

## MA in Technology-Mediated Language Teaching and Learning

# Improving fluency through digital storytelling: a proposal for beginner language learners.

Tanja Behrendt

tanbeh@uoc.edu

13/06/2021

Tutor/Supervisor: Marina Sokolova

**Final Master's Thesis**

---

**Year 2020-2021, semester 2**

## Table of Contents

Abstract .....	4
INTRODUCTION .....	5
THEORETICAL FRAMEWORK .....	7
Origins and definition of DST .....	7
DST and its use in foreign language teaching .....	7
Fluency in foreign language teaching.....	10
Fluency and DST .....	11
Summary.....	12
OBJECTIVES.....	13
METHODOLOGY .....	14
Context.....	14
Learner profile .....	14
Design and Justification.....	17
Instruments and procedure .....	20
RESULTS .....	22
Implementation proposal .....	22
Assessment .....	23
Piloting and discussion of results.....	25
Summary.....	28
CONCLUSION .....	29
REFERENCES .....	31
APPENDICES .....	33

## **Abstract**

This thesis aims at exploring how digital storytelling can be used for beginner learners of a foreign language and what benefits it offers for them. Specifically, the research focuses on the development of fluency and the increase of motivation. A pedagogic implementation that is based on the creation of a digital story is developed. The methodology of the implementation puts the learner at the centre of the learning process and focuses on multiliteracies. A pilot of the project was applied with a beginner group of teenaged language learners to discover the effects of digital storytelling on the learners' motivation and fluency. Data was collected with an observation rubric, interviews and the analysis of the students' creations. The results show that the learners engaged better than in usual classes and were able to produce fluent speech during and after the implementation of the project. Minor problems with technology were encountered but they did not hinder successful completion. The short duration of the pilot limits the implication of the study; however, the positive results validate digital storytelling as a beneficial teaching tool and encourage further research into the topic.

**Key words:** *Digital storytelling, fluency, motivation, digital skills*

## **Resumen:**

Esta tesis tiene el propósito de explorar cómo los relatos digitales se pueden emplear para estudiantes principiantes de una lengua extranjera y qué beneficios les ofrece. En particular, la investigación enfoca el desarrollo de fluidez y el aumento de motivación. Se desarrolla una intervención pedagógica que se basa en la creación de un relato digital. La metodología de la intervención pone el aprendiz al centro del proceso enseñanza-aprendizaje y enfoca la multialfabetización. Un piloto del proyecto fue aplicado con un grupo de estudiantes adolescentes de una lengua extranjera para descubrir los efectos de los relatos digitales en la motivación y la fluidez. Se recogieron datos mediante una rúbrica de observación, entrevistas y el análisis de las creaciones de los alumnos. Los resultados muestran que los estudiantes participaron mejor que en las clases habituales y que fueron capaces de producir habla fluida durante y después de la intervención. Hubo problemas menores con la tecnología, pero no impidieron la implementación exitosa del proyecto. La duración reducida del piloto limita la implicación del estudio; no obstante, los resultados positivos avalan los relatos digitales como una herramienta beneficiosa para la enseñanza de idiomas y alientan futuras investigaciones en este contexto.

**Palabras clave:** *Relatos digitales, fluidez, motivación, habilidades digitales*

## INTRODUCTION

Foreign language teaching has experienced a lot of changes over the last decades. It went from analytical approaches that focused on form to more open ones that focus on meaning (Gómez Parra, & Roldán Tapia, 2014). This development has favoured classroom practices that are a lot more engaging and motivating for the students. There is a strong focus on enhancing communicative competence that allows the learners to interact with other speakers despite not having reached proficiency. However, there are still problems to language teaching which mainly consist in the students not perceiving the utility of using the foreign language and their inability to produce language freely (Cano Bernal & Solano Fernández, 2018).

Following the above, there is a clear demand for teachers to provide a rich environment in which authentic input and meaningful output are prioritised. The students should perceive the need and benefits of using the foreign language, as well as they should experience it as something gratifying and enriching. There should be plenty of opportunities to use the language and to practise without any negative consequences. Likewise, there is a demand of integrating new technologies in the classroom. The students are surrounded by new media and make use of technological devices in their daily lives. This development has to be taken into account in order to teach the students skills and strategies for employing these technological tools for learning. It is also crucial to consider that new technologies have generated new forms of communication, which need to be introduced in the language classroom. This includes knowing the norms of the media as well as how to use them (Chun et al., 2016).

Digital storytelling (hereafter DST) is a new genre that combines conventional storytelling with new technologies (Robin, 2016). By doing that, a meaningful text is created. This text combines traditional literacy skills with the ones that relate to new technologies. Therefore, it fulfils the need of an updated approach to teaching in which new technologies play a central role as well as it fosters communicative language learning. The personal interest in DST lies in the researcher's positive experiences with it. During a university course she was asked to create a digital story about her own language learning journey. The technique was perceived as challenging due to its workload yet enriching for language learning and the development of study skills. One of the advantages was that pronunciation could be improved by recording the voice for the digital story. Moreover, digital competences were strengthened in overcoming problems in creating, editing and publishing the story. After this beneficial learning experience with DST, it became clear that it constitutes a valuable teaching tool for language classes.

Language teaching should focus on communication and enabling the learners to participate in authentic interactional situations. This can be challenging at lower levels since there are few contexts in which the learners can potentially participate due to their little knowledge. In these situations, it is particularly difficult to foster holistic language learning. Digital storytelling seems a valuable tool to enhance the learners' language skills as it does not rely only on one modality, but combines picture, text and sound. Put another way, meaning is made in several dimensions so that the language is supported by visual or vocal cues that can transmit messages. DST provides the learners with meaningful contexts to use the language and includes new technologies as a way of communication. In order to find out whether DST is useful to foster language learning, a pedagogic implementation has been designed. It is applied with a group of beginner students who learn German as a foreign language. The learners are insecure when expressing own ideas and struggle to use the language creatively. These problems increase concerning oral production. Thus, they are an appropriate sample to determine to what extent DST is useful.

The general didactic interest of this paper lies in its potential to explore and present an effective way of teaching that until now is not much used but is definitely feasible and promises to be efficient. The focus lies on improving oral skills, especially fluency, to enhance communicative competence as well as increasing student attitude and implication. Personal interest is crucial to get the learners motivated and this paper explores how this could be achieved. The objective is showing that DST can also be very useful for beginner students and that these students can gain fluency if taught correctly. The results of the application seek to motivate other teachers to use DST as well as to inform them about potential obstacles and difficulties they should bear in mind.

This research aims at finding out whether DST has a positive effect on the students' motivation and their oral fluency. To do so, a project in which the students elaborate a digital story has been designed. The project and its outcomes are presented in this paper. First, the focus will lie on how DST has been beneficial in other contexts and what researchers concluded about its use. Moreover, the concept of fluency will be explored and its relation to DST established. Then, a pedagogic implementation to introduce DST in class will be presented. This includes a description of the learners and a justification for the project. Afterwards, the piloting of the application is shown, and its outcomes analysed. Finally, the effectiveness of the DST project will be discussed, and conclusions drawn that refer to future research and use in class.

## **THEORETICAL FRAMEWORK**

In this section the use of digital storytelling will be explored, and some benefits will be outlined. Then, the focus will lie on fluency and how it can be trained in classroom settings. Finally, a connection between DST and fluency will be made by showing how the former can have a positive impact on the latter.

### **Origins and definition of DST**

Storytelling is a technique that is basically as old as human beings. Stories were always transmitted from one generation to another, be that by paintings, oral recounts, or written words. Just as in the past storytelling evolved according to human advancements, nowadays it has reached the digital dimension (González-Mesa, 2020). Regarding digital storytelling, Joe Lambert started creating a platform in 1990 which nowadays provides a lot of resources and examples of the technique. His work is considered as the beginning of the genre (Mirza, 2020).

