, trust and relationship-building.

[3]Dopamine is a hormone and a neurotransmitter and is seen as a chemical messenger in the brain (Dopamine, 2017). It is associated with trust, learning, motivation, etc.

[4] Endorphin is neuropeptides and peptide hormones (Endorphin, 2017) and is regarded as natural pain relievers, anti-anxiety, drugs, etc. They help people to fell less stressed and anxious.

1.5.2. Current Models of Digital Storytelling

There are different models for using and creating digital stories in the classroom. In this respect, Smeda et al. (2010) have reviewed some of the current models of digital storytelling. One of the earliest examples is Joe Lambert's "Digital Storytelling Cookbook Model" (Smeda et al. 2010). His framework contains the famous seven steps of digital storytelling which are pointedly discussed in his books: *Digital Storytelling: Capturing Lives, Creating Community* (2002) and *Digital Storytelling Cookbook* (2010). These steps are what encompass DST methodology and functioning process as they portray the way digital stories are produced and shared. Lambert (2010) describes the seven steps as a journey. The following table contains an outline of Lambert's seven steps:

The Seven Steps of Digital Storytelling
1- Own your insights – clarify what your story is about.
2- Own your emotions – articulate the emotional resonance of the story.
3- Find the moment – identify the moment of change in the story.
4- See your story – determine how you want your audience to see and hear the story.
5- Hear your story – find a relaxed, natural tone and pace for your voice-over
6- Assemble your story – consider how the different layers of assets work together.
7- Share your story – determine who your audience is and what your purpose is in sharing the story. Imagine how it will get presented and framed for the audience.

Table2: The seven steps of digital storytelling (Alrutz, 2014, p.37)

Concerning the creation process of digital storytelling, not all teachers are supposed to follow Lambert's model (Garrety & Schmidt, 2008). For instance, Dávid Bán and Balázs Nagy (2016) provide a model comprised of seven steps entitled "The Digital Storytelling Workshop Step by Step". These steps are ordered and explained as follows:

Step 1- Introduction

To begin with, teachers should introduce the concept, methodology, framework; and it would be better if they provide them with few examples to watch and use them as a guide and sample (Bán & Nagy, 2016).

Step 2- The Storytelling Circle

Learners start writing with the story circle which is a phase where participants form a circle that is motivating and encouraging. Initially, the story circle is a way to assist learners to develop and construct the structure of their stories in a collaborative and supportive learning environment in which they sit in a circle and present their ideas, script, and images (Bán & Nagy, 2016). Story circles were firstly developed by Lambert in which learners describe and discuss the theme or the whole story within a circle, i.e. a group. In this sense, Rudnicki states that "one does not create a digital story in a vacuum. They are created for oneself, as well as for an audience, and in addition, if they are created with others there is more opportunity for developing a better story" (2009, p. 21).

Step 3- The Writing

After the story circle ends, students should have written the first draft of the narrative (Bán & Nagy, 2016).

- **The Script**

In this phase, students proofread their stories because by the end of this step, a clear script must be finished which is the narrative of the digital story (Bán & Nagy, 2016).

- **The Storyboard**

It is used in order to organise the flow of the digital story. It is based on classifying visuals and text proportionally. It allows students to choose the suitable picture for certain script but it is possible to deviate from the guideline (Bán & Nagy, 2016).

Step 4- The Recording

After writing the story, students should record their narratives, select their images and music (Bán & Nagy, 2016).

- **Voice Recording**

This is the technical phase of the creation process where students record the narrative. They should read or recite the scripts with emotionality (Bán & Nagy, 2016).

- **Image Recording (digitizing, taking photographs)**

This part considers the digitization of photos which are either scanned paper picture, downloaded from the internet or taken by a camera. The participants must take into consideration the size and resolutions of the photos in addition to considering pictures' credit and copyright (Bán & Nagy, 2016).

- **Music**

Students can use music as a background for the digital story. The volume of the music must not destroy the author's voice but it should be a supplemental tool to attract the audience's attention and add an emotional atmosphere (Bán & Nagy, 2016).

Step 5- Editing

The editing phase should include the review of the whole material; sound, music, images, etc. (Bán & Nagy, 2016).

Step 6- Sharing (screening)

Authors work hard to get their narratives alive while novice storytellers go through an overwhelming process of learning and creating digital stories in order to finally share them with people (Bán & Nagy, 2016).

Step 7- Debriefing

As the sharing phase ends, students and the teacher have a discussion about the full creation process. They should talk about what they liked and disliked during this journey including the challenges they have faced. Talking about their experience, learners will share their opinions about this technological tool involving both positive and negative points of view (Bán & Nagy, 2016).

1.6. Challenges

As any other instructional technology tool, digital storytelling implementation owns some challenging elements that teachers may face during its utilisation in the classroom. Hofer and Owings Swan (2006) state that there are some potential problems that may derange and disrupt the process of DST implementation. They believe that the content of the digital stories should be related to the curriculum. They should also support students' learning and

meet their needs and the teacher should assist his/her students in the various DST stages as learners evolve. Finally, the authors reiterate that DST projects are to be used as an assessment tool, in that; a rubric-based assessment is required.

Initially, technological barriers relate to students' familiarity with ICTs and the availability of these tools. The use of new technology programs and software requires digital literacy and students' ability to access these technology-based elements. From another angle, there is a possible resistance of technology-based pedagogy because of their confined technological knowledge (Strayer, 2007); students may also be reluctant as the new way of learning requires responsibility. The introduction and the adoption of a new methodology can add a significant pressure and burden to both teachers and learners (Polly & Shepherd, 2007). Therefore, it is obligatory for teachers to add a considerable amount of time to develop their digital skills, prepare materials as well as ameliorate their technology-related repertoire to attract students' attention.

1.7. Emotional Intelligence

Emotional Intelligence is a book written by Daniel Goleman in 1995 that is widely renowned as the springboard from which EI has become a focused topic of interest. The essence of his work was the claim that emotional intelligence quotient (henceforward EQ) is equal, if not more valuable than, intelligence quotient (henceforward IQ) as it aids individuals to succeed in their personal and professional lives. It also helps in developing leadership competencies and organizational skills in addition to social involvement (Goleman, 1995). Furthermore, Bar-On (1997) defined EI as "an array of non-cognitive capabilities, competencies, and skills that influence one's ability to succeed in coping with environmental demands and pressure" (p 14). From another angle, "emotional intelligence refers to the capacity for recognising our own feelings and those of others, for motivating ourselves, and for managing emotions well in ourselves and in our relationship" (Goleman, 1998, p 317). Goleman in this definition illustrates the five components or dimensions of EI which are self-awareness, self-regulation, motivation, empathy, and social skill.

1.7.1. Emotional Intelligence Components

Self-awareness: It refers to the capacity to comprehend one's own moods, emotions, reactions, desires in addition to controlling their impacts on other people. The hallmarks of this trait include self-confidence, self-assessment, etc. (Goleman, 1998).

Self-regulation: The capability to appropriately control, monitor, and guide one's troublesome impulses and moods as well as the capacity to suspend and annotate prejudgement (Goleman, 1998).

Motivation (Internal Motivation): Stimulation that drives an individual to work for his/her own intrinsic contentment such as joy and happiness in working, curiosity to learn, to discover, etc. (Goleman, 1998).

Empathy: It is basically the ability to recognize, define and comprehend other's emotions, feelings and emotional reactions and impulses (Goleman, 1998).

Social Skills: They refer to the set of skills that facilitate interaction and communication with people as well as constructing and establishing networks and rapports with others (Goleman, 1998).

1.7.2. Emotional Intelligence and Digital Storytelling

The creation of digital narratives is considered as a collaborative activity that enables social learning which is supposed to enhance and stimulate emotional intelligence. "Storytelling-based learning promotes knowledge as well as social and emotional intelligence" (Frenzel, Müller & Sottong, 2004 as cited in Felicia, 2011, p.986). In this venture, a study that was carried out by Pieterse and Quilling (2011) of the University of KwaZulu-Natal, South Africa investigating the impact of DST on trait emotional intelligence showed that digital stories helped students develop their EI as it has provided them with a positive emotional experience and development. They were also able to voice their leadership thoughts. Along the same lines, since DST is a collaborative activity, it is argued that digital storytelling improves learners' EI through promoting collaborative learning atmosphere. On the one hand of the pendulum, collaboration is related to emotional intelligence in the sense that EI competencies allow them to develop shared collaborative goals (Xavier, 2005). On the other hand of the pendulum, there is a compelling relationship between learners' emotional intelligence and their ability to work efficiently within a group (Hattori & Lapidus, 2004). The essence of collaboration lies in the fact that each individual is responsible for the success or failure of the group.

As final words, few studies have been conducted about the irrevocable relationship between digital storytelling and emotional intelligence. Emotions have been corroborated to

be crucial in the process of learning and teaching. Thus, DST does assist learners in developing their EI and validating their emotions as it gives them voice and space. DST can "provide closure to deeply emotional issues in … [students] lives" (Robin & Pierson 2005, p.713). "The emotional potential of digital storytelling, however, is still largely untapped" (Miller, 2008, p.19).

1.8. 21st Century Education

Education in the 21st century has to adjust to the fluctuations that have become a test and a challenge to both teachers and educators. Modern technologies have revolutionized the educational world in an ineluctable manner and have generally focused on web-based instructions and digital tools to aid learners to absorb and ingest knowledge in a practical way.

> New understandings of teaching and learning, coupled with innovations in technologies for information search, communication, and teaching, provide many new options for the work of students and teachers, with the potential for creating a whole new way of doing things in schools. (Leithwood & Riehl, 2003, p. 5)

With the new technological era, the aforementioned revolutionary changes will only continue to increase in equivocal manner and velocity. For this reason, "these new demands [of the 21st Century] cannot be met through passive, rote-oriented learning focused on basic skills and memorization of disconnected facts" (Darling-Hammond, 2008, p. 2). In this respect, we need to replace the old-fashioned practices by "learning that enables critical thinking, flexible problem solving, transfer of skills, and use of knowledge in new situations" (Darling-Hammond, 2008, p. 2). The conceptuality of the term 21st century education leads to the thought that the focus should be on developing the competencies required for the information age such as emotional intelligence.

1.8.1. Digital Age Learning Requirements

There is a huge gap between the skills that students are learning in schools and what they need as the outdated curricula and methods used in our schools do not address the skills needed to survive in a technologically dependent era. In a time of budget cuts and technology-based world, the need for emotional intelligence in education is exceedingly warranted. Students' behaviour is unalterably correlated to emotional intelligence. Students' low EI leads to low concentration and the possibility of aggression towards their peers. These

problems of behaviour due to low EI can cause lack of communication and management skills in addition to other consequences that need to be palliated (Stottlemyer, 2002). Accordingly, EI usefulness has been validated as it can profoundly mitigate aggression and discipline issues. Educators and researchers have agreed on the fact that nowadays learners need several skills that probably have not been addressed in previous centuries as advances in digital technology and the spread of globalization have led to and fuelled other requirements for efficient, effective and highly educated workers over the past four decades. In addition to emotional intelligence, skills as technological literacy, collaboration, intercultural communication, teamwork, leadership, critical thinking, problem-solving are important and are to be addressed and tackled for successful academic and professional careers (Darling-Hammond, 2008). Every learner has to attain new levels of competencies and mastery - both knowledge and skills- which are considered to be highly recommended to succeed in school, college and also outside these settings.

1.9. Conclusion

This chapter has contained several resources that provide and propose a novel perception of learning and teaching practices in a technologically-driven world. This chapter has encompassed two sections as the first section has provided the reader with a clear definition of digital storytelling, its characteristics, elements, types and the historical background delineating its emergence. Additionally, it has included the theoretical perspectives related to digital storytelling and its relationship to the social constructivist approach and social-emotional learning principles. The second section of this chapter has reviewed previous studies that support this instructional innovative paradigm in addition to its implementation and the challenges that can face teachers in applying it in the 21st century classroom. As final words, emotional intelligence has been defined and discussed in relation to digital storytelling.

