

# **INTERACTED PROFESSIONAL DEVELOPMENT PROGRAMME**

Co-funded by the  
Erasmus+ Programme  
of the European Union



## INTERACTed - Professional Development Programme

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## INTERACTed project

INTERACTed is a project funded by Erasmus plus program (KA2) that works to support primary schools educators towards integrated Interactive Digital Narratives to develop the student's socio-emotional intelligence and empathy, enabling them to deliver high quality inclusive digital education. Interactive Digital Narratives refers to narrative in digital media that changes according to user input.

INTERACTed focuses on ways to promote online/remote education, through creating valuable online educational resources for educators in the form of a programme for professional development of teachers, a toolkit with resources including pedagogical digital scenarios, an online interactive digital game, and reflection and policy recommendations.

## An overview on Interactive Digital Storytelling as a teaching methodology

*When you want to motivate, persuade, or be remembered, start with a story of human struggle and eventual triumph. It will capture people's hearts – by first attracting their brains.*

*P. Zak*

### 1. What is digital storytelling?

According to the Digital Storytelling Association (2002), «Digital Storytelling is the modern expression of the ancient art of storytelling by using digital media to create media-rich stories to tell, to share, and to preserve». In a similar way, Ohler (2006) defines digital storytelling as a brief narrative combining writing with digital images and sound. The art of digital storytelling, he states, enhances the teaching power of storytelling by promoting students' valuable technical skills, engaging student interest, expanding the audience for student stories thanks to the opportunity to publish them online, and sharpening skills of critical thinking, expository writing, and media literacy. Based on these definitions, it is understood that a digital story is a media artifact that consists of multimedia elements such as text, music, picture and video. How does it work? Students, as computer users, select their topics, perform some research, write a script, develop an interesting story, and become creative storytellers or producers by making use of various multimedia (Robin, 2008). Additionally, the story is recorded and shared through digital media (Boase, 2013; Garrety, 2008). Digital storytelling is not merely an important tool for teaching school subjects such as math, history or science, it also helps improve visual skills, technology use skills, and develop identity and empathy through narrative (Hibbin, 2016). Digital storytelling enables the creation of student-centered and technologically rich, interactive learning environments as an innovative approach to learning that integrates human creativity and technology (Smeda, Dakich & Sharda 2010).

Emergent digital methods are changing the nature of storytelling and creating new possibilities for collaborative approaches. These methods encourage repositioning learners as co-producers of knowledge who partner in the definition of problems, formulation of theories, and the application of solutions in the learning environment. The simplification, interactivity, and affordability of technology has led to a rapid and diverse expansion of participatory storytelling strategies (O’Byrne W.I, Houser K., Stone R., White M. 2018). Digital storytelling has been shown to be a valuable tool to help teachers encourage their students to engage in discussion, participate in instruction, support the comprehension of content (Kosara and Mackinlay, 2013)<sup>1</sup> and promote the development of children’s linguistic, social, and emotional competences (Erickson, 2018).

## 2. Why are stories so attractive?

According to a great amount of research compelling narratives cause oxytocin release and have the power to affect our attitudes, beliefs, and behaviors (Zak, 2015). Paul Zak's research reveals how stories shape our brains, tie strangers together, and move us to be more empathic and generous. He says that there are two key aspects to an effective story. First, it must capture and hold our attention. In order to do it the tension of the story needs to continually increase. Once the story is able to create that tension then it is likely that attentive

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<sup>1</sup> Garrety (2008) distinguishes five kinds of digital storytelling employed and employable in school, from primary to higher education:

— Traditional digital storytelling, the students tell a story about personal events and experiences of their lives. In this sense, Meadows (2003) describes the digital stories like: «Short, personal multimedia tales told from the heart».

— Digital stories of learning: the student describes a content-knowledge. Digital storytelling becomes a tool that supports learning, because it forces students to deal in non-superficial content: to synthesise it, to turn it into a story, to tell not only with words but also with pictures and sounds. The product of this process can be understood as the story of an individual's learning (Garrety, 2008).

— Digital stories of project-based learning: in this peculiar type of digital storytelling the focus regards the process related to the construction of the story. Both project-based learning and digital storytelling adventures call for complex learning environments that focus on meaningful engagement with real-life problems (Season 2005, Garrety 2008 p. 19).

— Digital stories of social justice and culture: where the student builds and tells stories on issues concerning justice, community development and culture.