There are several definitions regarding what a digital story is, but most authors coincide that it is a short narration (between 2-10 minutes) that uses multimedia elements such as music, sounds, videos and pictures to convey meaning and emotion. Digital stories cover topics that are close to the author or explore a certain point of view (Al-Amari, 2020; Cano-Bernal & Solano Fernández, 2018; Robin, 2016). They are a quite open genre that is not limited to a certain type of content. Digital stories do not only serve to narrate personal experiences, but can be used for instructional purposes, for instance in school or other educational institutions like museums (Robin, 2016).

### **DST and its use in foreign language teaching**

Digital Storytelling has been proved to be very beneficial for education in general. According to Robin (2009), it can help to develop 21<sup>st</sup> century skills such as several literacies related to new technologies and media as well as critical thinking and problem solving. When elaborating a story, the students have to deal with multimodality, they have to analyse and organise information, and they have to create their story using digital tools. All this promotes their personal development at the same time as the students are engaged by the task. By using DST, the students are given a voice in class and play an active role. This helps them to feel in charge of their progress and coordinate their learning (Liu et al. 2018).

Concerning language learning, digital storytelling was used in several ways to different effects, which will be explored in the following. To begin with, Liu et al. (2018) conducted a study with 64 primary school in children in which they analysed the effect of storytelling

on the motivation and performance of the learners. Their approach was based on the create-to-learn paradigm, which states that the learners should have the opportunity to create freely and actively to acquire content, in this case the language. The study was conducted in two 6<sup>th</sup> grade classes, one of them being the control group. The students received teacher instruction regarding a new topic and read a story about it. Then, instead of traditional practice, they created a narrative that included the vocabulary and structures from the story they read. At the end, the students' results published on an online platform for others to see. The researchers retrieved data from a motivation survey, an achievement test and the evaluation of the digital stories. They found that over the course of the study (five months) the students were able to include more and more correct new sentences in their stories and to work efficiently on their own. A positive impact on reading fluency was found because the students had to record their voice several times. Regarding the motivation, it was found that choosing the topic freely increased the student engagement and that sharing the results was also a positive factor.

These findings are corroborated by another study by Liu et al. (2019) which implemented a digital storytelling approach on a long-term scale (2 years). The goal was to see whether the positive effects found in short-term implementations would increase or change in the long run. This time the students were younger, from the third grade, but the implementation was very similar. Again, the researchers found that the oral reading proficiency improved a lot and that the students were able to construct more elaborate stories over the course of time. Regarding engagement, it could be observed that there was a sharp drop during some phases, which had to be restored with techniques like changing team partners. This finding indicates that high motivation levels might be due to the novelty effect of the tool and that in long-term applications of DST careful planning is necessary to maintain the students' interest.

Another study that was conducted in a primary school setting had the objective of implementing a method to develop communicative competence and to discover the needs and implications of working with DST at school (Cano Bernal & Solano Fernández, 2018). The authors worked with a qualitative method in which they observed the classroom and categorised the issues that they detected. The participants were ten 6<sup>th</sup> graders of a public school. What stands out is that the students showed little motivation regarding the subject and had low levels of oral production. During nine sessions the students worked on the digital project which comprised a grammar explanation and a role-play in video format. The results showed that some students struggled a lot with the program and the general use of the Internet. In consequence, more previous tasks are needed to prepare the students and some in-depth explanation is required to secure a



more fluent workflow. Nevertheless, the authors note that DST was able to reach all students in class and have them participate actively. All were more motivated, and they were able to improve their oral skills.

More insights into the difficulties of creating digital stories is delivered by Mirza (2020). In a study with 20 pre-service teachers aged between 19 to 28 she wanted to find out whether DST improved the teaching skills and the language proficiency as well as determine the perceived challenges and benefits. The data was collected with open-ended survey questions. The students reported that some of the challenges were that it was difficult to find a topic for the narrative and that recording the audio was challenging because of the background noise. This is also a finding that Cano Bernal and Solano Fernández (2018) reported, which indicates that recording can be an obstacle in the project. In comparison, the benefits were that the students' improved their pronunciation and their technological skills. Moreover, it helped to improve their self-organisation and the students enjoyed working in an authentic context. Despite the advantages, some participants state that they would not repeat the project or recommend it to others because of the difficulty and the time that it takes. Hence, it is key to provide sufficient scaffolding so that the students are not overtaxed with the task.

Scaffolding is very important in language teaching since it allows the learner to get more independent. Being provided with appropriate support, the students produce language that is above their current level of ability. After some practice, the learner improves and will not need the teacher's support anymore. Scaffolding can be related to DST since the teacher guides the learners through the activities and provides them with examples and structures to include in their narratives. It is crucial to offer this type of support as is outlined by González-Mesa (2020) who implemented a digital storytelling project with two beginner level classes with 48 students between 14 and 16 years old. The data was collected by conducting interviews with the students, their written reflections and their final results. The students valued the opportunity to use the language in a meaningful way. They also appreciated the opportunity to practice speaking extensively. Furthermore, they outlined that working in groups was crucial to support each other and to share the workload. The author mentions that in the groups, roles could be distributed according to the students' abilities and that a lot of negotiation of meaning could take place. However, some students struggled more than others and their level being very low (A1) everyone needed support regarding linguistic structures and the stages of the project, for instance descriptions of the steps and parameters for each task.

## Fluency in foreign language teaching

First of all, it is important to sketch out the definition of fluency. There are a lot of different approaches to it, for instance from Skehan (1996, quoted in Patterson, 2013), who states that it is production that can be done without pausing or hesitating too long. Another approach is from Nation (1991, quoted in Patterson, 2013) who defines fluency as the easy access to what you already know. Hence, beginners can be fluent too. Moreover, Lennon (2000, cited in Senra Silva, 2017) defines fluency as putting thought into language in a smooth, accurate and quick way. Kessler (2010) adds that fluency can be measured by looking at the rate (number of syllables per minute), pausing (frequency and length), utterance (the length of a run) and the volume (neither too loud nor too quiet). Fluency is also presented in the CEFR scale which describes the grade of fluency at each level.

One key aspect in gaining fluency in the foreign language is chunk learning. It helps to increase the acquisition of new words and grammar structures. The idea is that a foreign language, similar to the first one, is learnt as a whole and then broken down into its parts. When second language learners acquire formulaic expressions, they are perceived as more fluent and proficient by native speakers (Senra Silva, 2017). Since activities focused on chunk learning and fluency are virtually absent in language teaching, Senra Silva (2017) elaborated a corpus of 200 often used phrases in English and designed material to study and practise these. 24 university students aged between 23 and 52 years participated in an investigation in which they first worked through the material and then answered a survey. The results show that the students identified the fluency practice as useful and would like to receive further lessons with more uncommon phrases and other varieties of English. This shows that fluency is important to students, probably because it gives them more security, and that they do not mind doing repetition exercises for its sake.

In another study, by Hilton (2008), the importance of vocabulary knowledge and spoken fluency was also related to the knowledge of language chunks. There were 56 participants, aged 21 years on average, who had to watch a short video sequence and then answer some questions about it in their foreign language. The results of the participants were compared to the ones of 23 native speakers. One of the obvious findings was that the more knowledge of the foreign language the students had, the more fluent they were. However, Hilton (2008) tried to determine what caused undue breaks in the second language production. Mostly this happened before a lexical error was made and before an overt lexical search (asking for a word). Hence, vocabulary knowledge seems to be key to avoid breakdowns in communication. Even though the students use

roundabout language, there still is a huge difference in the time needed to communicate efficiently so that it becomes clear that knowing the correct word is more beneficial for fluent communication. Hilton (2008) also makes reference to formulaic language because it helps to have longer utterance runs (speaking without pause) and because memorised language is accessed much more easily. This can be seen when observing native speakers, who reproduce rhymes or other fixed expressions more fluently than creative and elaborated speech. Much of our first language is declarative knowledge which we learned through repetition and that has been stored in the long-term memory. Therefore, language teaching should bear in mind that repetition is necessary and beneficial in some cases and that fluency can improve a lot thanks to good lexical knowledge.