The provided information in this chapter leads to a conclusion that 21st century teachers and learners have different needs. In this perspective, digital storytelling as a technological based instructional technique would assist them in honing and developing their emotional intelligence. Finally, after we have provided our readers with a meticulous description of the key concepts and theories of our research, our second chapter is going to deal with the practical part of our research.

2. Introduction

This chapter lays out the methodology adopted in this research. In specific terms, it discusses in details the research methods used to conduct this study. It also tackles the description of the sample (population), research procedures and the data collection tools which involve a classroom observation, an emotional intelligence test, and questionnaires. It delineates the procedures, steps, and organisation of the experiment that has been carried out at Abdelhamid Ibn Badis University.

2.1. Research Method

Our study is a tentative attempt to investigate the effectiveness of digital storytelling in developing learners' emotional intelligence. In this respect, we have used a mixed method design in order to gather the data needed for the validation of our research work. Many researchers agree on the fact that a mixed method design is the most convenient model as it caters variation in data which leads to the reliability and the validity of the research. It also tackles the question from different perspectives, i.e. both quantitatively and qualitatively, leaving no gaps. Arguably, Byrman (1998) declares that "…both of qualitative and quantitative approaches should be combined." (as cited in Hughes 2006, p. 1). In a similar angle, Creswell and Clark (2007) believe that "the use of quantitative and qualitative approaches in combination provides a better understanding of research problems than either approach alone" (p.5). A mixed method design, therefore, provides more comprehensive data that will aid us in providing accurate and rigorous validation to our hypotheses.

In this respect, an emotional intelligence test was administrated before and after the experiment which is composed of four emotional intelligence areas and various statements that measure students' EI. Additionally, an observation took place before and during the experiment in order to gauge learners' EI development qualitatively. We tried to observe them in natural settings with their learning process during the oral expression sessions in which an experiment was carried out to consolidate the quality of our findings. From another angle, a questionnaire was handed out to teachers and learners comprised of both closed-ended and open-ended questions with the aim of enquiring into their attitudes towards integrating digital storytelling in learning/teaching processes.

2.2. Procedure

We conducted an experiment that lasted for four weeks with third year licence students, specifically, group one and five at the department of English language, Abdelhamid

Ibn Badis University. Our experimentation consists of various lessons related to the creation of DST taken mostly from Educational Uses of Digital Storytelling website in which learners were introduced to this technological innovation. Its process is based on Dávid Bán's and Balázs Nagy's model "The Digital Storytelling Workshop Step by Step" (see chapter 1, section 1.5.2.) which is further modified to suit the demands of our context. The experiment took place every Wednesday from 9.30 till 11.00 with group one and from 11.00 till 12.30 with group five for four weeks.

2.3. Context

Our experimentation took place at Abdelhamid Ibn Badis University- department of English, Mostaganem. This setting was chosen because it fitted the requirements of our experiment such as the availability of rooms equipped with projectors.

2.4. Participants

The target population for this study consists of 44 third year licence students belonging to group one and group five at the University of Mostaganem. Their ages are between 18 and 24 years old. They are randomly selected to scrutinize and investigate the effectiveness of DST in developing their emotional intelligence.

Moreover, the population of the teachers is composed of 13 university teachers of English at the department of English language, Abdelhamid Ibn Badis University.

2.5. Data Collection Instruments

The data collection instruments used in this research are an experiment conducted at different stages, a classroom observation, an EI test for learners, and questionnaires addressed to both teachers and students.

2.5.1. Observation

Classroom observation can aid in collecting qualitative data through direct observance of the participants. In our study, the use of such a method aims at gauging learners' EI in classroom interaction where the researcher attended various sessions before and during the experiment. In better terms, the aim behind the use of such a methodological tool is to provide enough information about the learners' emotional intelligence.

2.5.1.1. Pre-Experiment Observation

During this phase, observation has been conducted in order to measure students' level of emotional intelligence. Our observation has taken place in four oral expression sessions in which the teacher has provided learners with different activities. She has usually divided them into several groups and asked them to work collaboratively on a specific task such as role plays, presentations, storytelling, etc. Hence, we have had an opportunity to measure learners' EI level into practice. In this perspective, group work and presentations have been one of the important keys that could reveal learners' level of EI before the experiment.

2.5.1.2. During-Experiment Observation

During the experiment, students have been divided into eleven groups (group one: 5 groups and group five: 6 groups) and asked to work together inside and outside the classroom. Several tasks have been given to them including; topic selection, story writing, images selection and editing, music and audio mixing, etc. Along the same vein, as story circles give learners a chance to share their stories, give feedback, ask each other questions, share personal experiences happy and sad, show and portray empathy, these circles have been carried out regularly during the experiment. In this perspective, the aim of the during-experiment observation is to pay attention to and observe students' development of their emotional intelligence competencies.

2.5.2. Emotional Intelligence Test

Most emotional intelligence questionnaires/tests are scored and graded quantitatively (DeBusk, 2008). Emotional intelligence tests are used to assess students EI and gauge their strengths and weaknesses. A test has been administrated before and after the experiment to both groups to measure their EI competencies before and after the experiment.

2.5.2.1. Description of the Emotional Intelligence Test

There are many emotional intelligence tests that have appeared in recent years which are designed by different authors and academics. Most of these tests are based on Daniel Goleman model of EI (Self-awareness, Self-regulation, Motivation, Empathy, Social skills). One of these questionnaires is designed and developed by Anaptys, the Development Practice (2013). This test is taken as a model in which it is modified, revised and simplified in order to make it suitable and accessible for L3 students (see appendix A). The used test is a self-

assessment questionnaire that is designed to gauge one's various competencies of emotional intelligence. It aims at provoking learners' area of emotionality that they may need to improve as well as it may help them know their well-developed areas. There are 38 statements arranged under a number of categories/rubrics which are self-awareness, self-regulation, motivation, empathy, social skills. Each rubric has a column for the scoring system that starts from a scale of 1 which represents a total No/low agreement and ends with 6 that symbolises a total Yes/high agreement.

a. Self-Awareness (Statements 1 to 8)

This sequence of statements aims at measuring one's ability to know his/her emotions, strengths, wants, weaknesses and limitations. It is also about being aware of one's emotions and anticipating their impact on others.

Statement 1 investigates the effects of one's feelings on him/her.

Statement 2 targets one's ability to put words to his/her feelings.

Statement 3 aims at measuring one's capacity to control his/her emotional impulses.

Statement 4 aspires to probe one's awareness of how his/her behaviour affects other people.

Statement 5 endeavours to elucidate one's awareness of his/her values and willingness to work with them.

Statement 6 attempts to investigate one's awareness of his/her weaknesses.

Statement 7 investigates whether the informant is aware of his/her strengths and weaknesses.

Statement 8 intends to see one's awareness and willingness to ask for help.

b. Self-Regulation (Statements 9 to 15)

This category refers to the ability to control or redirect one's emotional outbursts, moods and impulses as well as to adapt oneself to fluctuating and changing circumstances. It is the ability to regulate one's feeling to enhance his/her performance, work, and productivity.

Statement 9 pinpoints one's ability to predict his/her moods.

Statement 10 measures the individual's ability to remain calm in difficult circumstances.

Statement 11 targets person's tolerance of ambiguity.

Statement 12 targets the individual's openness to change.

Statement 13 surveys the level of one's anxiety during presentations and exams.

Statement 14 examines one's reaction towards criticism.

Statement 15 questions one's ability to manage emotional impulses and perform under stressful conditions.

c. Motivation (Statements 16 to 22)

This part of the test addresses one's intrinsic motivation, i.e. the capacity to know how to use one's emotions to propel himself/herself into an action. This category aims at investigating students' ability to pursue goals with vitality and assertiveness.

Statement 16 attempts to investigate whether the informant is motivated towards his/her current activities.

Statement 17 addresses one's point of view regarding self-growth and lifelong learning.

Statement 18 examines the individual's ability of personal development.

Statement 19 targets one's appreciation of failure.

Statement 20 enquires into one's level of self-motivation.

Statement 21 investigates one's ability to accept and overcome the impact of failure.

Statement 22 assays one's capacity to stay motivated in difficult circumstances.

d. Empathy (Statements 23 to 29)

The statements proposed in this sequence seek to investigate the individual's ability to understand and appreciate other's emotions and feelings. It also aims at measuring their ability to consider other's feeling in decision making as well as anticipating, recognizing, and meeting immediate and essential constituents' needs.

Statement 23 aspires to address the individual's ability to understand and appreciate other people.

Statement 24 enquires into one's willingness to provide help without any benefits.

Statement 25 targets the person's ability to read other's emotions

Statement 26 questions one's capacity to listen respectfully to others.

Statement 27 examines whether the informant is a good coach and if people usually come to him/her asking for advice.

Statement 28 probes one's ability to predict other's moods.

Statement 29 explores individual's capability to read other's body language.

e. Social Skills (Statements 30 to 38)

The given statements are directed towards gauging the capacity to manage relationships and build various social networks. It refers to one's ability to connect with others as well as to contribute to eligible answers through collaboration, communication and mutual understanding and respect.

Statement 30 gauges the wildness of individual's social network.

Statement 31 reveals one's competency in getting along with others.

Statement 32 seeks to gauge one's ability to coach others and people's willingness to be under his/her gaudiness.

Statement 33 examines one's beliefs regarding other people's perceptions of him/her.

Statement 34 targets person's ability to do favours and having people doing favours for him/her.

Statement 35 addresses one's enthusiasm and warmth.

Statement 36 aims at measuring an individual's ability to influence others in a good way.

Statement 37 intends to examine one's capability to resolve conflicts between people and help other's solve their problems.

Statement 38 seeks to inquire into one's willingness to listen to other people's arguments even when he/she is right.

2.5.3. Questionnaire

The questionnaire is used to collect the necessary data that would validate or invalidate the hypotheses. In this perspective, the aim of our questionnaire is to examine learners' attitudes towards the utilization of DST in their learning processes. It further investigates teachers' assumptions regarding DST as an effective tool and their attitudes towards the integration of digital storytelling in their teaching.

2.5.3.1. Description of Students' Questionnaire

The questionnaire is made up of two parts (see appendix B). The first part consists of questions concerning learner's personal information while the second part deals with students' attitudes towards the use of digital storytelling in learning and teaching processes.

The first part of the questionnaire investigates learner's personal information including gender, age, as well as geographical area, grade level, grade retention in order to provide an in-depth inquiry about the difficulties that learners may face when working on the creation of digital storytelling.

As for the second section, it tackles learners' attitudes towards the integration and the use of digital storytelling in the classroom. It is composed of nine questions that investigate the difficulties students faced during the creation of DST, their willingness to create other digital stories, and their opinions concerning the use of this technological innovation in the classroom.

Question (6) investigates whether students prefer digital storytelling, traditional storytelling or both accompanied with space to justify their choice.

Question (7) investigates students' opinions about DST workshop as it puzzles their level of excitement and enjoyment while working on such a digital innovation.

Question (8) seeks to identify whether DST motivates them. They are also asked to justify their choice of a given answer.

Question (9) tries to determine students' willingness to create another digital story in order to investigate their future intentions concerning the use of DST.

Question (10) examines the difficulties that students are confronted with during the process of working on digital stories in groups. It provides them with multiple choices such as working in groups, writing the narrative and using digital devices, etc.

Question (11) deals with learners' preferences regarding the various parts of DST process in which they are given an opportunity to choose more than one suggestion including story circle, storyboarding, digital media selection, working in groups, etc.