— Digital stories of personal reflection: in this case, the digital storytelling is to be intended as a tool to support reflective practice.

viewers/listeners will begin to emotionally resonate with the story's characters, and after it finishes, they are likely to continue imitating and impersonating the feelings and behaviors of the characters. This is linked to the second element that characterizes an effective story, its power to “transport” us into the characters’ world. The process of transportation is a neural feat. While watching a moving image, evolutionary old parts of our brain simulate the emotions we intuit the character should be experiencing and, even if we know that what we are watching is fictional, we start to feel the same emotions. Emotional simulation is at the root of empathy. Oxytocin is produced when we are trusted or shown kindness, and it motivates cooperation with others. This happens by enhancing the sense of empathy, our ability to experience others’ emotions. When the brain synthesizes oxytocin, people become more generous, helpful, reliable, and compassionate. Uri Hasson has studied the effect of story for relationship and impact on others. He says that “by simply telling a story, (a person) could plant ideas, thoughts, and emotions into the listener’s brains. A story is the only way to activate parts in the brain so that a listener turns the story into their own idea and experience”. When we hear a story, the region of our brain that corresponds to the story activates (e.g. the motor cortex engages when hearing a helicopter flying above the city) and, as a result, we feel sense of experience. Thus, magically, we share that cerebral experience as if we were there in the moment!

### **3. How do we learn through stories?**

Some narrative theorists state that there is a universal story structure. These scholars claim every engaging story has this structure, called the dramatic arc. It starts with something new and surprising, and increases tension with difficulties that the characters must overcome, often because of some failure or crisis in their past, and then leads to a climax where the characters must look deep inside themselves to overcome the looming crisis, and once this transformation occurs, the story resolves itself (Zak, 2013). The StoryCenter<sup>2</sup>, directed by Joe

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<sup>2</sup> Joe Lambert founded the Center for Digital Storytelling (now StoryCenter) in 1994. The mission of the Story Center is to create spaces for listening to and sharing stories, to help build a just and healthy world. The Story Center organises workshops that aim to provide individuals and organizations with skills and tools that support self-expression, creative practice, and community building.

Lambert, has been very influential in identifying the major components of a digital story by breaking the creative process into seven steps "The Seven Elements of Digital Storytelling", which are aspects that characterize the digital storytelling<sup>3</sup>.

#### **4. Why interactive digital storytelling in primary schools?**

Storytelling is known to be one of the most effective teaching strategies in primary education. The main benefits of storytelling in primary schools are high motivation and active participation, a boost of creativity, promotion of emotional sharing, cooperation between children, deepening the understanding of a subject, higher self-efficacy, permanent learning and an increase in attention span (Munn,1999; Mundy,2013). Storytelling in the classroom provides a realistic and authentic opportunity to capture students' attention and help them listen and learn more actively than other forms of instruction by providing a vehicle to bring facts to life, make the abstract concrete and, through sense making, make disciplinary literacies more accessible (Isbell et al., 2004). Storytelling allows children to acquire new knowledge about the world and to consolidate the knowledge they already have (Barret, 2006). Additionally, inviting children to invent stories means nurturing their narrative thinking as well as a variety of other skills, including linguistic and creative ones. When storytelling becomes digital, according to Catherine Boase (2013), it's a method for using digital devices to support the educational process<sup>4</sup>. The elements of simplicity, fluency and the fantasy of

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<sup>3</sup> The 7 elements recommended by Joe Lambert: 1. Point of view. Stories should be personal and authentic. 2. Dramatic Question. Telling something that is worth it. 3. Emotional Content. An emotionally valid content to be engaging. 4. The Gift of Your Voice. Your voice is an important element, many students only want to use images and music, but the effect is not the same. 5. The power of the soundtrack. It anticipates what will happen. 6. Economy. Every ingredient (voice, music, image / photo) must be used just enough to give them a chance to interact with each other. People usually don't realize that things to say can be said with few images, little text and little music. Let the implicit speak, the metaphors. 7. Rhythm. Rhythm is the secret of storytelling together with vitality. Lambert J., Digital storytelling book and traveling companion (version 4.0), may 2003.

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digital stories have the power to boost children' mental and emotional ability and make them familiarized with more than one language: verbal, visual, audio and digital (Zarifsanaiey, Mehrabi, Kashefian & Mustapha, 2022), while enabling children to acquire or consolidate their skills through action. Several authors claim that digital storytelling can be considered as a method, a strategy that can be used in a variety of ways and with many different possible outcomes. It is an indirect teaching method that is more compatible with the child's searching, curious, and active spirit, and motivates them to explore more (Schmoelz, 2018). Ausubel (2000) would call this process "learning by discovery". Considering the above mentioned educational contributions, the digital storytelling technique can enrich the educational process and provide a fun and interactive learning environment, especially for primary school students (Zeynep 2022).