As we have seen, fluency is a key component in foreign language acquisition and apparently should be focused more on in the classroom. By fostering fluency, the students become more confident in speaking and produce language more easily. Digital storytelling can provide a new way of working on fluency as it offers opportunities for acquiring language in context and practising language chunks extensively. In the following section, the relation between fluency and DST will be examined and ways of using it in the classroom explored.

### **Fluency and DST**

As can be gathered from the literature review, fluency is a very broad term that implies several concepts. Therefore, there are also very different approaches to how it can be improved and what type of activities are most useful to foster it. To determine whether DST can offer an efficient approach to teaching fluency, it is first explained what a good activity on fluency looks like. According to Patterson (2013), it should be related to the topic of interest so that the students are more engaged. Moreover, the activity should draw on past knowledge so as not to overtax the students. In addition, there should be some element of repetition included. The author also advocates that speed should be encouraged and the students should be challenged without being asked too much.

Digital storytelling can address all these points. Regarding the topic of interest, DST allows the students to talk about their own experiences or content that is very close to them. As some of the authors above stated, the choice of the topic motivated the students and helped to tie them to the project. When it comes to drawing on past knowledge and repetition, the digital stories are usually based on elements seen previously in class (Al-Amri, 2020; Cano Bernal & Solano Fernández, 2018; Liu et al., 2018). In other words, the students do not have to come up with totally new sentences if they do not feel ready

for it. Repetition is provided in the sense that the students have to practise their recordings several times until they are satisfied with the result (Mirza, 2020). In that context speed is also key because the students should speak fluently and without too much hesitation to engage the audience. Finally, digital storytelling can be adapted to each student's needs and with sufficient scaffolding all levels can benefit from it (Liu et al., 2019). In short, digital storytelling seems to fit very well in the description of a good fluency activity. This view is also corroborated by some authors cited above who, despite not focussing mainly on fluency, also noted some improvement in that area.

Another interesting point to add to the general development of fluency is its relation to anxiety. Kessler (2010) revealed in a study with 40 university students that the more anxious the students were, the lower was their fluency. The participants were asked to record an audio journal and had the option of doing so with an MP3-Player or in the computer lab. Nearly all students preferred the first option and performed much better with it than in the lab. When doing the recordings there, the students talked very quietly and showed other signs of being nervous, which had a negative effect on their production. Hence, the author concludes that the environment has a considerable impact on the students' fluency and should necessarily be taken into account when teaching. The same observation was made by Cadena Aguilar et al. (2019) who applied a literacy project which involved a speaking phase with 13 teenager students. An appealing learning environment was created that made sure that all students were relaxed. This helped to increase the learners' security and therefore boost their fluency level. In addition, the authors mention that self-correction was another key factor for the students' development. When noticing that they got better, they felt accomplishment and their motivation increased. Given that in digital storytelling the students can choose where and when to record, their anxiety level should be low, which ultimately would favour fluency. Moreover, the students also get the chance to self-assess their production and improve it several times.

### **Summary**

Digital storytelling consists in elaborating personal narratives with the help of digital devices. It is a practice that allows language teachers to integrate new literacies in class and work on digital competence. Several personal and social skills can be improved by organising one's work and collaborating. It can be pointed out that language learners who participated in DST projects improved their grammatical and lexical competence. Whereas in each study the researcher put the focus on a different issue, many of them observed a very positive development in the students' reading fluency. This was taken as a reason to consider DST as a tool for working on oral fluency in class. After reviewing

the concept of fluency and exploring how it can be fostered in class, it got clear that DST offers several traits that make it appropriate for working on fluency. Repetition and chunk learning were identified as key components for developing fluent speech and they are also part of DST projects. In consequence, one can assume that when wanting to improve this language skill, the digital narratives are very beneficial.

## **OBJECTIVES**

By now it is clear that DST offers a lot of benefits for foreign language teaching that can help to make it more meaningful and engaging. However, as in all teaching methods and tools, it is important to develop coherent pedagogic implementations to put the theory into practice. When doing so, the outcomes have to be measured to make sure the expected outcomes have been achieved. In this paper, a didactic application of digital storytelling is developed and applied with a group of beginner language learners. Several insights into DST are hoped to be gained through this process.

The general objectives of the application are to find out whether DST improves language learning. In other words, the overall question is what makes DST valuable for teaching and how it can enhance the learning process. Since there are a lot of dimensions to learning, it is impossible to focus on all of them. Rather, two have been chosen to be investigated more closely. First, it is to be seen if DST helps to overcome motivational issues. The group of learners chosen for the study shows low engagement during the classes; thus, DST is applied to see whether it motivates the students better. Likewise, the students have difficulties in speaking fluently. Whereas this is not uncommon for beginner learners, it is desirable that they are at least secure in contexts that they know well. Hence, it is to be found out if DST can foster fluency. The research questions are:

*RQ1. How is the learner's motivation affected by the digital storytelling sequence?*

*RQ2. Is there an increase in oral fluency thanks to the storytelling?*

Besides these two issues that refer to the students' progress and learning, another point is analysed; it makes reference to the feasibility and application of the project. The study aims to explore what problems arise with digital storytelling. It is not only important that the project is useful for the language development students, but also that it can be applied without further complications or obstacles. One specific component that is taken into account is the digital nature of the project. It is examined whether the use of technological tools causes problems and how well the students deal with it. The research question reads as follows:

*RQ 3. Are there any obstacles related to technology in the application of DST?*

## **METHODOLOGY**

In this section, the outline of the project will be presented. First, the setting is explored to contextualise the application. Then, the learners are presented to understand their strengths and weaknesses and how the project can take these into account. Afterwards, the design of the application is explained and justified. In the last part, the procedure of the project and the instruments are described.

### **Context**

The context is a language academy located in a village near Valencia. The establishment has several decades of experience and is well-known in its surroundings. The classes it offers range from language lessons in English, Valencian, French and German to general revision for school, typing classes and robotics. The students are aged from kindergarten to adults and come mostly from middle-class families. Regarding the language classes, it can be pointed out that teenage and adult students generally pursue the obtainment of official language certificates, whereas the younger students learn to improve their academic performance or to lay a basis for future language needs.

All language courses are divided into groups according to age and ability. There are no more than eight students per group. Each classroom is equipped with a projector, a board and a laptop. Internet is available for teachers and students. Regarding the methodology in teaching, most teachers base their classes on the use of a course book, which informs activities and assessment. Besides this rather traditional approach to teaching, projects are introduced in which learners apply their language knowledge in a meaningful context.

The students of this study belong to a German class that the researcher teaches. The selection was informed by several criteria. First of all, the students are teenagers which means that they are already able to work independently. They also have enough technological knowledge as to work on the project without needing the help of the teacher constantly. This will ensure that the workflow is smooth and that the students are not overwhelmed by the digital aspects of the task.

### **Learner profile**

In this section the learners who participate in the study will be presented. Their characteristics and needs determine the way the practical application is designed. First, their general level will be described, then the focus will lie on their strengths and their weaknesses.

There are five teenaged students in class who all have a beginner level of German. The first language of all is Spanish. Three students have attended classes for three years and have a high A1 level; one student has five years of experience and has a low A2 level. All of them have curiosity towards the language, which motivated them to start learning it. There is another student who has attended classes only for a few months. Nonetheless, his level can be classified as high A2 since he occasionally speaks German with a relative of his. In short, the students all have basic knowledge of the language which allows them to understand spoken and written language as long as the structures are simple, and the topic is familiar to them. Regarding production, simple sentences can be formed, but a lot of support is needed for the students to get there. For the pedagogical implementation this means that a context that the students know should be chosen. Moreover, scaffolding of language structures is needed to give the students the support they need to be creative with language.