Question (12) attempts to disclose whether DST has assisted learners in promoting and developing their language productivity, skills, knowledge, i.e. exploring what are the competencies that they could develop throughout the experiment including listening, speaking, reading, writing, critical thinking, etc.

Questions (13) and (14) inspect students' point of view towards the integration of DST in the classroom and whether they encourage teachers to use it in the classroom. They are provided with a space to justify one's choice of a given answer.

Question (15) aims at exploring students emotional intelligence development resulting from the work on DST in that it provides them with space to explain and justify their choice of a given answer.

At the end of the questionnaire, question (16) allows students to give their suggestions and points of view regarding the utilisation of DST in the teaching and learning process.

2.5.3.2. Description of Teachers' Questionnaire

The teachers' questionnaire aims at clarifying their attitudes towards the use of DST in their classrooms and pedagogical practices (see appendix C). It is made up of 12 questions that target the objectives and hypotheses of the research. This questionnaire is composed of either dichotomous questions or multiple choice questions (Likert Scale) in which the respondents are accorded with space to either explain or comment.

The questionnaire is made up of two sections in which the first section consists of 3 questions. The initial question aims at identifying teachers' gender whereas question two intends to measure the teacher's experience in the academic setting. Finally, question (3) explores the respondents' area of research interests.

The second part seeks to investigate the respondents' attitudes towards the utilization of DST in their teaching practices. It is comprised of 9 questions.

Questions (4) and (5) aspire to explore how often teachers use technology devices in their teaching practices in addition to whether they encourage their learners to utilize them in their learning process.

Questions (6) and (7) inquire into teachers' acquaintance with the term digital storytelling as it asks them whether they have already created a digital story and about their experience in doing such an activity.

Question (8) aims at exploring whether teachers agree or disagree on the fact that DST will help their learners have a deeper comprehension of the lesson content.

Questions (9) and (10) have the objective of unveiling teachers' opinion and point of view regarding the suggestion that DST is engaging besides it can make their teaching more motivating and beneficial.

Question (11) attempts to explore teachers' attitudes towards the incorporation of DST in the classroom. In essence, it asks them what would be their attitudes towards utilizing DST in their teaching practices as a way to deliver content or design activities for their learners.

Question (12) explores teachers' measurement of their students' attitudes towards the incorporation of digital storytelling in various learning and teaching practices.

2.6. Experiment

The experiment took place in oral expression sessions_ during March and April 2018_ in which it was designed according to the nature of research project and according to the case study. We have utilized the materials available in the classroom such as laptops, projector, speakers, and a set of papers.

Before implementing our experiment, we have gone through the following steps:

Step 1: In the very first step, we have set our research hypotheses. As for our case study, we have hypothesized that digital storytelling can help learners develop their emotional intelligence competencies.

Step 2: At this stage, we have chosen the targeted population that would participate in our experiment and which is composed of 44 third year licence students. Their ages are between 18 and 24 years old.

Step 3: We have further examined the targeted environment by attending the weekly oral expression sessions during the first semester. At this stage, we have observed learners in order to decide whether to work with them or not. We have also tried to build a rapport of confidence and trust by circulating the classroom, asking them questions during their activities, seeking their viewpoints regarding the assigned work, etc. with the purpose of making them respond to the EI test honestly and without fear of being humiliated or embarrassed from the results.

Step 4: At this stage, we have distributed the EI test after attending several sessions in order to examine and gauge learners' current emotional intelligence.

Step 5: In this stage, we have started presenting some digital stories and lessons in the oral expression sessions in accordance with the research objectives, motivation, questions, and hypotheses.

Step 6: The final step consists of the post-experiment phase in which we have administrated another EI test and questionnaires in order to collect the needed data which would be further analyzed and interpreted by numerical and descriptive ones.

2.6.1. Organization of the Experiment for Learners

2.6.1.1. The Pre-Experiment Phase

During this phase, we have taken online courses on Coursera[5] in order to become familiar with the procedures and steps of implementing digital storytelling in the classroom. The course is entitled "Powerful Tools for Teaching and Learning: Digital Storytelling" which lasts for five weeks with the intent of introducing teachers to DST and disclosing the various ways that can be utilized to ameliorate students' learning experiences and skills.

Along the same angle, we have started observing L3 students (group 1 and group 5) in order to gauge their level of emotional intelligence and to make sure that this population would suit the study and aid in validating the research hypothesis. The experiment as already

[5] It is an online educational platform that offers massive open online courses (MOOCs).

stated took place in oral expression classes in which the teacher of this module utilized many activities such as traditional storytelling and collaborative work which assisted us to measure learners' EI. This stage lasted for four weeks with an EI test distributed at the end of the last observational session. Along the same line of thought, using the results of the test and the observation, we could infer that these students need further developments in their EI.

Conjointly, we designed a personal digital story that speaks about the importance of emotional intelligence in relation to one's personal, academic and professional life. We have also contacted Dr. Bernard Robin; Associate Professor of Learning, Design, & Technology-University of Houston, in order to have his permission for the use of his designed digital storytelling material and videos on Coursera and Educational Uses of Digital Storytelling website. We further asked Story Center website for authorization to download their digital stories founded on their YouTube channel in order to use them as examples that would give students a clear idea about DSTs.

2.6.1.2. The Experiment Phase

The model that we have adopted in order to facilitate digital storytelling creation process is Dávid Bán's and Balázs Nagy's model "The Digital Storytelling Workshop Step by Step" (2016). Several modifications have been proposed to make it suitable to our context.

Phase 1: Introduction

During this process, some questions are selected. They are as follows:

- What is digital storytelling?
- What are its elements and main components?
- What is emotional intelligence and why it is important?

In this stage, we have presented our digital story for both groups (group one and five) in order to make them familiar with DST. The topic of the story is about our personal experience dealing with the effects of having low emotional intelligence level.

After having watched the digital storytelling video, students have been asked several questions about the story, their points of view about the author's reactions and what would they do, if they were the author. The aim of these questions is to discover learners' EI strengths and weaknesses.

An overview of the results of their emotional intelligence has also been given to the students in order to make them aware of the role of emotional intelligence in the 21st century. Then, we have explained how to write a digital story, i.e. the seven elements of DST that should be taken into consideration in their stories.

In collaboration with their teacher, we have divided the students into eleven groups (group 1: five groups and group 5: six groups) and asked them to choose their story topic and start the writing process. As our attempt is to promote social-emotional learning, we have given them freedom of choice regarding the type and the number of the stories they want to write and create.

Phase 2: The Story Circle

At the heart of digital storytelling creation process, there is the story circle phase which refers to a safe environment where the participants have the opportunity to share their scripts, ideas, provide and receive feedback from each other.

After having the stories written, learners have started sharing them orally while sitting in a circle. This process has allowed them to provide feedback and comments to ameliorate and improve each other's narratives.

Phase 3: Storyboarding and Realization of the Digital Stories

Storyboarding is close to PowerPoint presentation in which students visualize their stories and outline the transition, the animation and the organization of the photos in relation to the scripts. Storyboards are used in order to help students know what things would appear in the video and when. In this stage, students have to create their storyboards in order to help them organize their narratives.

Learners are asked to record their stories using their laptops or their mobile phones and to download the needed software. At this stage, Technology skills and abilities are highly emphasized. Learners are introduced to the different types of software including Ice-cream Slideshow Maker and Audacity.

Here are definitions of some key digital programs we have used:

Audacity

This software allows its user to record audio from different sources as well as to edit this recording through amplifying, trimming, cutting and normalization. It can also be used to mix music with audio and the user can even control the dominant sound which can be either the recorder voice or the music.

Ice-cream Slideshow Maker

Students use this software to create their digital stories. It can breathe life into their slideshow by adding their audio recording that is mixed with music and transition effects.

At the end of this stage, we have tried to help learners in collaboration with their peers to edit and finally create their own digital stories.

Phase 4: Sharing and Debriefing

In this stage, the groups shared their digital stories. Feedback is necessary in this stage in that learners can share their feedback with their peers about their experience working in this workshop.

2.6.1.2.1. Procedures of the Experiment

The experiment has lasted for four weeks. The learning objectives and content of each week are described in the following table.

Week	The Content of the Week	Learning Objectives
Week One	-Introduction to DST. -Introduction to EI. -Do you think that EI is important for your professional and personal life? -Do you think that it is important to have EI in order to be successful in the 21st century?	-Becoming familiar with digital storytelling technology. -Checking students' familiarity with the term emotional intelligence. -Raising students' awareness towards the importance of EI. -Investigating students' opinions concerning working in groups and collaborative work. - Discussing the essentiality of EI in group work.

	-Do you need high EI in order to work in groups?	-Dividing learners into small groups and asking them to choose a topic for their story and work on the scripts.
Week Two	-How was your experience working in groups? -Have you faced any problems when working in groups? -What was the source of the problem? And what do you think about it? - Story Circle - peer feedback.	-Discussing the different stories. -Learning how to give one's point of view without hurting the other (peer feedback). -Raising students' empathy. -Enhancing learners' social skills. -Raising students' confidence and trust in each other. -Learning how to give feedback. -Checking students' motivation. -Asking students to record their stories, collect pictures and music that they would apply to their story.
Week Three	-Storyboarding -Introduction to Icecream Slideshow Maker. -Introduction to Audacity.	-Working on organisational skills. -Working on digital skills through learning how to use Icecream Slideshow Maker and Audacity. -Trying to motivate students to help each other. - Working as a TEAM (Together Everyone Achieves More)
Week Four	-Sharing and Debriefing. -Presenting the digital stories. -Feedback	-Managing stress before presentations. -Ability to recognise one's emotions and control them. -Controlling one's impulsive behaviour when receiving constructive criticism.

Table 3: Procedures and organization of the experiment

2.6.1.3. The Post-Experiment Phase

In the post-experiment phase, learners have been handed an EI test and questionnaire to gauge their improvement and development. The aims of using these two tools are to collect the required data that would validate or refute the hypotheses. Commensurately, another

questionnaire has been given to teachers in order to measure their attitudes towards the use of DST in their classrooms and teaching process.

2.7. The Facebook Group (Digital Storytelling Creators)

A Facebook group is created in order to provide students with the required materials and guidance. It is utilized as a hybrid learning tool that would facilitate the learning and teaching processes in a context that is new to technology-based instructions. It is also to help students find answers to their queries and to know their opinions regarding DST. In this respect, students are provided with several videos taken from Educational Uses of Digital Storytelling website, Story Center YouTube channel and Coursera. These videos are as follows:

Videos Taken from Coursera: Finding and Using Copyright Free Music, Mixing Audio with Audacity, Images and Copyright, Creative Commons.

Videos Taken from Educational Uses of Digital Storytelling Website: Run your World, Spies of the Revolutionary War, In Search of the Pythagoreans

Videos Taken from Story Center YouTube Channel: Starting again - by Amanda Bensel, I Guess I Don't Hate Blueberries - by J. Forrest, Choice - by Mari McCoy.

2.8. Conclusion

The present chapter is the most essential part of our work since objective and well-studied methods and methodology bring our readers to more credible results and more convincing generalizations. To be more informed about our study case which deals with investigating the effectiveness of digital storytelling in developing learners' emotional intelligence, a deep description of the EI test, learners' questionnaire, teachers' questionnaire, and the classroom observation process has been given.

After we have presented a whole chapter on how our research was organized and the methods and methodology we went through, our third chapter is going to provide our readers with analysis, interpretation, and discussion of the collected data.

3. Introduction

After having presented and discussed further information concerning the methodology adopted in this study, the present chapter discusses the results obtained throughout the process of the research. It is divided into two sections. The initial part deals with the effects of digital storytelling on learners' emotional intelligence development whilst the other parts investigate teachers' and learners' positive/ negative attitudes towards the incorporation and use of digital storytelling in the learning/teaching processes.