## 5. Why emotion-driven storytelling?

Flynn (1999) discovered that IQ scores increased from one generation to the next in many countries, but alarmingly, many studies reveal that while the children are getting smarter, their emotional skills are sharply declining. The COVID-19 pandemic has worsened this trend due to the impact of the extended loss of social and emotional connections. Emotional intelligence has a strong impact on the children' lives because having a good emotional intelligence will make them be able to overcome all the situations and conditions they will need to cope with. Emotional intelligence is the ability to sense, understand and effectively establish emotional power and sensitivity as a source of human energy, information, connections and influences (Shapiro, 1997). Goleman (1996) argues that emotional intelligence determines a person's position of learning practical skills based on this five

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elements: self-awareness, self-motivation, self-control, empathy, and skill in relationships. He suggests that if elements related to emotional intelligence are involved well during the learning process, it can help students in facing learning problems as well as improve student's problem-solving abilities. One tool that can be useful to promote children's emotional intelligence is definitely storytelling because it can be used as a learning method to create personality and morality of childhood (Stein & Book, 2006). Thus, the presence of emotional intelligence in learning activities will spur the students' open stance in brainstorming and increase interest in the challenge of finding solutions to problems (Shapiro, 1997). According to Goleman the key ability in emotional intelligence is self-awareness. Self-awareness itself directly affects the development of self-control (personal competence) and empathy (social competence). The ability of children to identify their emotions and thus, increase self-awareness, is also stimulated by digital storytelling. Through digital storytelling, the teacher can train students to recognize emotions in a fun way and messages can be appropriately delivered. Digital storytelling is exciting and full of moral lessons that lay the foundations for building moral character which is easy to understand for children. Moreover, the use of digital media is intended to make children more interested and not feel bored. In conclusion, storytelling has the potential to help the process of self-identification, humanize individuals, build personal contact, improve empathy and understanding, and enrich the inner experience.

## Cognitive-Motivational-Emotive Theory: a pedagogical point of view

The cognitive-emotional motivational theory is considered by many authors the most functional theory for improving the usability of interactive digital storytelling as a teaching method, aimed at increasing empathy and motivation in students.

According to cognitive theories (Arnold, 1960; Lazarus, 1984; Zajonc, 1980) the cognitive interpretation of circumstances plays a key role and is essential before any overt or internal emotional reaction can occur. In other words, the individual has an active role in the emotional process, which does not happen to the individual but is created by him while evaluating the situation. Through the evaluation, the event under consideration is given a meaning and the emotion becomes an information that leads to the behavior that will be adopted by the individual. Interest (or need) becomes crucial to the emotional process, they can be evaluated positively or negatively with respect to the needs of an individual, and can be divided into superficial - goals and desires of the individual - and deep - goals and desires shared by the individual. Cognitive theories emphasize the interlacement between emotional experience and cognitive processes, in stark contrast to the naive psychology that considers emotions as irrational feelings. Therefore, there is a strong direct link between emotion and cognition, and emotions are activated by meanings and values and not just by the stimulus itself. Lazarus' theory (1980; 1991) also defined as "cognitive-motivational-emotive" examines how the emotions arise from particular situations through a process of evaluation. Moreover, it examines the probability that subjects respond to their demands and actual objectives as to their attitudes and long-term beliefs. Depending on their personalities, two subjects can react with similar emotions or completely different ones to the same situation through different processes of evaluation. Feeling emotions make people act as an impulse to respond to the situation in some/any-particular way. As far as Lazarus' Theory is applied to the building of interactive digital narration/tale, the emotions can work as a driving force to cause the evolution of the narration. The models of interactive narration exploit an approach facing the objectives and based on the activities. Many models are present in literature: resolution of

the plot focused/spot on the user (Sgouros, Papakonstantinou & Tsanakas, 1996), approaches based on characters (Youngs, 2000; Mateas, 2000), interactions in any moment (Nakatsu & Tosa, 1999) and the need for narrative formalisms (Szilas, 1999).

To activate emotions leading to the development of empathy, it is important to select a mechanism of emotional participation with the story (Zillmann, 1994). This is fulfilled by the construction of an emotional connection with the characters of the story and by exploiting the heritage of the characters in order to enhance the emotions and consequently to drive the development of the story. Reflecting and feeling from a character point of view, the gamer experiences his emotions in a vicarious way. Thanks to the influence of the personality on the evaluation process, anyone could feel different emotions. For this reason, during drive-by-emotions interactive digital storytelling it would be important that students have the opportunity to make choices, while they progress with their own narration, regarding their feelings from the character point of view or in different moments of emotional conflict.

The choices of the students should define the character's emotions and then in different ways of reacting and responding to these emotions. Moreover, the character actions with respect to the narration could be useful as stimuli to summon new sensations to the player and to trigger (brand new) actions.