- Strengths

The learners have several strengths that facilitate the instruction and help to maintain a quick pace throughout the course. First, the learners pick up new structures and vocabulary easily and can apply them autonomously in closed activities. They also know several strategies to overcome problems and doubts. For instance, after having heard an explanation from their teacher and having seen examples, the students work on tasks that address the content. They do not seek much help, only when a word is unknown, or the activity made them question how they understood the instructions. Minor doubts are solved by themselves, for example by going back to the examples or rereading the explanation in the book. When checking the activities, the learners usually have 90% of the answers correct. This shows that the learners do not depend too much on the teacher's instructions and help; rather, they are able to pick up new language by seeing examples and by applying it in controlled contexts. For the pedagogical application this means that there is no need for lengthy explanations; instead, examples that serve for reference should be included. The fact that the students learn easily will ensure that they are able to advance well through the stages of the project and will not feel overwhelmed by it.

Another strength is that the students are very hard-working and competitive. They want to achieve good results and if possible be better than their classmates. The learners seek their teacher's approval when they have finished an exercise, to be sure that everything is right and are very satisfied when they did better than the rest. For the DST project, the students' wish to excel will be useful to achieve good results. It can be taken for granted that the students will put a lot of effort into the project and try to do their best.

It should also be mentioned that the students are digital competent. During a period of online teaching the students were introduced to platforms like Genial.ly, Padlet and Nearpod, where they had to carry out several activities. After short explanations from the teacher, the students were able to work autonomously with the tools. It took them very short time to become familiar with the functions and work efficiently. On the platforms, the students were asked to answer quizzes, read information or share pictures and texts. The fact that the students were able to do so nearly without any support from the teacher shows that they have good control of technological tools. This comes in handy for the project since the students are expected to create a story with an online program. Thus, the more knowledgeable the students are, the easier the project can be carried out.

- Weaknesses

There are several needs and weaknesses that can be detected. The pedagogic implementation seeks to address them and provide ways of overcoming them. The students are very insecure regarding their pronunciation and general oral production. The students have difficulties in speaking freely and creating new sentences in speech. Oral production activities are kept very short due to the learners' inability to maintain a conversation. In consequence, there are few opportunities for the students to improve oral competence and become more fluent. In addition to this, the learners are self-conscious about their pronunciation and are reluctant to answer questions because of being afraid of mispronouncing words. Despite little speaking competence being common at a beginner level, it should certainly be tried to foster in contexts that the students are familiar with, e.g. speaking about the family or free time activities. The DST project addresses the pronunciation issue due to its digital nature. The students are asked to record their voice and might need several attempts to get a good result. Therefore, pronunciation is practised extensively. Oral fluency and ability to produce language is fostered by practising and applying structures related to a certain topic. The students need to retrieve their knowledge of the topic regularly so that the memory is strengthened, which facilitates the use of the vocabulary in a future conversation (Hilton, 2008).

Besides these linguistic needs, there are other weaknesses that have to do with the instructional circumstances. The classes take place only once a week and at a very late time (from half past seven to eight in the evening). The students are very exhausted at this moment and ask for creative or game-based activities. Initial motivation usually wears off after the half of the class and the students distract each other easily. The fact that several days pass between each class makes it more difficult for the students to remember content from previous lessons. In consequence, the classes have to be



planned carefully to not confront the students with too much new input and to maintain their engagement. Using DST as a teaching tool addresses these issues efficiently. Regarding the motivation, the project will call the students' attention and change usual classroom dynamics. The use of technology will also be a main factor for student engagement and interest. DST fosters retrieval practice by building up on previous classes and drawing on former activities.

To sum up, the learners have several qualities that will facilitate the project, such as being able to work autonomously, picking up language easily and knowing how to use technology. For the project this means that explanation stages are kept short, and the students are provided with examples that serve them to guide their working process. The learners' linguistic weaknesses are mainly in free language production and oral fluency. The project will address this by providing support during the production process and offering several opportunities for practice of oral language. Motivational problems are addressed by introducing new dynamics in class and focussing on the students' interests and strengths.

### **Design and Justification**

In this section the design of the DST project will be presented. The learner characteristics were taken into account to develop a pedagogic implementation that addresses their strengths and needs. Methodological approaches to language teaching that match the objectives have been chosen and are presented here to justify the design of the application.

- Overall design

The purpose of the study is to find out whether digital storytelling can help the learners to improve their fluency skills and whether they work better motivated in class. In the project, the students elaborate a digital story about a topic that is relevant to them. They follow several steps to guide them through thinking of an idea, developing it into a script, choosing appropriate multimedia for the story, creating the story and reflecting on the process. The project is implemented at a revision stage after several learning units so that the learners can strengthen and apply knowledge of previous stages. The students are asked to work in one pair and a group of three of mixed levels. This will facilitate the sharing of knowledge so that the students of the lower level do not feel lost (González-Mesa, 2020). .

The students work on their creations in the last half of each class (about 45 minutes) until they finish their digital story, which takes about four sessions (i.e., four weeks). The

latter half of the classes is chosen due to the concentration and motivation issues mentioned above. The students get tired after some time and need a change of dynamics and activities. Thus, working on the digital storytelling project brings some fresh air into the classroom and gives the students something to look forward to. Four lessons are an appropriate length to have enough time to develop the project without not making it repetitive.

- Methodological approaches related to DST

The Digital Storytelling project can be related with several relevant teaching methods. First of all, the students' affective state is addressed by taking the learners' interests and skills into account. According to Krashen (1986), the **affective filter** of the students should be low for them to be able to take in new content and to learn efficiently. If the students are stressed, they will progress very little in class. The project creates a relaxed atmosphere by having the students work together and share their personal opinions. They can develop a better understanding of each other and show themselves as they are. This helps to make them feel more comfortable in class. The low affective filter causes the students to be more confident in their language production and to lose fear of making mistakes.

Another general feature of digital storytelling is that it provides the opportunity for producing **output**. According to Swain (1985), learners need to use a language in a meaningful context that is accessible for them. By doing so, they consolidate their acquired knowledge and test hypothesis about how the language works. However, in many contexts creative production with language is left for higher stages in which the students have more resources and are more independent in their language use. In consequence, there is the risk of making beginner learners passive bystanders in the learning process and provoking the feeling that they cannot do anything with the language. Thus, one key feature in the design is that beginner level students are challenged to get creative with language and apply it in new contexts.

Concerning general features, it can also be pointed out that DST is useful to apply **multiliteracy** approaches in class (New London Group, 1996). The students' production is facilitated by the use of technology. Through the combination of text with picture and sound, the students can transmit ideas they are not yet able to express with their own words. This allows them to create meaningful messages and touch upon a variety of topics even though their language abilities are limited. If the students only wrote or only spoke, they would not be able to reach the same level of content depth. Moreover, the learners can experiment with multimodality by combining text, picture and sound. Since

in the 21<sup>st</sup> century a lot of media is multimodal, the students develop important skills for understanding and interpreting them.

By working with computers and technology, the **digital competence** of the students is also fostered (Shetzer and Warschauer, 2000). They work not only on their basic computer literacy, but also on information literacy by using digital content like pictures and sounds. The students learn to be aware of privacy and intellectual property issues. It should also be pointed out that by working on an extensive project the students learn to organise themselves and to coordinate their work. They have to collaborate which means that they have to discuss with their peers and reach agreements. This can contribute to life-long learning skills and make them an active part of their learning process.

- Specific learner needs in the design

Beside these general benefits, the application offers specific characteristics that address some of the learners' needs. The learners' **oral competence** is a problem area that calls for improvement. As stated previously, the students feel insecure when having to answer and are worried about their pronunciation. The application is designed to address this in several ways. Oral output is guided and scaffolded with a number of steps. The students are required to read the text that they have written and record it to integrate it in the digital story. To do so, they will be provided with a sample recorded by their teacher, to get acquainted with the sound of the words and the rhythm. Then, they will have to record their voices several times until they are satisfied with the result. They improve by comparing their outcomes with the example and identifying where there are still differences (Cadena Aguilar et al., 2019). Fluency is developed in this context because of the repetition of several structures. As was stated previously, chunk learning is a key feature for developing fluency because it helps to strength the memory and have language more easily available (Hilton, 2008; Senra Silva, 2017). In the DST project the students will repeat numerous times the same structures since they need them at all the stages of the project. In other words, the students first use them in writing, then in recording and editing their story.