3.1. The Effects of Digital Storytelling on Learners' Emotional Intelligence

This section is devoted to the analysis of the data collected from learners' responses on the emotional intelligence test and via classroom observation in order to gauge their level of EI before and after the experiment. The classroom observation and emotional intelligence test are analyzed and illustrated as follows:

3.1.1. Classroom Observation

3.1.1.1. Pre-Experiment Observation

We attended four sessions with third year licence students (group1 and 5) in order to collect information about their emotional intelligence quotient and to see whether it is possible to realize the experiment with them. At this stage, an observation was undertaken with the purpose of investigating the research's objectives including learners' self-awareness, self-regulation, motivation, empathy, and social skills.

During the four sessions with both groups, we observed that learners' self-awareness and self-regulation were low as most of them could not regulate their emotions, especially when responding to the teacher's comments or when working in groups. Lack of confidence and high anxiety were observed in students' performances. Students' negative reaction to criticism and feedback was also detected. Also, we deduced that learners' motivation was low as volunteering, risk-taking, engagement and participation were poorly noticed. This was seen when the teacher asked them "who wants to volunteer and prepare a story for next week" or "who will be the first one to present". In a similar vein, when the teacher asked for students' points of view on other's presentations or ideas, empathy was not discerned, i.e. the learners who commented on their classmates' work did not provide constructive feedback and

sometimes their answers showed that they were not actively listening. One example that can be provided is when a female student talked about her personal point of view regarding the negative effects of polygamy and spinsterhood. The student was faced with high lack of empathy, negative opinions and comments from her classmates in which they did not analyze facts logically but they rather addressed it from a subjective point of view until the teacher intervened and tried to calm down the situation. Furthermore, social skills were examined through collaborative work. For instance, in the second session, the teacher asked her learners to work as a group and each one should re-tell the story that his/her classmate wants to write in the future, i.e. each student should present the story of his/her classmate. Students at this stage were discussing the ways stories will be told and presented. Some students said "You write in details which story you want to write and I do the same and when you finish give it to me to read it and I will try to paraphrase it and you should do the same" others said, "I talk about mine, you talk about yours". Instead of listening to and communicating with each other, each learner was working individually. From these comments, we could infer that their social skills and ability to communicate with each other were highly low and poor. Additionally, the teacher was unable of controlling the classroom as students' side conversations dominated oral expression sessions. She usually used warnings in order to make them listen to each other.

3.1.1.2. During-Experiment Observation

We attempted to observe learners when they were working as a group in the classroom as well as during the story circle sessions. It was imperative to observe the developmental journey that students are going through as they become aware of emotional intelligence and its significance.

Session One

Learners showed a huge interest in emotional intelligence after the EI test they took in the pre-experiment stage. Many of them admitted their unawareness of this intelligence before the test but since they took it, they started re-considering their emotional intelligence level. After watching our digital story, they started reflecting on the situation described in the story empathetically and positively. They tried to see the problem elucidated in the digital narrative from the narrator's and the character's perspectives and points of view. They tried to describe their ability to be self-aware and being able to control their emotions if they were the

storyteller. Illustrating the idea of creating a digital story increased their motivation as many questions were raised in the classroom and on the Facebook Group about the process of realizing this project. Unlike the pre-experiment sessions where students refused communicating with us, many of them took the risk towards developing their social skills and started sharing their fears and anxieties with us and their friends. One of the learners said, "We could share our fears and experiences with everyone in the classroom thanks to this story and I think creating one will be highly beneficial". Concerning their social skills, a plethora of comments and opinions were given in addition to some personal stories dealing with EI such as the story of a girl whose painting was stolen by a teacher and how she challenged that person by realizing another painting and winning the competition. In conclusion, Learners elucidated a willingness to develop their emotional intelligence and it was estimated that DST process will be helpful.

Session Two

During the second session, an enhancement in learners' EI was recognized. We can say that learners moved from being in the lowest level of EI to the moderate state. Learners started appreciating and respecting each other's contributions wherein they become active listeners. During this stage, learners revealed the topics of their stories varying from educative, instructional, to historical but all groups have produced a personal story which was either additional or the basic story. Topics such as "Over Weight" "Facing Fears" "Trust God" "Jerusalem" "Social Anxiety" "Being Born" "Keep Faith" "The Lost luggage" "The fated Chance of Friendship" "The Pursuit of Happiness" "Mulan" "Life Experiences" "Time is Remedy" "The Aged Mother" "Ratatouille" "The Giving Tree". A series of comments and questions were given to the story writers. In this perspective, their reactions to the feedback that was given in the story circle sessions were not negative but rather they tried to benefit from their classmates' comments. For instance, when the first group talked about their story "Social Anxiety" and shared their narrative, feedback was given. One student said, "I believe that your story is well structured but I think that you need some examples in order to illustrate more". Another declared "I find the title little bit general, I think you should either add a definition at the beginning of the story or do something to make it clearer". The group took these pieces of advice wholeheartedly and all the guidance suggested above was seen when the story was digitally presented. An overall control of negative reactions towards criticism and becoming comfortable with the uncertainty of the teacher or their classmates from time to another was detected as well. As an example, the teacher pointed out that the story of

"Mulan" should be shortened in order to draw their classmates' attention to the message of their digital story. The girls accepted the teacher's comments and modified their story which did not exceed three minutes. There were some students that stood up and asked for feedback in order to create a treasured digital story. Moreover, students' motivation has noticeably increased in which it was middling and almost reaching accepted levels of enhancement. In a similar angle, learners became more aware of other's emotions and they consummately progressed towards achieving higher levels of empathy. Finally, social skills were developing slowly but generally a shift towards amelioration was detected as they started valuing their friends' efforts.

Session Three

Being digitally literate or illiterate was not an issue as everyone was working collaboratively. Although our context has many limitations, we could pursue our aim which was realizing the project in which learners showed their willingness to bring their laptops and work in the classroom. Eventually, this session was devoted to digital storytelling creation in the classroom where learners sat in groups and helped each other. Questions, eagerness, laughter, motivation, empathy, enthusiasm, relaxation and more positive feelings and emotions were the dominating lineaments of this session. Though many obstacles appeared at the beginning of the session, collaboration and the emotional intelligence spirit made it a special session for everyone. Their competencies were gradually improving. Self-awareness and self-regulation were detected as students exhibited high control of their emotions when they were moved to different classes in addition to some learners who were struggling with digital programs. Accurate self-assessment was observed as they could assess their digital skills and EI development honestly and self-confidently. Despite the fact that working in groups can cause problems, we could notice that many learners tried to manage and control their negative emotions and stress by empathizing with and learning from their classmates instead of providing unconstructive feedback. Learners became more empathetic as they tried to help each other while respecting each one's level of digital literacy. Accordingly, motivation was undeniable and was viewed in their actions, happy faces, and asking questions related to the topics as well as general queries. Along the same vein, people's skills flourished during this class in an unexpected way, their motivation led them to participation and risk-taking. Generally, learners transformed in a constructive way trying their best to become emotionally intelligent.

Session Four

The last session which was devoted mostly for presentations and feedback was characterized by an observance of all the emotional intelligence components as learners appeared to be more aware of their EI and attempted to consider their wordings and actions. Throughout this session, we could detect that learners started to possess self-awareness which was portrayed in their high self-confidence, self-esteem, and ability to word their feelings in front of their classmates which dominated the oral expression sessions. Many of them could monitor their negative emotions when confronting and presenting their digital stories in front of others in which self-confidence was adopted by many of them and this treat has characterized many students' presentations and general attitudes. In a similar vein, self-regulation also went through an amelioration process in which it was transitioned to perfecting level of EI. This was noticeably seen in their actions when receiving comments and criticism on their answers, performances and presentations of their digital stories.

Along the same line, it seems that technology motivates learners more than the traditional way of learning and teaching. Additionally, they seemed more excited and intrinsically motivated, participating and taking risks. Furthermore, their empathy altered as well in which they became more careful with their comments and prejudices. They tried to understand their mates and change their judgemental glasses into empathetic ones. In a similar aspect, social skills improved as learners could stand on the stage and talk to their classmates. Learners did not ridicule others' mistakes but rather they supported each other. Finally, social skills were improved and developed in which students could reach a considerable level of amelioration that was noticed throughout the four sessions. There were some students sitting alone before the experiment but they moved to sit with others during the experiment, i.e. DST project gave them an opportunity to broaden their social network. The participants were also able to communicate and work collaboratively with some guest classmates from the other group and some master students.

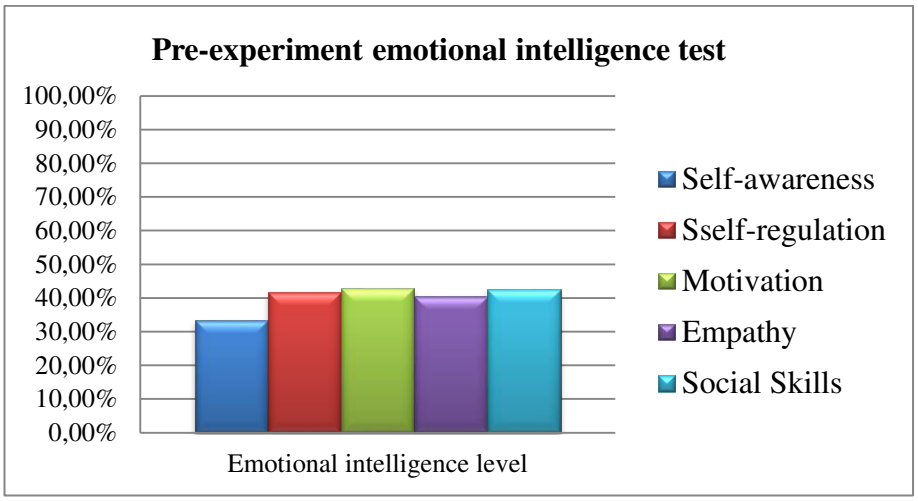
3.1.2. Emotional Intelligence Test

Since the observation has taken place only inside the classroom, the EI test has been designed; so as to, equip our findings with credibility and reliability. At this stage, 44 students participated in answering the EI test and the responses were analyzed quantitatively from very low (1) to very high (6) emotional intelligence (see appendix A). The analysis of the EI test

has enlightened and provided us with more credibility that is germane to our observation outcomes. In this respect, the respondents were asked to be honest since this test is of high importance and value.

3.1.2.1. Analysis of the Pre-experiment Emotional Intelligence Test

The pre-experiment test aims at gauging learners' EI before the integration of digital storytelling in the classroom. The following graph further discloses the findings of the pre-experiment emotional intelligence test:

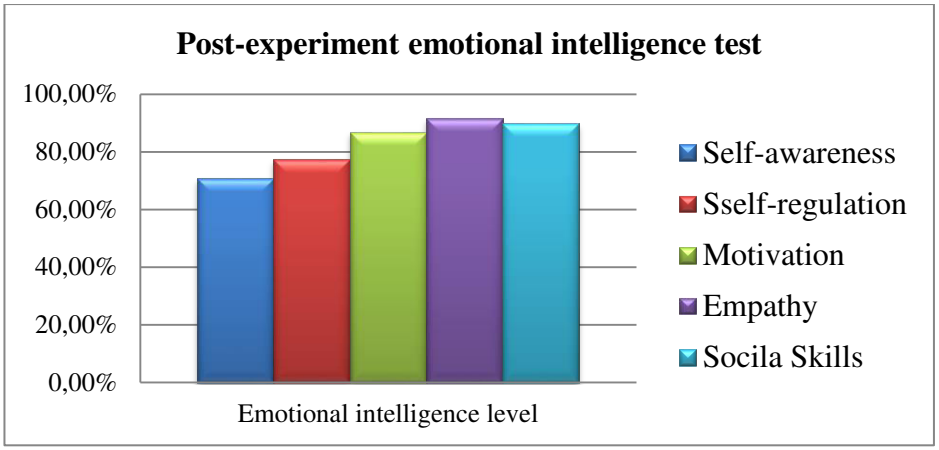


Graph 1: Pre-experiment emotional intelligence test

Graph (1) displays the variable rates of self-awareness, self-regulation, motivation, empathy and social skills. As indicated in the graph above, students' self-awareness is low and needs further enhancement with a percentage of 33.33%. Moreover, self-regulation competency level is also low and amelioration should be considered with a rate of 41.67%. As Motivation fluctuates between low and moderate levels of EI with a percentage of 42.83%, strengthening this EI competency is required as well. Learners' empathy is also poor and requires further development with a percentage of 40.5%. Finally, students lack social skills as they fluctuate between low and moderate levels of EI with a percentage of 42.67%.