In this sense, the choices, regarding the evolution of the story, made by the students, nourish the emotive reactions with respect to the plot and can lead to a particular series of events. These events summon new emotions and can trigger new action in the interactive digital storytelling. The student must drive the story and define the end of the story built. In this sense, different students would experiment different stories on the base of their different sensations summoned by the empathy to/with the characters and the feelings, so they become a powerful driving force for the narrative setting in the interactive digital storytelling (Nath, 2004). In the Lazarus' Model, three processes implicated in the emotional harvest are emphasized:

1. Evaluation (the cognitive process)
2. The main role of the efforts, intentions and individual objectives (the motivating process)

3. The relevance of external events with respect to those efforts (the relational process).

The activation of these processes increases the possibility to use the storytelling to enhance the identification with the characters built and to be aware of emotions. This means personal but also grouping growth and empathy development (Jonassen, Howland & Marra, 2007). In addition, it is particularly useful to build meaningful learning, in other words an active, intentional, cooperative, authentic and constructive process that helps with the comprehension of how the knowledge experienced affects the learners' life, in the perspective of a lifelong learning. In fact, this methodology is said to be active because students are often actively involved in the production of the digital artifact; intentional because it must be clear what the purposes and the target audience will be; cooperative, because it not only allows users to contribute to the creation of the product, but also because the final use is never passive, but requires interaction with the artifact itself, allowing them to develop various skills and collaborate in the implementation phase; authentic, because the proposed disciplinary contents are similar and close to the life experiences of the recipients; constructive because the target audience must re-elaborate the knowledge, as foreseen by the indications of the StoryCenter.

## INTERACTed Professional Development Programme

### 1. Objective and learning outcomes

The objective of this Professional Development Programme is to facilitate teacher adoption of Emotion-Driven Interactive Digital Narratives in their teaching. In accordance with the Recommendation of the European Parliament and of the Council on the establishment of the EQF (2008) the Professional Development Programme will use an approach based on learning outcomes, described in terms of competences according to the Descriptors of Dublin.

The programme contents are defined through the Technological Pedagogical Content Knowledge (TPACK), divided into three macro areas:

Pedagogical Knowledge (PK)	Psychological-educational implications of storytelling and emotion-driven interactive digital storytelling for learning and the development of expressive potential.
Knowledge of Contents (CK)	Knowledge of the 7 elements of digital storytelling recommended by Joe Lambert <sup>5</sup> . Knowledge of the main tools for storytelling. Knowledge of pedagogical and evaluative scenarios of Digital Storytelling.
Technological Knowledge (TK)	Use of tools for the creation of digital storytelling.

The TPACK is a framework for teacher knowledge for technology integration. This framework builds on Lee Shulman's (2009) construct of pedagogical content knowledge (PCK) to include

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technology knowledge. Under this scope, at the end of the course, the participants will be able to create their own lesson plans incorporating standalone tools and web applications in their everyday activities, encouraging, at the same time, their students to become digital story creators.

The educational objectives according to the Dublin Descriptors<sup>6</sup> are formulated in terms of competence and are built on the following five elements:

**a. Knowledge and understanding**

At the end of the course the teacher will know how to:

- reflect on the role of emotion-drive interactive digital storytelling in primary school teaching;
- understand the role of the teacher in using Interactive Digital Storytelling in primary school teaching to foster the development of the emotional intelligence and social empathy of the students;
- use the didactic methodology of storytelling to foster the student's emotional intelligence and social empathy;
- define the concept of emotion-driven Interactive Digital Storytelling.

**b. Applying knowledge and understanding**

At the end of the course, the teacher will be able to understand and use the knowledge learned in professional practice to:

- define the initial idea of Digital Storytelling through a brief description, a diagram, a question;
- build a storyboard and implement the Digital Storytelling creation process;

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<sup>6</sup> The learning outcomes common to all qualifications of the same cycle are described by a set of general descriptors, which must reflect the wide range of disciplines and profiles and must be able to summarize the variety of features of each National Higher Education System. After the Ministerial Conference in Prague (2001), a group of experts from different countries drafted a series of descriptors for the three Bologna Process cycles, which will later become known as the Dublin Descriptors. The Dublin Descriptors are general statements about the ordinary outcomes that are achieved by students after completing a curriculum of studies and obtaining a qualification. They are neither meant to be prescriptive rules, nor they represent benchmarks or minimal requirements, since they are not comprehensive. The descriptors are conceived to describe the overall nature of the qualification. Furthermore, they are not to be considered disciplines and they are not limited to specific academic or professional areas. The Dublin Descriptors consist of the following elements: Knowledge and understanding; Applying knowledge and understanding; Making judgements; Communication skills; Learning skills.

- gather/create images, music and sounds suitable for Digital Storytelling;
- assemble and reassemble the material (text, images, narration, music and / or video clips) to create the final version of the digital story.

### **c. Making judgments**

At the end of the course the teacher will be able to:

- give and receive feedback and think about how to improve the story;
- use pedagogical and evaluative scenarios of Digital Storytelling.

### **d. Communication skills**

At the end of the course the teacher will be able to:

- define the three dimensions present in storytelling (digital, pedagogical and content);
- communicate with colleagues explaining the use of storytelling in teaching practice.

### **e. Ability to learn (learning skills)**

At the end of the course the teacher will be able to:

- analyze his/her training needs related to digital and pedagogical skills for the structuring of storytelling;
- identify the most relevant sources to independently keep their knowledge on the topic up to date;
- use adequate tools to monitor his learning, reflect on it and activate a review process in order to improve it.