In short, digital storytelling can aligned with several language teaching approaches. This validates it as a beneficial tool for language classes and shows that it can have a huge influence on the learner's development. The design for the application of DST was presented and its advantages for the learning context presented previously were explored. Now that it is clear why DST is a valuable tool for the context, the application and its resources will be described more in detail.

## Instruments and procedure

Here, the procedure of the pedagogic application will be described and the instruments that are necessary to implement it. The outline of the procedure follows the steps recommended by Morra (2013; see Picture 1). The storytelling cycle she proposes is very logical and will ensure that the students are prepared to produce valuable work. The steps prepare them gradually for the final task so that there is an increase in difficulty throughout the project. In this study, the steps have been divided into four phases, which coincide with the distribution of lessons over the weeks. The stages are 1) introduction to project and topic (steps one and two), 2) crafting the plot (steps three and four), 3) creating the story (steps five and six) and 4) reflection (steps seven and eight).



Picture 1.

As the starting point, several texts of the students' course book have been chosen. Cano Bernal and Solano Fernández (2018) state that the goal of a new application is to maintain the parts that already work well and tackle only the ones that cause problems. The authors let the students elaborate a digital story based on information from the course book, which has served as an inspiration for this project. The textbook of the lower-level students has been chosen as a source for input to make sure that all of the participants are able to understand it. Cities and their facilities were selected as a suitable topic because it includes a lot of cultural information which the students find very interesting. Moreover, the texts are easy to understand, and the format can be taken as a basis for the digital story (see [appendix 1](#)). There is one poem about a city which introduces interesting comparisons between the city and family members and three other texts written by teenagers who talk about places they like in their towns. The idea is that in the digital story the students describe their town similar to the pattern in the poem and talk about the places that they like.

- ❖ The *first phase* is dedicated to introducing the students to the project and generating ideas to lay the basis for the digital story. An example<sup>1</sup> of a digital story is shown so that the students know what they are expected to do. The texts (appendix 1) are read together, and their content is discussed. The students are divided into groups and think about the places they could talk about in their town. They organise their thoughts in a mind-map (see [appendix 2](#)). This organisation helps to detect vocabulary and structures that are necessary to describe the places.
- ❖ The *second phase* aims at developing the script of the story and planning its visual components. Based on the ideas from the mind-map, the students write their text. The teacher monitors them and makes sure the students have enough tools to develop their script. Next, the students combine their story with pictures. This is done in a storyboard ([appendix 3](#)). The students should consider which pictures they can use and how to design the pages of their story.
- ❖ In the *third phase*, the students assemble their story in Bookcreator. First, the focus lies on the recordings. The teacher provides the students with a sample recording of the texts so that they get acquainted to the sounds. The students practise reading in pairs and record their voice on the computer. With the help of a rubric ([appendix 4](#)) the students can mark how well they did in each attempt. Afterwards, they start to create the story in Bookcreator. They receive a brief introduction to the program by their teacher to know where to find each function, and then work autonomously. For creating the story, the students need to insert a picture of the place, write its name and record the part of the script that describes it.
- ❖ The *fourth phase* is dedicated to sharing and evaluating the stories. The students read the other group's story and give them feedback. To do so, they are given a feedback form ([appendix 5](#)) in which several criteria are listed. To finish the project, the students go through the feedback the other group has given them and a whole class discussion is led regarding the experiences with DST.

Concerning the instruments, Bookcreator has been chosen as a tool to implement the pedagogic application. It is very user-friendly in the sense that the interfaces are well organised, and there are icons to show the several functions like inserting pictures or recording the voice. The program is simple to use and everyone with basic computer knowledge can work with it efficiently. In this case, the students already have some experience with other programs so that there should be no problems in the use. Another

---

<sup>1</sup> [https://read.bookcreator.com/dCJ7emG8F7PivFrE0EJADcat1LQ2/E551x4UmRr2\\_LDUff7lqiA](https://read.bookcreator.com/dCJ7emG8F7PivFrE0EJADcat1LQ2/E551x4UmRr2_LDUff7lqiA)

advantage of Bookcreator is that there are a lot of ways to create and edit the story. Several options for the style of the background, the type of font and the format of the pictures are given. Thus, the students can create a visually appealing story in a very easy way. A cooperation with Pixabay allows the students to insert a lot of copyright free pictures directly in the program. However, they are also given a list ([appendix 6](#)) with other license free visual and sound resources in case they do not find what they want. It should also be mentioned that the students' creations are saved online which allows them to have a look at their books from at home and the teacher to check at any moment how the students are doing.

To conclude, the pedagogic application consists of four phases that guide the students towards the creation of a digital story. The content of the story is the students' hometown and the places they like in it. First, the students gather ideas for the content and get acquainted with useful structures. Then, the focus lies on writing the script and choosing the visual content. In the third phase, the students create their story in an online program and in a fourth step the results are shared and assessed. The students' motivation is maintained by introducing new technologies in the classroom and allowing the students to be creative. Oral fluency is fostered by letting the students practise language structures repeatedly and enhancing reflection on their development.

## RESULTS

### Implementation proposal

In this section the focus will lie on how the digital storytelling project can be implemented in the context of the beginner German learners. It is explored what is needed to successfully put the sequence into practice. Since the project is related to technology, first the technical resources are explained. Then, the teacher's role in class is presented and the ideal role of the learner discussed.

- **Technical requirements and resources**

Regarding the resources, it has to be made sure that the technological devices work and can be used without any problems. In this case, two laptops are necessary so that the groups can create the story at the same time. It must be checked that the laptops can open the Bookcreator app and that all its functions can be exploited. There are basic needs, such as enough battery life or the possibility of charging the laptop, and specific ones to the digital story, like the use of the microphone. For the recording session it is necessary to make sure that separate rooms can be used so that the students can record their voice without any background noise.

- **Required skills of the instructor**

One of the tasks of the teacher is to prepare all the resources and ensure that they function without any problems. The teacher must be technology knowledgeable enough to solve issues that may arise during the creation of the digital story. A valuable approach to foreseeing any potential problems is to undergo all the stages of the project and observe what factors could cause conflicts. In that sense, the teacher is the person who facilitates the materials and controls their well-functioning.

Moreover, the teacher carefully plans the steps and guides the students through each phase. This includes adapting to the students' needs and making sure they can carry out all activities with their current knowledge and ability. In consequence, the teacher has to observe the learners constantly to detect when they need further support. Considering that the group of students is very small, the teacher can dedicate a lot of time to assisting all learners. If the sequence were to be carried out in a bigger group, more cautious planning in regard to time distribution to tutor all groups would be needed.

- **The learners' role**

The learners play a very active role in the application. By creating the digital story, they are given a lot of choices in terms of content they want to focus on and preferences they have. The students can pace their progress and work autonomously for long parts during the sequence. As stated before, language learning requires the students to use the language actively and to make new meaning with it. This implies that the learners take a part of responsibility for their progress by participating and putting effort into their work.

### **Assessment**

There are two dimensions to the assessment of the application. On the one hand, there is the learners' performance that has to be considered and on the other hand, the effectiveness of the application in order to achieve learning outcomes and competencies. In other words, there is a practical dimension to assessment that can inform other practitioners who want to carry out this proposal or a similar one, and there is a scientific dimension, which provides other researchers with the necessary information to carry out the application and measure its impact.

- **The learner's performance**

Regarding the learner's performance, formative and summative assessment are applied. During the elaboration phase, the teacher observes the students concerning the consistency of their participation and the quality of their contributions. Evaluation criteria are the frequency of actively taking part in the activities, the linguistic correctness and richness of their answers, and the coherency in their ideas. In [appendix 7](#) an assessment

rubric is provided. The formative assessment serves to appreciate the learners' continuous effort and has also a diagnostic dimension. This means that it informs the teacher about any potential problems the students face, which can inform the next steps to take in class.