3.1.2.2. Analysis of the Post-Experiment Emotional Intelligence Test

The post-experiment test aims at measuring learners' EI after the integration of digital storytelling in the classroom. The following graph discloses the results of this test:

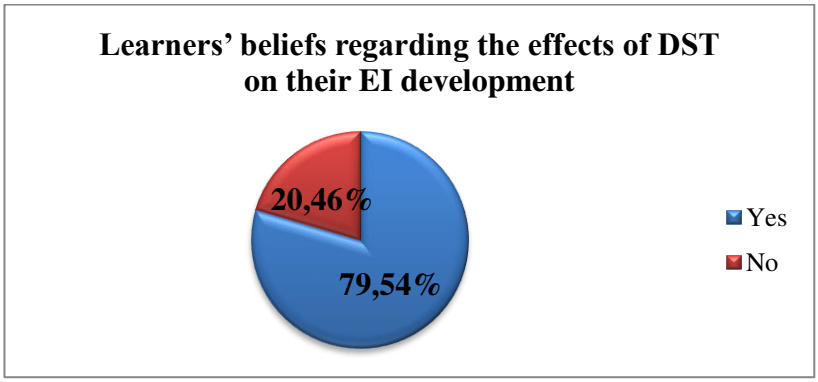


Graph 2: Post-experiment emotional intelligence test

The above graph presents the results of the post-experiment emotional intelligence test. To begin with, their self-awareness becomes high with a percentage of 70.83%. In parallel, their self-regulation competency is ameliorated after the experiment but it still needs further attention with a rate of 77.33%. In keeping with this perspective, students' motivation is reinforced and improved in which a shift towards high intrinsic motivation is recognised with a percentage of 86.83%. Regarding empathy, a consummate resettlement of this competency is also exposed with a high percentage of 91.67%. In a parallel fashion, social skills are enhanced and a move towards perfection is noticed with a percentage of 89.83%.

3.1.3. Learners' Beliefs Regarding the Effects of Digital Storytelling on Their Emotional Intelligence Development

In our questionnaire, we have asked our students about their opinions and beliefs regarding the effects of DST on their EI, i.e. whether DST has aided them in developing their EQ (see appendix B, question 15). The following graph displays their answers:



Graph 3: Learners' beliefs regarding the effects of DST on their EI development

As disclosed in graph (3), the majority of learners believe that digital storytelling helped them develop their EI. Eventually, 35 students (79.54%) have replied with positive answers. Their comments reveal their fascination with digital storytelling and their appreciation of it in the sense that it helped them discover themselves as well as their classmates' and other people's perceptions and attitudes. Some of their comments are as follows:

"When my classmate shared with us her story about her experience with weight loss, I really felt proud of having her in my class and I went to talk to her; hence, I could surpass my social anxiety. For sure, the process of this project assisted me in developing my EI in many ways. And most importantly I could widen my social network after working on the story collaboratively and sharing it with everyone."

"I believe that when I started this project I thought that it will be useless, how can digital storytelling help me but then I could discover my gaps and weaknesses."

"My motivation was high from the beginning because I already had an idea about digital storytelling and how to work on using it. Concerning how DST affected my EI, it did in many ways for instance: when working as a group, when discussing our stories in circles, and especially when presenting in which I could notice that I could confidently speak and present in harmony with my group."

"I believe that digital storytelling project raised my awareness towards the importance of EI. Consequently, when I started working on this amazing venture, I paid attention to my EI and tried to develop it thanks to constructing a digital story"

"I had no idea about EI before this project and after realising the importance of EI; I did not know how to deal with my low level in this area of intelligence. However, I think by the end of this project I have improved it throughout working in groups, presenting, and most importantly discussing and sharing our life experiences."

Exceptionally, most of them reflected on their experience believing that they could develop many competencies during this process. Regarding the students who have answered negatively, they comprehensively consider themselves as being emotionally intelligent and consider digital storytelling as an activity that helped them practice their EI. Others have replied with "No" without justification as the space devoted for clarifications was left blank.

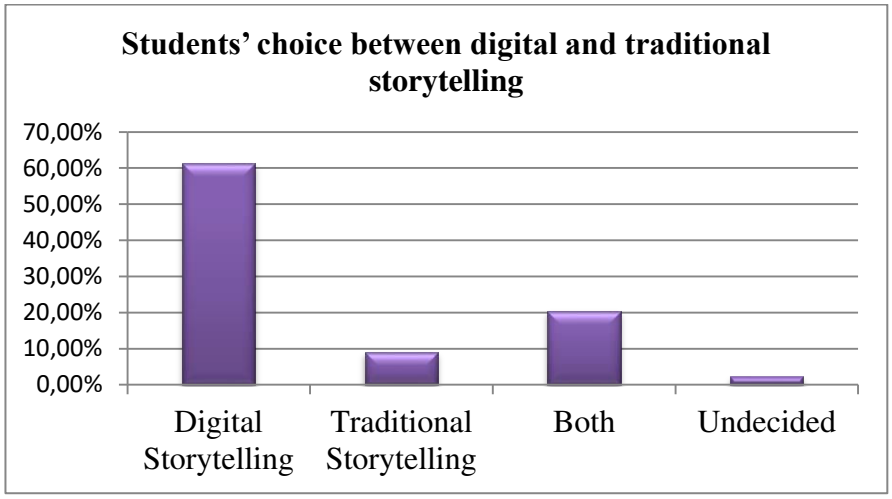
As disclosed in the section above, digital storytelling can assist learners in developing their emotional intelligence. It is clear from the outset that the pre-experiment, post-experiment test and the observation analysis are quite distinct which support the assumption that DST can alter students' EI. Accordingly, learners also reckon that DST process aids them in enhancing and developing the aforementioned type of intelligence.

3.2. Learners' Attitudes Towards the Incorporation of DST in the Learning/Teaching Process

Throughout this section, we have decided to select learners' substantial responses concerning DST incorporation in both teaching and learning processes. Their responses are demonstrated by graphs and by paraphrasing their written answers. Throughout our questionnaire, we have asked the participants several questions; nevertheless, we have selected the most essential questions to be analysed, they are as follows:

- Students' choice between digital and traditional storytelling.
- Students' motivation concerning the integration of digital storytelling.
- Students' willingness to create another story.
- Students' attitudes towards the incorporation of digital storytelling in the teaching/learning process.
- Students' suggestions to teachers regarding the incorporation of DST in classrooms.

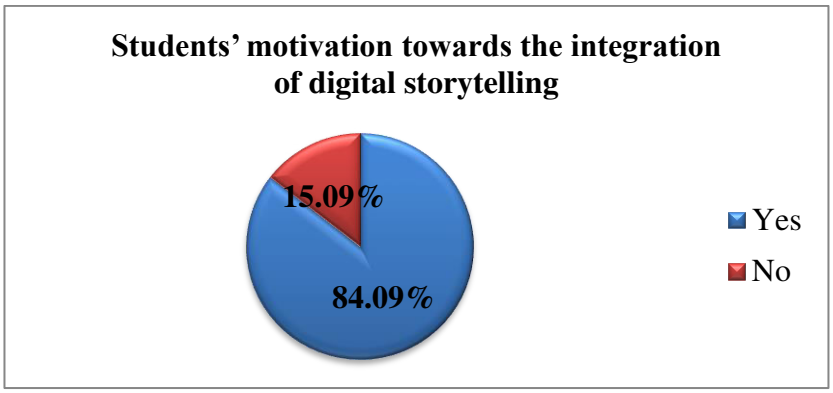
The graph below shows students' choices of digital storytelling, traditional storytelling, or both with the possibility of being undecided: (see appendix B, question 6).



Graph 4: Students' choice between digital and traditional storytelling

Graph (4) designates that 30 (68.18%) students prefer digital storytelling. They disclose that this innovation is more organised, motivating, it allows for the use of technology and helps in developing vital competencies. It also motivates students with melancholic experiences to share them digitally and avoid the burden of emotional impulses. In general, they admire the idea of amalgamating music, recording, and pictures alongside other instruments to create a valuable DST that can be shared on different platforms. From a different angle, 4 (9.09%) learners from both groups have selected traditional storytelling asserting that old ways are always the best and we need to move away from being technology-dependent all the time. There are 9 (20.45%) learners who prefer both digital storytelling and traditional one. They state that both of them are useful and enjoyable. They cannot favour one type over the other one since they both have undeniable benefits and astounding lineaments. In conclusion, only one (2.27%) student reckons that s/he is still undecided since both contain treasured characteristics, uncountable advantages but similarly we need to consider the limitations that they may have.

Eventually, graph (5) provides a clear picture of learners' motivation towards the integration of digital storytelling in teaching/learning processes: (see appendix B, question 8)

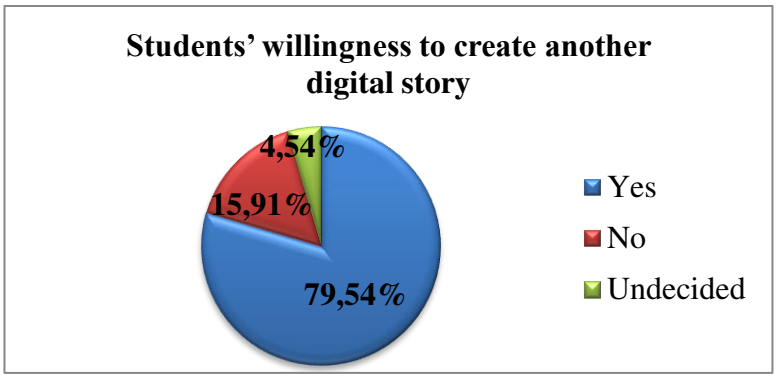


Graph 5: Students' motivation towards the integration of digital storytelling

As illustrated in the afore-designed graph, 37 (84.09%) informants acknowledge that DST motivates them as it incorporates traditional and digital components of storytelling, it assists them in honing many skills including writing and speaking, it fosters their EI, research skills, digital literacy as well as collaboration skills. Students argue that DST makes their products unique and creative in addition to allowing them to tell their stories under serene conditions. They further believe that DST is exceptionally beneficial for one's academic and emotional lives in which it provides an opportunity to share one's emotions, stories,

experiences with others in a novel and creative way. However, 7 students (15.09%) report that DST is unmotivating and tedious in that they consider traditional storytelling as a more creative activity and there is no need to amalgamate it with digital multimedia.