## **2. Target audience**

The INTERACTed Professional development programme is addressed to:

- Primary Educational leaders, coaches and trainers, interested to embed interactive digital narratives in their agendas, workshops/practices/approaches and how to enhance teachers' capacity to promote socio-emotional intelligence and empathy amongst their students.



- Primary school teachers, as a secondary target group, will be affected, through engagement in the activities implemented by coaches and trainers and during the learning/activity in Cyprus.
- Primary students, as a secondary target group, will be affected, through engagement in the activities implemented by teachers
- Policy makers, researchers and stakeholders, interested to embed interactive digital narratives in their schools and how to promote socio-emotional intelligence and empathy amongst their students

### **3. Structure and content**

The course is based on **experiential learning**: 4 learning modules and an individual project work through which to define how to apply the storytelling in one's teaching practice. The entire programme has a duration of 24 hours of class lessons and 6 hours for the project work.

Each learning module includes 3 phases and the consequent teaching methods:

- a) the acquisition of knowledge through both lectures and collaborative activities, supported by power points and expert interventions on specific issues. The lecture introduces the topic of the training unit and faces an aspect/element from a theoretical and methodological point of view;
- b) the application of knowledge learned through a comparison with a real problem with specific guided tutorials. It deepens the topic covered in the lecture with hands-on moments on experience of the teachers through: practical activities, exercises, simulations, case studies, interviews;
- c) the personalization of knowledge, or the integration of learning and knowledge through personal re-elaboration to build an application of knowledge.

The learning modules addressed will be used for the creation of a personal project work that will aim to define concrete actions that contribute to the creation of a story telling in the classroom. This final exercise aims to show how to "act" the knowledge acquired.

The learning modules will be built on The Technological Pedagogical Content Knowledge (TPACK) framework, that describes the kinds of knowledge required by teachers for the successful integration of technology in teaching. It suggests that teachers need to know about the intersections of technology, pedagogy, and content.

The learning modules will be a thematic in-depth study based on:

- Pedagogical knowledge
- Knowledge of the contents
- Technological knowledge

For each of them there is an individual activation level which includes a laboratory and an individual exercise, according to the following table:

Acquisition	Lectures and collaborative activities
Application	Guided tutorials
Personalization	Laboratory exercises

The final project work can be built in itinere and in parallel with the knowledge learned in the professional development program.

The modules will be divided in the following training units.

### **Module 1 - Psychological-educational implications of storytelling and digital storytelling for learning and the development of emotional intelligence**

- 1.1 How to reflect on the role of emotion-driven interactive digital storytelling in primary school teaching.
- 1.2 The role of the teacher in using Interactive Digital Storytelling in primary school teaching.
- 1.3 The didactic methodology of storytelling to foster the student's emotional intelligence and social empathy.

### **Module 2 – How to build effective digital stories**

- 2.1 The 7 elements of Digital Storytelling by Joe Lambert.
- 2.2 Reflection on the learning outcomes of the Digital Story and definition of the initial idea of Digital Storytelling through a brief description, a diagram, a question.
- 2.3 How to build a storyboard and implement the Digital Storytelling creation process.
- 2.4 The use of pedagogical and evaluative scenarios of Digital Storytelling.

### **Module 3 - Use of tools for the creation of digital storytelling**

- 3.1 Use of the main tools for storytelling.
- 3.2 How to gather / create images, music and sounds suitable for Digital Storytelling.
- 3.3 How to assemble and reassemble the material (text, images, narration, music and / or video clips) to create the final version of the digital story.

### **Module 4 – Collecting feedback and continuous learning**

- 4.1 How to receive feedback and think about how to improve the digital story.
- 4.2 Analysis of the teacher's training needs related to digital and pedagogical skills to integrate emotion-driven interactive digital storytelling in their classes.
- 4.3 The most relevant sources to independently learn and update on the topic.

#### 4. Some guidance for implementing the Programme

The INTERACTed Professional Development Programme is designed to be implemented entirely, like a journey from the beginning to the end. The sequence of the training modules and the training units permits teachers to progressively build their knowledge and, at the end, understand how to apply the digital storytelling in their teaching practice. At the same time, the description of the content of the training units has to be considered as a trail for the trainer that will be able to personalize the content based on his/her experience and the characteristics and needs of the target audience. Therefore, if on the one hand the sequence of the training units is built as a step-by-step learning process, the continuity between the different training units is left to the trainer. He/She will create each time the link between what was done in the previous training units and the current one. This will also permit the trainer to use the Programme in a more flexible way, and based on the training needs of the teachers, to deliver a single module or blocks of training units.