Summative assessment is applied with the digital story that is created. The aspects that the teacher pays attention to are accuracy, pronunciation in the recordings, task achievement and design. The rubric can be consulted in [appendix 8](#). The students are informed about the criteria so that these can guide them during the creation process. Summative assessment helps the students to have a clear goal in mind and work towards it. The final grade is constituted half and half by the formative and summative assessment.

- **The effectiveness of the application**

The effectiveness of the application and its impact regarding the learning outcomes is assessed with observation, result analysis and learner interviews. One question was whether the students would be more engaged in the tasks and show a bigger interest in the subject. This is found out by observing the way the students interact in class. It has to be established how motivation can be interpreted and how it is visible in the students' behaviour. Indicators of high motivation levels are little distraction from the task, frequent participation and contributions, visible enjoyment, as well as preoccupation about final results. However, how motivation is shown varies individually so that it is important to compare the observation with the students' perspective. This is done by conducting short interviews in which the students speak about the experience and share how they felt about it. A rubric to measure motivation and the interview questions are provided in [appendix 9](#).

Another learning goal was to improve the students' fluency in speaking about towns and the things that can be seen there. It is important to establish the definition of fluency and determine how it can be measured. Fluency is interpreted here as the ability to speak without undue pauses while producing illegible speech. To measure it, the teacher takes the recordings that are produced by the students and analyses them in terms of the pauses, rhythm and pronunciation. In addition, one of the application's aims is to foster fluency in regard to the topic in general, which is why in a post-session the teacher asks questions about places in the students' town and analyses the students' answers. If the application is effective, the learners will be able to answer basic questions without much hesitation or searching for words. A rubric to assess the fluency and example questions are presented in [appendix 10](#).



- **Related competences**

Besides the increase of motivation and improvement of fluency, the application has the potential to develop two other competencies: group working skills and digital literacy. Regarding the **group working skills**, the students have to collaborate in each stage, which encompasses taking decisions together and sharing knowledge. In order to work efficiently, the learners need to find a balance between defending their point of view and accepting the one of the other person. It is an opportunity to learn how to reach agreements and share workload equally. A peer work report can help the students to reflect on how well they collaborated and provide the teacher information about the students' ability to work with others. Another competency that is enhanced is **digital literacy**. The students have to employ searching machines and translators to gather the information they need. When using the book creator app, they also get acquainted with a presentation tool. The students experiment with different options for design and have to take decisions regarding the effects on the audience. Digital literacy can be assessed by observing to what extent the students can work autonomously during the research and creation phase, as well as by analysing their digital stories in terms of the quality of the visual effects.

### **Piloting and discussion of results**

The application was piloted with the group of students presented in the context above. Only one lesson was available for this so that several steps had to be skipped to make it possible to work on the most relevant parts in only 90 minutes. It was opted to do the introduction with the texts, the research regarding a town the students liked and the creating of the digital story with book creator. These stages were chosen due to the importance for the project and their potential to provide results on the learning outcomes despite not going through all phases. The objectives of the pilot where to see whether the students improved their fluency; thus, doing the recordings was necessary; moreover, the students' motivation was to be analysed so that using the digital tool was imperative.

The piloting was short so that not all of the assessment explained above was applied, nor can the results be generalised for another context. Rather, the aim was to draw conclusions on the effectiveness of the implementation and to provide information for future applications. The results are presented according to the research questions.

**RQ1: How is the learner’s motivation affected by the DST sequence?**

In Table 1 the results from the observation of the students’ motivation are shown. 5 stands for high frequency of the behaviour always and 1 for low. There were positive (green) and negative (red) findings.

	S1	S2	S3	S4
<i>Focus on task</i>	3	2	4	2
<i>Active participation</i>	5	4	5	4
<i>Enjoyment</i>	4	4	5	4
<i>Investment and persistence</i>	5	4	4	3

Table 1.

First, the students engaged well with the topic. From the start they voiced interest and excitement at the prospect of working with an online tool and elaborating a digital story. The change in the usual dynamics called their attention and they were happy at the prospect of writing a story (enjoyment). When being told what to do, the students started to work immediately (Active participation). Throughout the working process the students came up with a lot of ideas and included even more content than the teacher had asked for. They clearly wished to show the best parts of the city they had chosen so that it can be affirmed that the topic is relevant to the learners. The students also recorded their voice several times and asked the teacher for help in pronunciation. This shows that they were interested in creating a good result and wanted to improve actively their language skills (Investment).

Besides these rather positive observations, it has to mentioned that at certain points some of the students got distracted. One of them started searching other content online that did not have anything to do with the topic and two students started chatting when they went to a different room to record their voice (Little distraction). One conclusion that can be drawn from this is that the time spent working on the application was too long so that the students were not focused momentarily. This indicates that working on the project for only one half of the lessons is better to help the students to pay attention to the task.

**RQ2: Is there an increase in oral fluency thanks to the storytelling?**

Fluency was addressed by reading the text for the digital story. Since there was no time for sample recordings, the students read the text several times to their teacher and then started recording for the story. In table 2, the results can be seen. 5 stands for fully fulfilled and 1 for strong need for improvement. Again, positive findings are highlighted in green, negatives ones in red.

	S1	S2	S3	S4
Pauses	5	4	5	5
Speed	4	2	5	3
Audible	5	2	4	4
Pronunciation	4	3	4	5

Table 2.

Three learners did very well in recording their voice by speaking in a clear way and appropriate speed. As can be seen, undue pauses and pronunciation were no problem for any of them. One of them (S1) had voiced concern at the prospect of having to record her voice since she felt insecure about her pronunciation, but in the end, she performed very nicely. This shows that repeated recordings contributed to better language production and transmitting the message fluently.

Another student (S2), in comparison, spoke very low in the recording and too quick at some points so that it cannot be understood properly. The recording was produced in another classroom, when the teacher was not present, which can indicate that supervision and support are crucial throughout the production phase. All of the students, when asked in a later lesson about the places in town were able to answer the question without any need for further clarification and speaking in whole sentences, rather than isolated words. Despite the pilot being very short, this allows to see that by reading, the students' fluency improved and that they benefitted from it in a different context.

### RQ 3. Are there any obstacles related to technology in the application of DST?

The use of technology included internet research and the Bookcreator app. The first caused no problem at all since the students are used to doing that type of activity frequently. In comparison, Bookcreator was new to all of them but its use was easy for the students, who worked autonomously with it the whole time. The only help they needed was for adjusting the font and being told where to record their voice. The tool resulted as intuitive as the researcher expected, which validates its appropriateness in the context. The results<sup>2</sup> of the students were very positive and exceeded the teacher's expectations at some point. In Table 3 their achievement according to the assessment rubric can be seen. The results corroborate the good use that the students made of book creator. Everything was designed in a neat way and the students chose colours and fonts

<sup>2</sup> <https://read.bookcreator.com/dCJ7emG8F7PivFrE0EJADcat1LQ2/PVfp2gTxSNKr1bKTnFwgiq>  
<https://read.bookcreator.com/dCJ7emG8F7PivFrE0EJADcat1LQ2/ufr9Wqe5QX2H7Wb-Bo6cvq>

deliberately to create an appealing layout. The content of the stories was very appropriate, and the students had very creative ideas to describe the places they had chosen.

	<b>S1&amp;S2</b>		<b>S3&amp;4</b>	
<i>Accuracy</i>	4		4	
<i>Pronunciation</i>	4	2	5	4
<i>Task achievement</i>	5		5	
<i>Design</i>	5		5	

Table 3.