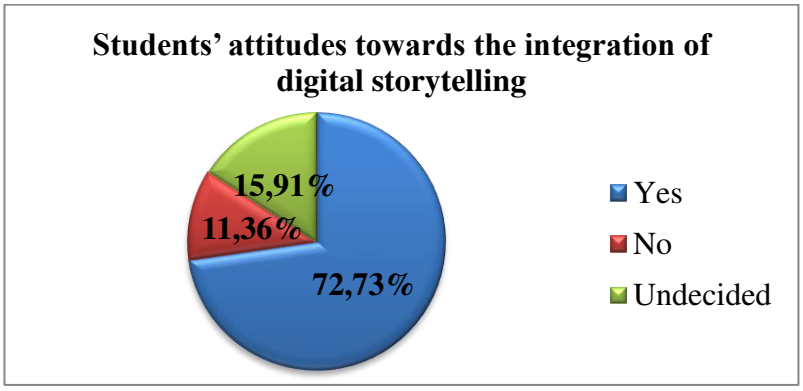
Furthermore, we have asked learners about their willingness to create another digital story in order to accumulate sufficient data regarding whether their experience in DST workshop was positive or negative. The graph below presents their answers: (see appendix B, question 9)



Graph 6: Students' willingness to create another digital story

Graph (6) indicates that 35 (79.54%) students are willing and enthusiastic to construct another DST whilst 7 students (15.91%) are reluctant and do not want to repeat the same experience; this is followed by undecided attitudes adopted by 2 students (4.54%).

Along the same perspective, determining learners' attitudes is one of the primordial aims of this digest; thus, the following pie chart summarizes their attitudes towards the incorporation of DST in teaching/learning practices: (see appendix B, question 13)



Graph 7: Students' attitudes towards the integration of digital storytelling

As presented in graph (7), 72.73% (32 students) of the respondents acknowledge and welcome the idea of incorporating DST in the teaching/learning process. These learners affirm that the integration of such an innovative tool will ameliorate the Algerian educational practices and bring about many changes in teachers' pedagogical practices. They further mention that this step would help many learners to enhance various skills needed for the 21st century. From another angle, five students (11.36%) refuse the idea of integrating DST in our classrooms proclaiming that there are many learners who do not have access to technologies and internet in addition to their lack of digital literacy. They also reckon that technology is not good for health and it will direct them towards excessive addiction. From another angle, seven students (15.91%) assert that they cannot decide if they are with or against DST integration in that they propose that technology is both advantageous and malicious.

The last phase is related to students' suggestions to teachers regarding the incorporation of digital storytelling in classrooms. We have chosen the following relevant suggestions from both groups: (see appendix B, question 16)

Learners' Suggestions

"I think teachers should incorporate digital storytelling in their teaching practices because the traditional methods do not help us develop our skills."

"I believe teachers who utilize DST are having highly interactive learners in their classrooms; thus, our teachers should know that using this tool will be of great benefit and asset to us and we will never get tedious because it breaks the routine and changes the mood."

"I suggest that teachers should first learn about digital storytelling; so that, they can use it with their learners easily."

"I suggest the periodical use of DST. It is essential to use such a new way of telling stories which is non-traditional and up to date in order to meet our needs."

"Teachers have to integrate DST in order to help students develop their skills. They should use novel ways of teaching."

As final words, learners have reckoned that DST can revolutionize our educational system and teaching practices. The majority of learners felt motivated during this journey and they encourage teachers to integrate DST in their syllabi and classrooms. Accordingly, they

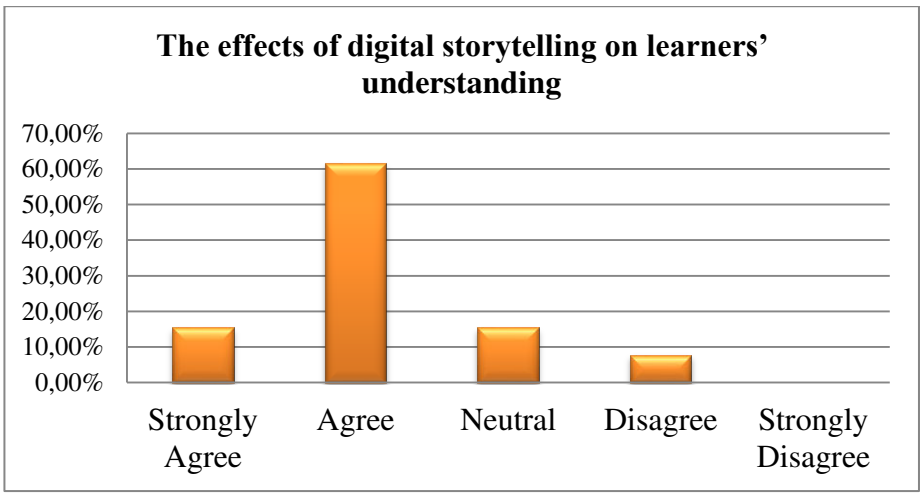
demonstrate positive attitudes towards the incorporation of DST in the learning/teaching processes.

3.3. Teachers' Attitudes Towards the Incorporation of DST in the Learning/Teaching Process

In this section, we have also decided to analyse the most fundamental questions that address teachers' attitudes and assumptions regarding the effectiveness of DST in EFL classrooms at Abdelhamid Ibn Badis University (see appendix C).

- Teachers' assumptions about digital storytelling.
- Teachers' attitudes towards the incorporation of DST in the teaching/learning process.
- Learners' attitudes towards the incorporation of DST in the teaching/learning process.

Initially, we have investigated teachers' assumptions and beliefs in relation to the benefits of digital storytelling. To begin with, we have explored to what extent they agree on the fact that using digital storytelling in the classroom will help their learners have a deeper understanding of the content (see appendix C, question 8).

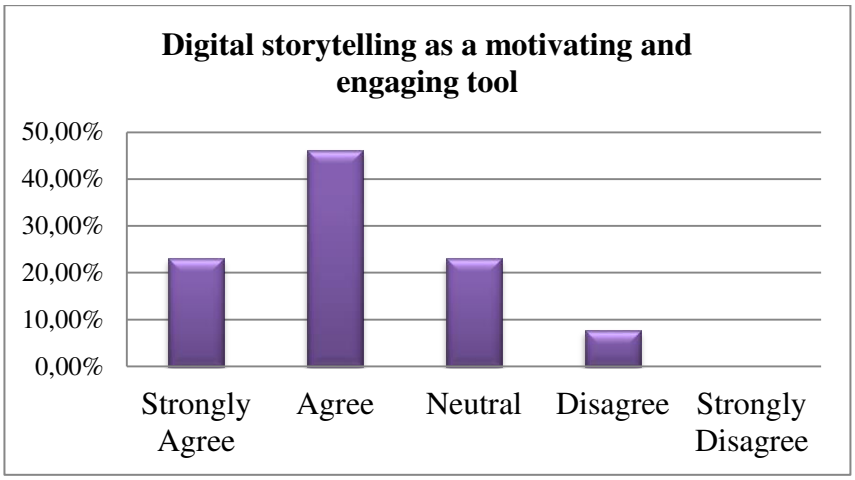


Graph 8: The effects of digital storytelling on learners' understanding

Graph (8) indicates that 10 (61.54%) informants confirm that digital storytelling can help learners have a deeper understanding of the content. Nonetheless, some teachers report either disagreement or neutral state. In this regard, those who agree or strongly agree on that statement justified their choice by stating that digital storytelling plays an important role in collaborative work in which it motivates and encourages learners to unravel their capacities and develop their sense of responsibility. Accordingly, today's generation needs technology

in the classroom because many students understand better through using digital technologies. They also assume that DST meet different learning style's needs especially audiovisual learning style. While the informants (15.38% neutral / 7.7% disagree) who do not believe in the potential of DST explain that technology limits our imagination and production and it will only cause laziness and unoriginality in addition to the fact that learners' understanding depends only on teacher's presentation and teaching capacity.

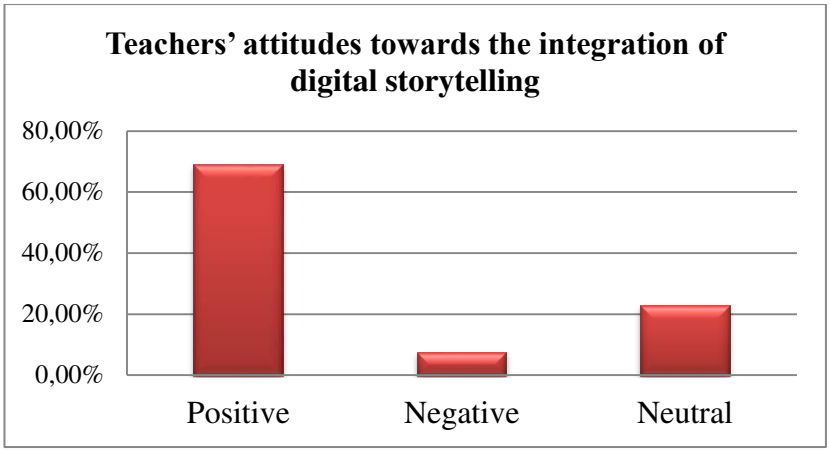
Similarly, we have asked our informants if they believe that DST is motivating and engaging. Their beliefs are explicated in the following graph: (see appendix C, question 9)



Graph 9: Digital storytelling as a motivating and engaging tool

The graph above indicates that there are 3 (23.08%) teachers who report total agreement while 6 teachers (46.15%) value agreement. These informants suggest that DST fosters motivation especially when they are allowed to add their personal touch. This tool will nourish learners' motivation because they love innovation and new methods in which it allows them to share their experiences and digital abilities. Nevertheless, few informants (23.08% neutral / 7.69% disagree) depict either a state of neutrality or disagreement by claiming that technology is only a mere tool that assists the teacher in delivering his/her lessons while some participants did not justify or explain the reason of opting for such an answer.

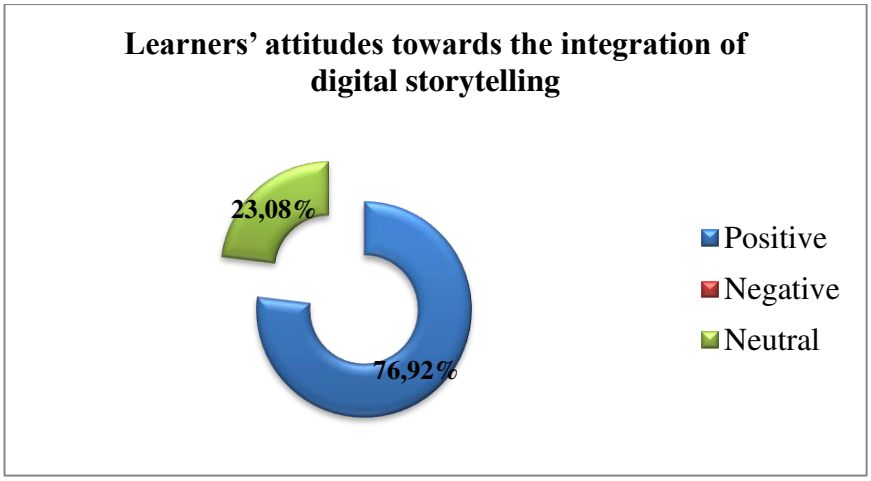
Since teachers are the ones who decide for DST incorporation in their classes and teaching practices, inspecting their attitudes is of indispensable importance. The following graph elucidates the results gathered from the informants: (see appendix C, question 11)



Graph 10: Teachers' attitudes towards the integration of digital storytelling

From the graph above, we can infer that 9 (69.23%) teachers have positive attitudes toward the incorporation of DST in their pedagogical practices in higher education. They believe that this new generation grows up with technology and using storytelling fused with digital multimedia will surely motivate and encourage them to voice their inner ideas and feelings in front of their classmates. This new way of delivering storytelling will lower learners' anxiety, encourage them to practice their speaking and pronunciation skills in addition to developing the required 21st century skills that are deemed to be primordial in this era. One teacher suggests the use of digital portfolios in which learners record their experience and finally present it as a digital story. From another angle, 1 (7.69%) teacher is against the incorporation of DST in his/her teaching practices reporting that our university cannot offer the required material that would help teachers integrate such an innovation in their teaching process. S/He adds that several students cannot offer access to new technologies and the utilization of such tool will be humiliating for them and will cause several dilemmas. Lastly, 3 (23.08%) teachers report a neutral choice as they affirm that DST integration can be beneficial but it has some limitations as both teachers and learners lack digital literacy and are not technologically mature. They also add that our learners are not ready yet for technology integration.