#### 5. Modules

##### **MODULE 1 - PSYCHOLOGICAL-EDUCATIONAL IMPLICATIONS OF STORYTELLING AND DIGITAL STORYTELLING FOR LEARNING AND THE DEVELOPMENT OF EMOTIONAL INTELLIGENCE**

<b>MODULE</b>
Module 1 - Psychological-educational implications of storytelling and digital storytelling for learning and the development of emotional intelligence
<b>TRAINING UNIT</b>
1.1 How to reflect on the role of emotion-driven interactive digital storytelling in primary school teaching.
<b>OVERVIEW</b>
Interactive stories are often conceived as goal-oriented and task-based. The player is stimulated to interact with stories by achieving the goals rather than empathizing with the characters, experiencing emotions and behaving more resourcefully, due to the way our emotions respond to the actions of someone else.

Through lectures, peer discussions, and hands-on exercises the training unit proposes an emotion-driven storytelling approach in primary school teaching.

The unit is made up of three parts. The first part examines the theoretical bases of the pedagogical use of emotional storytelling in primary school teaching and answers to the following questions: Why storytelling in primary schools? Why emotion-driven storytelling? Why interactive? Why digital?

In the second part, some examples of practical application of storytelling in primary school are shown and critically analyzed by the learners.

In the third part the learner will personalize the knowledge acquired by performing an exercise to raise awareness on how storytelling might be applied to the didactical content of primary education's curriculum to foster children's emotional intelligence and social empathy.

On the basis of those three parts the learner will improve his/her understanding of the potential of emotional storytelling in primary school teaching.

### LEARNING OBJECTIVES

At the end of the training unit the teacher will know how to:

#### Knowledge and understanding

- Reflect on the role of emotion-driven interactive digital storytelling in primary school teaching.

#### Communication skills

- Communicate with colleagues explaining the use of storytelling in teaching practice.

TIMING	MATERIAL AND RESOURCES
120 minutes	<ul style="list-style-type: none"><li><input type="checkbox"/> Individual writing tools (paper, pencils, pen etc.)</li><li><input type="checkbox"/> Group writing tools (flipchart, markers, blackboard etc.)</li><li><input type="checkbox"/> Digital individual devices (smartphone, tablet, laptop etc.)</li></ul>

	<ul style="list-style-type: none"><li><input type="checkbox"/> Digital group devices (computer &amp; projector, speakers etc.)</li><li><input type="checkbox"/> Specific resources:</li></ul>
<b>DELIVERY MODE</b>	
<p>The training unit will be delivered through:</p> <p><b>Acquisition of knowledge</b></p> <p>Peer discussion</p> <p>Lecture</p> <p><b>Application of knowledge</b></p> <p>Practical examples</p> <p><b>Personalisation of knowledge</b></p> <p>Individual and group exercise</p>	
<b>DESCRIPTION OF THE TRAINING ACTIVITY – METHODOLOGY</b>	
<p><b>Activity 1 (20 minutes)</b></p> <p>The trainer divides the class into subgroups of four people and asks them to answer the question “Why storytelling in primary education?”. Participants have 5 minutes to discuss the advantages and possible uses of storytelling in primary schools based on their knowledge and experience. Afterwards, one representative of each group presents the results of the discussion and the trainer takes notes on the blackboard, by summarizing the intervention using keywords.</p> <p><b>Activity 2 (30 minutes)</b></p> <p>The trainer introduces the theoretical part of the module supported by a synthetic presentation (by using PowerPoint, Canva or similar applications) based on the resources included in the references’ section. The lecture answers the questions below.</p> <p><b>Why storytelling in primary education?</b></p> <p>According to a great amount of research compelling narratives cause oxytocin release and have the power to affect our attitudes, beliefs, and behaviors (Zak, 2015). Storytelling is</p>	

known to be one of the most effective teaching strategies in primary education. The main benefits of storytelling are high motivation and active participation, a boost of creativity, promotion of emotional sharing, cooperation between children, deepening the understanding of a subject, higher self-efficacy, permanent learning and an increase in attention span (Munn, 1999; Mundy, 2013).

Storytelling in the classroom provides a realistic and authentic opportunity to capture students' attention and help them listen and learn more actively than other forms of instruction by providing a vehicle to bring facts to life, make the abstract concrete and, through meaning making, make disciplinary literacies more accessible (Isbell et al., 2004). Storytelling is an indirect teaching method that is more compatible with the child's searching, curious, and active spirit, and motivates him or her to explore more (Schmölz, 2018). The elements of simplicity, fluency and the fantasy of stories have the power to boost children' mental and emotional ability and make them familiarized with sounds, words, images, concepts and language.

### **Why emotion-driven storytelling?**

Emotion-driven storytelling assists children in gaining language that helps them understand their emotions and the emotions of others. Words that describe emotions provide a great vocabulary for children. When children are offered the opportunity to build and share emotion-driven stories they gain deeper insight into their feelings and learn to value the emotions of others (Erickson, 2018). The children who hear and create stories can have close experiences in their imagination and learn how to feel empathy with the story characters and heroes. Therefore, stories can significantly promote not only emotional intelligence but also empathy.