Despite the very positive experience, there was an unforeseen technological issue that hindered the working flow and good collaboration in groups. Two of the students had little experience with using the touchpad of a laptop; they were accustomed to a peripheral or touchscreen. This caused them to have difficulties when wanting to move pictures or adjusting the design of the book. They got nervous and started clicking wildly on the touchpad while their partners, who were more experienced, got impatient and wanted to do everything on their own. This shows that basic computer literacy was not given; however, the problem could be amended easily in the future by providing a conventional computer mouse to use. It can be affirmed that this issue did not hinder the learning process or posed an obstacle to the implementation of the project.

### Summary

The piloting showed very positive results. The students' implication and participation in class was high which is a sign for increased motivation. Regarding fluency, the results are limited to the students' final recordings. However, these show that the majority of the learners was able to produce good audios and that the intensive practice of structures was beneficial for answering questions in a new context. Technology helped to motivate the learners and was easy to use.

For a future implementation it seems crucial to limit the time spent on the project to reduce distraction. Only half the class, as was stated in the design, is more appropriate. It is also important to supervise the final results of the students before submission to make sure that they meet the criteria and the students have worked properly. Despite technology not being a problematic issue, the students might not be used to working with the type of devices that are available in class. Again, supervision and close observation can help to detect this and propose immediate solutions.

## CONCLUSION

Digital storytelling provides a valuable teaching tool for fostering fluency and motivation. This is shown by the pedagogical application that was presented in this paper. The development of the project was informed by the findings of other researchers and practitioners. Namely, it focused on elaborating a digital story about a certain topic that is close to the students' interest. This fosters their motivation since they are asked to talk about something that engages them (Liu et al., 2018). Drawbacks mentioned by other investigators such as difficulties in using the program (Cano Bernal & Solano Fernández, 2018) or background noises in the recordings (Mirza, 2020), were considered in the design and tried to avoid by choosing an appropriate tool and creating conditions for silent recording environments. A focus was laid on fluency by working extensively with a topic (places in town) and repeating relevant structures related to it. Broad vocabulary knowledge and chunk learning is crucial to decreasing undue pauses and hesitation in the learner's speech (Hilton, 2008; Senra Silva, 2017) so that it will be easier for the learners to express their thoughts spontaneously. The application also took anxiety into account, which can affect fluency negatively (Kessler, 2010). By allowing the students to do the recordings without their peers (in another room) and as many times as needed, little stress was put on them. Therefore, the storytelling project includes characteristics that can actively promote fluency in the foreign language students.

The piloting shows that the application is feasible and engenders the expected learning outcomes. The students were motivated in carrying out the application and it helped them to overcome their fear of speaking out in class. Nevertheless, due to the fact that the pilot was not complete and very reduced in time, there were little insights into the impact on fluency. In a long-term application that effect would be more visible. Despite not completely validating the research hypothesis, the piloting allowed to identify areas for improvement that should be addressed in a future application. First, there was an unexpected lack of computer literacy which caused two students not to be able to work efficiently with the integrated mouse of the laptop. It is a reminder that digital natives do not necessarily know all functions of technological devices or how to use them for study purposes. Another important insight was that the students would lose interest in the activities despite their engaging nature. This indicates that timing has to be planned carefully to guarantee focused working.

All in all, digital storytelling is a very powerful tool for language learning since it provides the learners with meaningful contexts and relevant topics. A lot of competencies can be developed; however, the emphasis here was on the improvement of fluency. If beginner

learners are to experience themselves as competent, it is relevant to focus on it and make it part of classroom practices. DST can help to introduce activities in an engaging context that contribute to the development of fluency and other language skills. The proposed application can be seen as a starting point to develop similar implementations and measure their impact on the students. Further research could address fluency in other types of learners such as children or adults as well as carry out longer projects to see if the benefits increase over time.

Digital storytelling definitely bears the potential for changing learning processes and is suitable for technological settings that are and more common in education. It is an approach that deserves our attention and that will certainly become more relevant in the years to come.

## REFERENCES

- Al-Amri, H.M. (2020). Digital Storytelling as a Communicative Language Teaching Based Method in EFL Classrooms. *Arab World English Journal*, 11(1), 270-281. <https://dx.doi.org/10.24093/awej/vol11no1.20>
- Cadena-Aguilar, R. F., Ortega-Cuellar, J. H., & Cadena-Aguilar, A. (2019). Daily 6: An approach to foster oral fluency of English as a foreign language in adolescents. *Profile: Issues in Teachers' Professional Development*, 21(2), 29-44. <https://doi.org/10.15446/profile.v21n2.71364>
- Cano Bernal, J. I., & Solano Fernández, I. M. (2018). Digital storymaking en la enseñanza de inglés: Una experiencia en el aula de sexto de primaria. *EduTec. Revista Electrónica De Tecnología Educativa*, (66), 18-31. <https://doi.org/10.21556/edutec.2018.66.1189>
- Chun, D., Kern, R. & Smith, B. (2016). Technology in Language Use, Language Teaching, and Language Learning. *The Modern Language Journal*, 100, 64-80.
- Gómez Parra, M.E. & Roldán Tapia, A. (2014). Language Learning and Acquisition Theories and Methods of Teaching and Learning. In D. Madrid and N. McLaren (Eds.), (pp. 73-101). Granada: Universidad de Granada.
- González Mesa, P.A. (2020). Digital Storytelling: Boosting Literacy Practices in Students at A1-Level. *HOW Journal*, 27(1), 83-104. <https://doi.org/10.19183/how.27.1.505>
- Hilton, H. (2008). The link between vocabulary knowledge and spoken L2 fluency. *Language Learning Journal*, 36(2), 153-166. DOI: 10.1080/09571730802389983
- Kessler, G. (2010). Fluency and anxiety in self-access speaking tasks: the influence of environment, *Computer Assisted Language Learning*, 23(4), 361-375. DOI:10.1080/09588221.2010.512551
- Krashen, S. D. (1986). *Principles and practice in second language acquisition*. Oxford: Pergamon Press.
- Liu, KP., Tai, S.J.D., Liu, CC. (2018). Enhancing language learning through creation: the effect of digital storytelling on student learning motivation and performance in a school English course. *Education Tech Research Dev*, 66, 913-935. <https://doi.org/10.1007/s11423-018-9592-z>

- Liu, CC., Yang, CY. & Chao, PY. (2019). A longitudinal analysis of student participation in a digital collaborative storytelling activity. *Education Tech Research Dev*, 67, 907–929. <https://doi.org/10.1007/s11423-019-09666-3>
- Mirza, H.,S. (2020). Improving university students' English proficiency with digital storytelling. *International Online Journal of Education and Teaching (IOJET)*, 7(1),84-94. <http://iojet.org/index.php/IOJET/article/view/66>
- Morra, S. (2013). *8 steps to great Digital Storytelling*.  
<https://samanthamorra.com/2013/06/05/edudemic-article-on-digital-storytelling/>
- New London Group (1996). A pedagogy of multiliteracies: Designing social futures. *Harvard Educational Review*, 66(1), 60-92.
- Patterson, D. (2013). Fluency building activities for the EFL Classroom. *Working Papers in Language Education and Research*, 1 (1), 71 -84.
- Robin, B. (2008). Digital storytelling: A powerful technology tool for the 21st century classroom. *Theory into Practice, themed issue on New Media and Education in the 21st Century*, 47(3) (220-228). Lawrence Erlbaum Associates.
- Robin, B. (2016). The power of digital storytelling to support teaching and learning. *Digital Education Review*, 30, 17-29. <https://files.eric.ed.gov/fulltext/EJ1125504.pdf>
- Senra Silva, I. (2017). Speech fluency in phrases: Teaching English oral fluency in distance learning. *Elia*, (17), 209-232. <http://dx.doi.org/10.12795/elia.2017.i17.09>
- Shetzer, H. and Warschauer, M. (2000). An electronic literacy approach to network-based language teaching. In M. Warschauer and R.Kern (Eds.), *Network-based language teaching: Concepts and practice* (pp.171-185). New York: Cambridge University Press.
- Swain, M. (1985). Communicative competence: some roles of comprehensible input and comprehensible output in its development. In S. Gass & C. Madden (Eds.) *Input in second language acquisition*. Rowley, MA: Newbury House.