The following question deals with teachers' measurement of their learners' attitudes toward the utilisation of DST in the teaching/learning process. In this perspective, the following pie chart interprets the findings: (see appendix C, question 12)



Graph 11: Learners' attitudes towards the integration of digital storytelling

As elucidated in the pie chart, 10 (76.92%) teachers confirm that learners will have positive attitudes towards DST and its incorporation in the classroom. Their comments entail the point that learners of today's ever-changing era need to be equipped with the required competencies to be prepared for their professional lives. Some teachers attest that learners will welcome this innovation with open arms. From another pendulum, 3 (23.08%) teachers are neutral in which they surmise that learners may disprove DST integration as many learners are not equipped with needed materials and skills in addition to the fact that they are not familiar with technologised teaching materials and classrooms.

We have deduced that teachers have positive assumptions and beliefs regarding the effectiveness of digital storytelling. Most of them are willing to integrate this innovation in their teaching practices but this step requires preparation and training in addition to maturity depicted by learners and teachers. Our context needs to be equipped with computer rooms and digital tools in order to facilitate the process of DST integration.

3.4. Discussion of the Results

The results disclose many important points that have been discussed throughout this research and which were gathered from the emotional intelligence test, classroom observation, and questionnaires. The preliminary findings of the pre-experiment emotional intelligence test elucidated that the L3 learners needed to work on this competency since there were many lacunas and fluctuations in the results of their EI test. Furthermore, through classroom observation, we could figure out that learners lacked many competencies as the teacher could not stop them, for instance, from talking and disturbing their classmates when presenting or giving feedback; lack of social skills and empathy caused problems for the

teacher who used threatening sometimes to make them respect her and others. Before the experiment, the culture of emotional intelligence was not incorporated in the classroom as students demonstrated an unawareness of this area of competency through portraying irresponsible attitudes towards the teacher and their classmates. The learning atmosphere has totally changed when students heard that we will use digital tools in the classroom.

Students' emotional intelligence awareness, overall enthusiasm and ardour started to take a new departure as far as digital storytelling was integrated in the classroom. They became more empathetic, careful in giving feedback, active listeners, responsible individuals, and communicators who are intrinsically motivated since they were given freedom to choose, write, and select whatever they desire. During the story circle sessions, learners became more enthusiastic, started admiring what they are doing in oral expression sessions, they asked questions, shared personal stories happy and sad, talked about the history of Algeria, moral lessons, etc. A great number of students portrayed an urge and an impetus towards developing their EI and creating their digital stories. By the end of the workshop, we observed a change in learners' emotional intelligence which was measured quantitatively through EI test in which the results were distinct from the pre-experiment EI test.

It was conspicuous that digital storytelling has affected learners' EI in many ways. Initially, when comparing how were students before the integration of this innovative technique and after realizing the project, it becomes obvious that a significant development is achieved. In the pre-experiment phase, students were neither self-confident nor self-aware of their emotions and how they affect their actions. They could not manage their feelings which were mostly embodied in their angry attitudes towards feedback. They had several deficiencies in their empathy and motivation competencies in the sense that they were not participating or volunteering in addition to lack of interest in other's performances. They had an inability to see the world from other's point of view or to put themselves in other's shoes. These negative lineaments were remarkably eliminated during the experiment in which their awareness towards EI and its importance was raised as well as they learned how to give constructive criticism and feedback in addition to depicting an EI behaviour that would allow them to share and receive experiences and emotions. Positive attitudes were epitomised and willingness to accept other's emotions, points of view, and feedback became a basic feature of their reactions. A number of features were noticed during the experiment and which indicated learners' EI development such as self-confidence when presenting, valuing their mate's efforts, accepting comments, giving constructive criticism, etc.

As finals words, from the analysis of all the findings we have gathered before, during and after the experiment, we can infer that digital storytelling can help learners develop their EI specifically when using this technique in collaborative groups. In better words, DST process including story circle, writing the narrative, the multiple choices that DST offers, collaboratively collecting digital tools, all of these can assist learners in developing and improving their emotional intelligence competencies. In conclusion, assessing and measuring learners' emotional intelligence is neither an easy task nor stable, i.e. we utilized all these data collection tools in order to supply our hypotheses with reliable data.

On the one hand, learners' choice of digital storytelling instead of traditional storytelling explicates learners' attitudes towards the use of DST. We can deduce that they are with the idea of digitalizing the various pedagogical practices in that they appreciate the digital storytelling workshop and the majority reckon that such sessions were beneficial and advantageous. They reckon that this experience was interesting and convenient. They seem to be satisfied with the idea of integrating technology as many students brought their personal laptops directly after the initiation of the DST workshop. In the same angle, many learners are motivated and want to construct another digital story in the future whereas few of them refute this idea. Generally, their responses reveal positive attitudes as they believe that DST can consummately enhance their learning and make it more interesting, interactive, modern, productive and learner-centred. Their comments indicate a desire for technology integration and appreciation of digitalizing the traditional art of storytelling.

Remarkably, the majority of students suggest that teachers should take a step forward and try to incorporate DST in their teaching practices as in this way learning will be more exciting and motivating. Today's teachers should change their traditional way of teaching as DST promotes not only social constructivist classroom and reinforce social-emotional learning but also helps learners enhance and develop their EI. In contrast, few students exhibit reluctance towards DST integration claiming that there is a number of learners cannot offer the required material and that our university suffers from a shortage in this technologized area of interest. Their comments portray incontrovertible, unfavourable standpoints and attitudes regarding the integration of digital storytelling in the teaching/learning processes.

On the other hand, teachers' responses disclose both inclination and aversion from DST integration in their pedagogical practices. To begin with, the majority of teachers who have participated in answering our questionnaire encourage technology integration and that

DST will supply students with deeper understanding of the content and make their teaching more motivating. Their attitudes towards the utilisation of DST in higher education are mostly positive as they see it as a revolutionary appliance that would revolutionize educational practices in our university. They further estimate that learners' attitudes will be encouraging and positive as they believe that this generation needs autonomy and high academic self-regulation mixed with various skills and competencies. From another perspective, other teachers noticeably declare that technology integration in the Algerian Universities is far-fetched and unfeasible because they believe that the lack of apparatuses and digital maturity will be of a great impediment. Although some teachers had negative outlook regarding digitalized education, they all suggest that our university should become equipped with computer rooms and internet should be available everywhere; so that, neither teachers nor learners will face difficulties when trying to create a digital story or any other thing that is technology–based or dependent. All these results reflect a positive attitude towards the incorporation of DST in teaching/learning practices fused with reluctance depicted by a minority.

Both EFL learners and teachers encourage the incorporation of digital storytelling in the teaching/learning process in order to develop the competencies that may have been waned due to traditional didactic practices. DST can revolutionize the educational sphere in Algeria and change the way of learning English in our university classes. The answers of the participants unveil the level of students' consciousness towards the effects of DST on their skills and EI in particular; whilst, teachers' responses demonstrate a positive viewpoint that would motivate them towards changing their didactic teaching practices.

Subsequently, we have sought to aid learners develop and ameliorate their emotional intelligence through the integration of DST in their learning process. Through our experiment, we have endeavoured to increase the informants' knowledge regarding the new pedagogical techniques that are advantageous and innovative. Finally, the results of this study were collected impartially and genuinely as our attempt was either to validate or refute the given hypotheses in addition to familiarizing students and teachers' with a technologized way of telling stories instead of the long-established art of storytelling.

3.5. Conclusion

Throughout this chapter, we could ratiocinate that digital storytelling is a novel innovation that can assist learners to develop and ameliorate their emotional intelligence.

Along the same vein, it has been deduced that both informants; learners and teachers, depict positive attitudes towards the integration of digital storytelling in the learning/teaching process in higher education. The learners, on the one hand, believe that this innovation will alter and change the traditional dominating learning/teaching practices in our context. They argue that DST has a potential of changing the educational system in Algeria with the great benefits it owns. The teachers, on the other hand, assert that digital storytelling incorporation will be of great help; however, the limitations that delineate our context will be a colossal obstacle to pass through.

General Conclusion

The 21st century is characterised by the great technological developments that have revolutionized the teaching and learning practices. These educational innovations attempt to change and improve the traditional approaches that dominated the pedagogical practices of teachers in Algeria. In realistic terms, educational technology is one of the key technical infrastructures in existence today. It will be a source of our motivation and prosperity in the future. In this perspective, digital storytelling is the new way of expression of the longstanding art of storytelling i.e. it refers to the act of blending traditional storytelling with any emerging multimedia tools that may include: audio, music, graphics, etc. This innovation has invaded teaching and learning practices of the modern world. Eventually, it can be stated that DST owns several advantages that would positively change the classroom atmosphere and help learners develop their emotional intelligence and other skills that are deemed to be primordial in this century. In a similar angle, emotional intelligence possesses a large chain of powerful abilities that attempt to promote learners' development in an age where EI is a key to a successful academic, professional and personal life. Accordingly, digital storytelling integration is warranted as it is accepted that the Algerian Universities have always utilised didactic approaches to teaching without trying technology-based techniques such as DST which can support not only learners' emotional intelligence development but also 21st century skills such as collaboration, digital literacy, creativity, etc.

In this study, we investigated the effectiveness of digital storytelling in developing students' emotional intelligence at Abdelhamid Ibn Badis University. Our endeavour was to find a modern way that would help today's generation develop their EI. It inspected learners' and teachers' perceptions and attitudes towards the incorporation of digital storytelling in the teaching/learning practices.

The first chapter examined the elements and components of digital storytelling and the theories underpinnings it including social constructivism and social-emotional learning. It also described the concept of emotional intelligence and its relation to digital storytelling and how it can be relevant to learner's emotional intelligence quotient development.

As for methodology chapter, it provided an in-depth description of the methods used, the participants and the context. Both qualitative and quantitative methods were employed to collect the necessary data. Observation, questionnaire and EI test were among our research

tools that we used to measure the learners' emotional intelligence. Initially, the EI test was designed based on Daniel Goleman's model of emotional intelligence and which was retrieved from Anaptys, The Development Practice (2013). The latter was modified and simplified to suit both the Algerian context and learners' level. In this perspective, the test was administrated before and after the experiment to gauge learners' EI development. Along the same vein, classroom observation was adopted to inspect learners' EI competency level before and during the experiment and to measure the effects of DST on learners' competencies. Additionally, two questionnaires were addressed to teachers and learners as to investigate their attitudes and perspectives regarding the incorporation of DST in the teaching/learning process. Our inquisitiveness led to the utilization of an experiment which was skilfully conducted for four weeks with third year licence students in order to investigate the feasibility and efficiency of this instructional digital tool as well as to validate or invalidate the suggested answers to the raised questions.

The last chapter displayed the analysis of the information collected from the data collection instruments and accurately discussed the founded results. In this respect, the findings of the experiment and classroom observation processes validate the effectiveness of digital storytelling in developing and ameliorating students' emotional intelligence. Through an in-depth analysis of the questionnaire, an appreciation of digital storytelling incorporation in the teaching/learning process by both learners and teachers was established. Reluctance towards DST integration was noticed from some teachers and learners proclaiming that integrating technology in our educational settings cannot be attained due to the limitations that the Algerian Universities place in the face of these attempts to revolutionize the didactic traditional ways of teaching. As final words, an observable development was noticed in learners' EI capacities in addition to a portrayal of positive attitudes by the informants regarding the incorporation of DST in the classroom.