### **Why interactive?**

In interactive storytelling, the players direct the narrative and orient the story they experience. The players' emotions act as the driving force to determine the narrative evolution and configuration. As an important mechanism of emotional involvement with narrative, empathy helps the player build emotional bond with the character. By thinking

and feeling from the character's perspective, the player experiences the character's emotions vicariously (McDougall, 2011). In this sense, different players would experience different stories based on their different appraisal process evoked by empathizing with the characters.

### **Why digital?**

Digital storytelling is one of the educational methods that has been formed with the development of technologies. It combines storytelling with multimedia resources (such as text, audio, video, animation, and film), makes learning concepts easier and more engaging, and enhances active learning and collaboration in learners. Jason Olher asserts that the art of digital storytelling enhances the teaching power of storytelling by teaching students valuable technical skills, engaging student interest, expanding the audience for student stories, and sharpening skills of critical thinking, expository writing, and media literacy. He emphasizes that to make quality digital stories, teachers must focus on story before technology. He suggests ways to guide students in planning, writing, and orally telling their story before they begin creating the digital presentation.

### **Activity 3 (30 minutes)**

The trainer shows the following videos or other videos from Jason Olher Youtube channel as practical examples of emotion-driven digital storytelling:

**Bear- YouTube:** <https://www.youtube.com/watch?v=fSrap-7OGXU>

### **The Math Teacher Without a Story- YouTube**

<https://www.youtube.com/watch?v=YHkGUieiKJM>

Group work. The trainer divides the class in subgroups and asks each group to reflect on one of the following questions (5 minutes):



Group 1: Are the videos appropriate to primary schools? What is adequate and what should be improved/modified?

Group 2: How do the videos contribute to foster students' emotional intelligence and social empathy?

Group 3: What are the advantages of creating digital stories? What are the constraints? Are there elements of interactivity in the videos proposed? If yes, which ones?

Group discussion (10 minutes). Each group presents synthetically its reflections to the rest of the participants.

#### **Activity 4 (40 minutes)**

Exercise 1. Individual activity – The trainer shows to participants the following list of ideas for Digital Storytelling in the classroom. Each participant is invited to think on how storytelling might be applied to his/her discipline based on the list proposed or others ideas they may have. The trainer asks participants “Which specific topic/content would you teach and how? How does the activity chosen contribute to the development of students' emotional intelligence and social empathy? Describe it”.

- Transform a story or part of it into a dialogue, an interview or a telephone conversation.
- Turn a story into a comic or video animation.
- Show a picture of a person about to take an action and ask students to imagine what will happen next.
- Present a news video or an article and ask the students to tell the story from the point of view of the different characters involved.
- Create imaginary interviews or a video report.
- Create a fake radio broadcast or a talk show in which young people are spokesmen for opposing ideas and simulate the intervention of experts.

- Telling historical events from the point of view of an imaginary character (e.g. the story of a soldier at the front, the official speech of a historical figure or a farewell speech for the funeral of a famous person, etc.).
- Create a fictitious newspaper page chronicling a historical or biographical event
- Reconstruct a sequence of events, a historical event or a biography through a timeline or the itinerary traveled by the protagonist of a novel, a scientist or an explorer through an interactive map.
- Create an advertising campaign to disseminate shared messages and values.
- Create a video trailer or an invitation flyer to read a book, visit an exhibition or watch a film/show.
- Express the internal monologue of a character at a particular moment in the story.
- Propose a short video and ask students to: continue the dialogue between the characters, identify yourself with one of the characters and write his diary, imagine possible endings.

Exercise 2. Group work. The participants are divided into groups of four people. The task for each group is to discuss the four individual ideas, and choose at least one to present in plenary. The activity chosen needs to include the identification of the didactical content/pedagogical scenario and to contribute to the development of students' socio-emotional intelligence and empathy.

Exercise 3. Group discussion. Each group presents their didactical application of storytelling to the rest of the participants, focusing on students' emotions.

#### **POSSIBLE DEBRIEFING/ASSESSMENT**

The trainers ask the trainees to reflect on the lecture, on the individual and group exercise performed and comment, starting a discussion about it.

The trainer stimulates a reflection through the following questions or other relevant questions:

How did I feel while working? What was easy/difficult? What do I bring home? How can I use it in my professional activity?

At the end of the evaluation phase, the trainers ask the trainees to choose an image/word that represents what they bring home at the end of the training session.

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## MODULE

Module 1 - Psychological-educational implications of storytelling and digital storytelling for learning and the development of emotional intelligence

## TRAINING UNIT

1.2 The role of the teacher in using Interactive Digital Storytelling in primary school teaching.

## OVERVIEW

In order to effectively implement emotion-driven interactive digital storytelling in primary schools, firstly teachers need to identify their role and the students' role in the process of learning. Rather than offering pre-packaged materials and content to the student, the teacher needs to create conditions that permit the student to drive the story to fulfill the learning process both in terms of acquisition of contents and emotional growth.