## APPENDICES

### APPENDIX 1: Text of course book.


Landeskunde

3

**10 a** Meine Stadt – Hörst und lest das Gedicht von Josef Reding. Wie ist die Stadt?

**Meine Stadt** (Auszug aus einem Gedicht von Josef Reding)


Meine Stadt ist oft schmutzig; aber mein kleiner Bruder ist es auch, und ich mag ihn. Meine Stadt ist oft laut; aber meine große Schwester ist es auch, und ich mag sie.	Meine Stadt ist dunkel wie die Stimme meines Vaters und hell wie die Augen meiner Mutter. Meine Stadt und ich sind Freunde ...
---	---




**b** Wie ist eure Stadt? Kennt ihr sie gut? Mögt ihr eure Stadt? Wo in eurer Stadt ist es schmutzig, laut, hell, dunkel? Sprecht in der Klasse.

**c** Lara, Philipp und Hanna schreiben über ihre Stadt. Lest die Texte. Wo sind die Städte? Sucht auf der Karte im Umschlag.


Ich lebe sehr gerne hier im Norden, in Hamburg.  
 Ich fahre oft zum Hafen und treffe meine Freunde.  
 Der Hafen ist super interessant.  
 Die Schiffe dort sind riesig und die Fischbrötchen sind lecker.  
 Man sieht Menschen aus der ganzen Welt. Hamburg ist international. Ich habe Glück, ich wohne hier!  
 (Lara 13)



Ich wohne in der Schweiz, in Fribourg.  
 Hier spricht man Deutsch und Französisch, das ist echt cool:  
 „Hallo, wie geht es dir?“  
 „Allô, comment ça va?“  
 Das hört man auf der Straße. ☺  
 Mein Lieblingsort ist das Museum von Jean Tinguely.  
 Da gibt es verrückte Kunstwerke. Sie bewegen sich wie Roboter.  
 Und ich liebe unser Käsefondue, besonders im Winter.  
 (Philipp, 12)



Ich wohne am Kohlmarkt in Wien.  
 Das ist praktisch! Ganz in der Nähe ist das Café Demel.  
 Dort kann man super Kakao mit Schlagobers trinken!  
 Ganz toll ist natürlich das Riesenrad im Prater! Es ist über 60 Meter hoch!  
 Und ich schwimme gerne, deshalb gehe ich oft ins Amalienbad,  
 das ist ein super Schwimmbad.  
 (Hanna, 14)



**d** Was finden Lara, Philipp und Hanna gut in ihrer Stadt? Erstellt eine Tabelle.

	Lara	Philipp	Hanna
Hafen, ...		...	...

**e** Und jetzt ihr. Schreibt auch einen Text über eure Stadt. Die drei Beispiele in 10c helfen.

Ich wohne in...

fünfunddreißig 35

**Source:**

Fleer, S., Koenig, M., Koithan, U. & Sieber, T. (2018). *Klasse! A1.2 – Kursbuch*. Stuttgart: Ernst Klett Sprachen.

### APPENDIX 2: Mind-map.






### APPENDIX 3: Template for storyboard.

Title of Story: \_\_\_\_\_

Authors: \_\_\_\_\_

Page No.	Page No.	Page No.
_____	_____	_____
_____	_____	_____
_____	_____	_____

**APPENDIX 4: Rubric for improving fluency.**

			
I do not pause too long between words.			
I do not hesitate before pronouncing difficult words.			
I stop properly at the end of a sentence.			
I do not use fillers (ehm, eh...)			

**APPENDIX 5: Form for feedback**

<b>What we liked:</b>
Sounds and voice: Images: Content: Design:
<b>What you could improve:</b>
Sounds and voice: Images: Content: Design:

**APPENDIX 6: Links to resources**

**Pictures and Sounds:**

[https://www.pics4learning.com/?utm\\_campaign=ce\\_footer&utm\\_source=ce&utm\\_medium=web](https://www.pics4learning.com/?utm_campaign=ce_footer&utm_source=ce&utm_medium=web)

<https://www.photosforclass.com/>

<http://recursostic.educacion.es/bancoimagenes/web/>

<https://www.zapsplat.com/>

**APPENDIX 7: Observation table.**

	<b>Grade*</b>	<b>Comment</b>
<p><b>Active participation</b> The student engages continuously and actively in all activities. S/he carries them out until finishing them.</p>		
<p><b>Linguistic quality</b> The student uses correct structures and vocabulary to communicate. Messages are understandable despite errors.</p>		
<p><b>Content quality</b> The student brings up new ideas and moves discussions forward. The answers are logical and follow a rationale.</p>		

\*Grades from 1 to 5 are given, meaning the following:

1: strong need for improvement – 2: need for improvement – 3: acceptable performance – 4: very good performance – 5: performance exceeds expectations

**APPENDIX 8: Assessment of digital story.**

	<b>Grade*</b>	<b>Comment</b>
<p><b>Accuracy</b> The linguistic structures used are correctly. Minor mistakes are made but these do not impede understanding.</p>		
<p><b>Pronunciation</b> The student speaks clearly and at an appropriate pace. All words are audible and there are no undue pauses.</p>		
<p><b>Task achievement</b> The story covers the required content (the town and its places). The information is interesting and engages the reader. The comparisons help to understand the peculiarities of the place.</p>		
<p><b>Design</b> The colours match and do not distract from the content. The fonts are legible, and their size is appropriate. The content is placed in a logical way.</p>		

\*Grades from 1 to 5 are given, meaning the following:

1: strong need for improvement – 2: need for improvement – 3: acceptable performance – 4: very good performance – 5: performance exceeds expectations

**APPENDIX 9: Motivation evaluation criteria and interview questions.**

	<b>Grade*</b>	<b>Comment</b>
<p style="text-align: center;"><b>Focus on task</b>  <i>The student does not get distracted from the task and works without interruptions.</i></p>		
<p style="text-align: center;"><b>Active participation</b>  <i>The student participates by contributing ideas and answering all required questions.</i></p>		
<p style="text-align: center;"><b>Enjoyment</b>  <i>The student tries to achieve good results and improves their work. The student does not give up when facing problems.</i></p>		
<p style="text-align: center;"><b>Investment and persistence</b>  <i>The student shows clear signs of enjoyment either verbally or mimic.</i></p>		

\*Grades from 1 to 5 are given meaning the following:

1: never – 2: casually – 3: normally – 4: frequently – 5: always shows signs of this

Interview questions (the interview would be conducted in Spanish, the students' L1)

- What did you like about the project?
- How did you feel when first hearing about it? How did you feel afterwards?
- What do you prefer: normal classes or working with Digital storytelling? Why?
- Where there any difficulties in working on the story? How did you overcome them?
- Would you like to repeat the project?

**APPENDIX 10: Fluency evaluation criteria and follow-up questions.**

	<b>Grade*</b>	<b>Comment</b>
<p style="text-align: center;"><b>Pauses</b></p> <p><i>There are no pauses at indue moments. The pauses made are short (under 3s).</i></p>		
<p style="text-align: center;"><b>Speed</b></p> <p><i>The text is spoken at an appropriate speed and rhythm. It is not too fast or too slow.</i></p>		
<p style="text-align: center;"><b>Audible</b></p> <p><i>The text can be understood at all times. It is not too quiet or too loud.</i></p>		
<p style="text-align: center;"><b>Pronunciation</b></p> <p><i>The pronunciation of the words is clear. Wrong pronunciation does not cause misunderstandings.</i></p>		

\*Grades from 1 to 5 are given, meaning the following:

*1: strong need for improvement – 2: need for improvement – 3: acceptable performance – 4: very good performance – 5: performance exceeds expectations*

Follow-up questions (to be asked in German):

- Where do you live?
- What things can you do in your local area?
- What do you like about your town?
- What is your favourite place?
- What is the ... like ? (e.g. what is the church like?)