Eventually, the hypotheses were validated with slight reluctance that characterized some teachers and learners. Initially, the incorporation of digital storytelling could help learners ameliorate and develop their emotional intelligence through working collaboratively to create their digital stories. Furthermore, learners adopted positive attitudes towards DST integration since they regarded it as a motivational aspect that would revolutionize the classroom environment and lead to the development of their competencies. In a similar vein, teachers' attitudes were characterised by positivity and appreciation as well as willingness to

widen their knowledge in this instructional field of study. In conclusion, our results correspond to our hypotheses.

Digital storytelling can consolidate and reinforce learners' EI in specific and 21st skills in general. It also assists teachers in creating a classroom environment that is motivating and allows a room for creativity and innovation. Consequently, for successful incorporation and integration of DST in teaching/learning practices, we recommend the following points: digital literacy, emotional intelligence training, raising awareness, and equipment.

1. Digital Literacy (Training)

In our journey to investigate the effectiveness of DST, we could notice that the majority of teachers need training, digital maturity and literacy. In this prospect, lack of digital literacy training in our context may impede the successful integration of DST. Training and developing teachers' information and technology skills is warranted since they can influence students' learning. Every teacher should be willing to improve his/her digital skills and become a tech-savvy; hence, conferences, workshops, study days need to be held in order to become acquainted with the new technologies.

2. Emotional Intelligence Training

For effective technology integration, we recommend specific training for teachers that would help them develop their emotional intelligence. Teachers' emotional intelligence is warranted in the classroom as they cannot foster their learners' EI without owning such competency. We believe that high emotional intelligence and interpersonal skills should be highly capitalized and addressed in this training. Teachers' should be able to actively listen to his/her students in order to meet their needs and expectations. They need EI in order to reach every student in the classroom. In this perspective, being emotionally intelligent will facilitate DST incorporation as this process requires consistency, ability to listen and empathize, as well as being approachable and helpful.

3. Equipment (Resource Constraints)

Although there are many students that are equipped with computers and the internet, some students; for example, those of families on low incomes, may have less access to computers and internet which will exceedingly affect their learning and acquisition of new

competencies. In this respect, every university should be equipped with computer rooms and internet that are available at any time for all students.

4. Awareness Raising

Throughout our research process, we discovered that both teachers and learners are not familiar and aware of this new instructional innovation namely digital storytelling and the concept of emotional intelligence. In this vein, learners' and teachers' awareness should be raised towards the importance of EI and DST in order to avoid reluctance regarding technology integration in the teaching/learning process. This can be done through the organisation of workshops, study days, and conferences that can help both teachers and students become aware of the novel ways of teaching and learning in the 21st century

As for future research, it is important to further investigate the effectiveness of digital storytelling in all over Algeria including universities, secondary and middle schools. We further suggest an in-depth inquiry into teachers' and learners' awareness of the concept of emotional intelligence and its essentiality for successful academic, professional and personal career and life. It is also necessary to inspect the efficiency of DST as an instructional technique for delivering history, literature, natural sciences, and physics lessons in providing learners with an in-depth enquiry of the content. Another suggestion would be an investigation of how the process of sharing digital storytelling related to cultural experiences can influence the development of intercultural communicative competence.

This study has addressed the significance of DST which can change the way of telling stories and alter students' motivation towards learning in oral expression sessions. It attempted to unveil the peculiarities of digital storytelling in relation to emotional intelligence in which it has provided evidence for the claim that DST can aid learners to develop their EI. As final words, this study does not intend to portrait DST as a panacea that would solve all pedagogical issues but it is a revolutionary way of learning and teaching that can provide fruitful results.

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Appendix A: Emotional Intelligence Test

Name: Group Number:

No → **Yes**					
1	2	3	4	5	6
0%	20%	40%	60%	80%	100%

- **Self-Awareness**

Self-Awareness						
More like this	1	2	3	4	5	6
I know how my feelings affect me.						
I find it easy to put words to my feelings and I can accurately describe what I am feeling.						
I am aware of my feelings, their emotional impact on me and I do not act them out.						
I know how my behaviour affects others.						
I know what my values are and I cannot work without them.						
I know my weaknesses and I do not use them as an excuse.						
I am honest with myself. I know what I can do and what I cannot.						
I know when to ask for help and willingly take it.						
Total Score =		**Average score (total score/8) =**				

- **Self-Regulation**

Self-Regulation						
More like this	1	2	3	4	5	6
My moods are predictable.						
I can stay calm, even in difficult circumstances.						
I am comfortable and I tolerate ambiguity. I do not feel anxious if decisions are not made.						
I am open to change.						
I do not feel anxious during exams and presentations.						
I control my emotional impulses when confronted with criticism from my teachers, classmates, family, etc.						
I can control and manage my anger and improve my performance under stressful conditions and situations.						
Total Score =		**Average score (total score/7) =**				

- **Motivation**

Motivation						
More like this	1	2	3	4	5	6
I feel really motivated about what I am doing.						
I see self-growth and development as a never ending process. I believe in life-long learning.						

I want to get better and better at what I do because I want to do so and satisfy myself.						
It is okay if I fail or I face problems when trying to achieve my goals.						
I have a great deal of discipline and I am self-motivated.						
Failure or problems do not affect my motivation.						
I can stay motivated even in difficult circumstances.						
Total Score =			**Average score (total score/7) =**			

- **Empathy**

Empathy						
More like this	1	2	3	4	5	6
I think I understand other people and respect their differences.						
I care about other people's feelings even if they have already done something bad to me.						
I find it easy to "read" other people's emotions.						
I am a good listener, I listen attentively and respectfully, aware of what is not being said.						
I am known to be a good coach. People regularly come to me for this kind of support and direction.						

It's predictable how my classmates will feel in any given situation						
I am capable of reading the different messages sent through body language.						
Total Score = **Average score (total score/7) =**						

- **Social Skills**

Social Skills						
More like this	1	2	3	4	5	6
I have wide professional and social networks. I know a lot of people in all kinds of areas.						
I can talk and get along different people with different interests.						
I am known to be a good coach. My classmates regularly come to me for this kind of support and direction.						
I am told that people find me warm and accessible.						
I always know someone who knows someone; I can call in favours easily and regularly do favours for others.						
I think people experience me as enthusiastic, outgoing and engaging.						
I am a pretty good influencer inside and outside the classroom.						
I can help people solve their problems and resolve conflicts easily between						

my classmates and friends.						
Even if I believe that I am right about something, I make an effort to listen to other people's viewpoint.						
Total Score = **Average score (total score/9) =**						

For each quality, take your 'average' score (rounded appropriately) and tick the relevant column						
Dimension	1	2	3	4	5	6
Self-awareness						
Self-regulation						
Motivation						
Empathy						
Social Skill						

Appendix B: Student's Questionnaire

Dear student,

This questionnaire is an attempt to gather information needed for the accomplishment of a master dissertation. There are a number of questions that serve to contribute to a scientific research; no names are sited, so it is an objective display of information. The researcher would be pleased if you could answer the parts appropriately in the space provided. Your answers will be kept strictly confidential and the given information will be used for research purposes.

Part One: Personal Information

1- Gender: Male ☐ Female ☐

2- Age: 18-20 ☐ 20-24 ☐ > 24 ☐

3- Geographic area: Where do you live?

Urban area ☐ rural area ☐

4- Grade level: What is your grade level in school? .....

5- Grade retention: Have you ever repeated a grade in school?

Yes ☐

No ☐

Part Three: Students' Attitudes Towards the Incorporation of DST in the Classroom

6- Do you prefer digital storytelling or traditional storytelling?

Digital Storytelling ☐

Traditional Storytelling ☐

Both ☐

Undecided ☐

Justify

……

……

……

7- How do you feel about digital storytelling workshop?

It was interesting; I enjoyed working in this workshop. ☐

In the beginning, I was not excited about the project, but then I liked it. ☐

I was excited to work on this project but I did not enjoy it. ☐

If I did not have to, I would not work on the project. ☐

8- Does digital storytelling motivate you?

Yes ☐

No ☐

Why?

……

……

……

9- Would you like to create another digital story in the future?

Yes ☐

No ☐

Undecided ☐

10- Did you face some difficulties when working on the digital storytelling project?

Yes ☐

No ☐

-If you answered yes to question (**10**), what was the nature of this difficulty? (You can choose more than one answer)

In choosing the narrative ☐

In working in groups ☐

In the use of Ice-cream Slideshow/Audacity software and other digital tools ☐

In controlling your emotions, and trying to remain emotionally intelligent. ☐

Others ……...

11- What was your favourite part of this project? (You can choose more than one answer)

Writing the narrative ☐

Storyboarding ☐

Selecting music and images ☐

Story voice recording ☐

Story circle ☐

Working in groups ☐

Presentation of digital stories ☐

Others ……...

12- What is the skill(s) that digital storytelling helped you to develop?

Listening ☐

Speaking ☐

Reading ☐

Writing ☐

Information and Technology skills ☐

Critical thinking ☐

Others ……

13- Would you like digital storytelling to be integrated in the classroom?

Yes ☐

No ☐

Undecided ☐

Comment

……...

……

…...……..

14- Do you encourage teachers to use digital storytelling in their classrooms?

Yes ☐

No ☐

Explain

……...

……

…...…….

15- Do you believe that digital storytelling helped you develop your emotional intelligence?

Yes ☐

No ☐

Explain how and why.

……...

……

…...……

16- What are your suggestions to teachers regarding the utilisation of digital storytelling in classrooms?

……...

……

…...……

Thank you

Appendix C: Teacher's Questionnaire

Dear Teacher,

This questionnaire is designed in order to inquire into teachers' attitudes towards the integration and incorporation of digital storytelling in their teaching process at Abdelhamid Ibn Badis University, Department of English Language. The researcher would be pleased if you could answer the parts appropriately in the space provided. Your answers will be kept strictly confidential and the given information will be used for research purposes.

Part One: Personal Information

1- Gender: Male ☐ Female ☐

2- How many years have you been teaching at university?

1-5 ☐

5-10 ☐

10-15 ☐

15< ☐

3- What are your research interests?

……...

……

…...……

Part Two: Teachers' Attitudes Towards the Incorporation of Digital Storytelling in their Teaching Process

4- How often do you use technology devices in your teaching?

Always ☐

Sometimes ☐

Rarely ☐

Never ☐

5- Do you encourage learners to use technology in their learning process?

Yes ☐

No ☐

6- Is the term digital storytelling new to you?

Yes ☐

No ☐

7- Have you ever created a digital story?

Yes ☐

No ☐

If yes, how was your experience?

……...

……..

..……

…...……

Please indicate the extent to which you agree or disagree with the following statements (Statements from 8 to 10)

8- Using digital storytelling in the classroom will help your learners have a deeper understanding of the content.

Strongly agree ☐

Agree ☐

Neutral ☐

Disagree ☐

Strongly Disagree ☐

Explain.

……...

……..

..……

…...……

9- Digital storytelling is motivating and engaging.

Strongly agree ☐

Agree ☐

Neutral ☐

Disagree ☐

Strongly Disagree ☐

Explain.

……...

……..

..……

…...……..

10- Using digital storytelling in the classroom will make your teaching motivating and beneficial.

Strongly agree ☐

Agree ☐

Neutral ☐

Disagree ☐

Strongly Disagree ☐

11- If digital storytelling can be integrated, how would you describe your attitudes towards integrating it in your teaching process at university?

Positive ☐ Negative ☐ Neutral ☐

Justify

……...

……..

……

…...……

12- If digital storytelling can be integrated, how would you describe your learners' attitudes towards integrating it in higher education?

Positive ☐ Negative ☐ Neutral ☐

Justify

……...

……..

……

…...……...

Thank you