Through lectures, peer discussions and application of concepts, the teachers will be made aware of what their role in the classroom is and how they can impact their students' lives and academic performance while using emotion-driven IDN in their teaching practice.

The training unit is divided into three parts. The first part focuses on gathering more knowledge on how the role of the teacher influences the classroom while using interactive digital storytelling. In the second part, the teachers are invited to fill out a template/worksheet through which they will share their reflections and thoughts on their newly acquired knowledge. The third and final part focuses on the personalization of knowledge by its application and adaptation to their own work context.

The expected outcome of this unit is to increase teachers' awareness and understanding on how they can effectively integrate IDN in the teaching and learning process.

## INTENDED LEARNING OUTCOMES

At the end of this training unit the teachers will be able to:

### **Knowledge and understanding**

- Understand their role in using Interactive Digital Storytelling in primary school teaching.

### **Making judgments**

- Reflect on their role in the classroom to foster the development of the emotional intelligence and social empathy of the students.

**Communication skills**

- Interact with colleagues and exchange feedback explaining their perspective and viewpoints on how a teacher can influence the use of Interactive Digital Storytelling.

TIMING	MATERIAL AND RESOURCES
90 minutes	<ul style="list-style-type: none"> <li><input type="checkbox"/> Individual writing tools (paper, pencils, pen etc.)</li> <li><input type="checkbox"/> Group writing tools (flipchart, markers, blackboard etc.)</li> <li><input type="checkbox"/> Digital individual devices (smartphone, tablet, laptop etc.)</li> <li><input type="checkbox"/> Digital group devices (computer &amp; projector, speakers etc.)</li> <li><input type="checkbox"/> Specific resources: Access to an online forum; access to a presentation tool (Prezi, Canva, PowerPoint, etc.)</li> </ul>

**DELIVERY MODE**

The training unit will be delivered through:

**Acquisition of knowledge**

Lecture and self-study

**Application of knowledge**

Worksheet/template followed by peer feedback

**Personalisation of knowledge**

Individual exercise

**DESCRIPTION OF THE TRAINING ACTIVITY – METHODOLOGY**

**Activity 1 (30 min):**

The trainer introduces the theoretical part of the module supported by a synthetic presentation (by using PowerPoint, Canva or similar applications) based on the resources included in the references' section.

When integrating emotion-driven interactive digital storytelling in the classroom, the teacher assumes the role of a facilitator/moderator, being able to support the constitution and development of a class environment works in a collaborative way, facilitating with active strategies an adequate level of organizational and operational autonomy for the children to work.

The teacher encourages children's discovery and invention skills by creating a non-judging, positive and inclusive learning environment, where students feel comfortable sharing their stories and giving and receiving feedback (Yuksel, 2011). The teacher supervises the children during activities, using guiding questions, preparing the environment and the materials prior to the main activities, and helping consistency in the use of technologies.

To do so, teachers are responsible for: 1) effectively planning and implementing digital storytelling activities that align with the curriculum and learning objectives, based on the Technological Pedagogical Content Knowledge (TPACK) framework (Barrett, 2006; Koehler & Mishra, 2005); 2) providing guidance and support to students as they work on their digital stories, helping them to develop their creativity, communication, critical thinking and emotional intelligence skills (Condy et al., 2012); 3) effectively using the digital tools and resources needed to create and share stories, and modelling and teaching these skills to their students (Bernard, 2016); 4) evaluating and providing feedback on the digital stories created by their students, by using the feedback to guide future instruction and support student learning (Ivala et al., 2013). Finally, the importance of the use of technology in all the above-mentioned activities is highlighted as a means of effective and engaging teaching (Tassell et al., 2013).

**Activity 2 (50 min):**

Peer discussions within a virtual discussion forum to gather insights and viewpoints on how the participants perceive their role and the incorporation of Interactive Digital Narratives (IDN) in the classrooms. Teachers will reflect on the following aspects:

- a) how to create a positive and inclusive learning environment to incorporate emotion-driven IDN;
- b) how to clearly define learning objectives for the implementation of IDN;
- c) how to plan the implementation of IDN in the classroom.

Once they have answered the above aspects, they will provide their feedback to at least one of their peers.

### **Activity 3 (40 min):**

Once the discussion is completed, the teachers will reflect on the feedback they received from their peers and they will create an infographic on their role in implementing IDN in their classrooms, by using Canva, Prezi or PowerPoint.

The individual infographics will be uploaded in a common online space.

### **POSSIBLE DEBRIEFING/ASSESSMENT**

The debriefing will take place in the form of a class discussion. The participants are asked how they experienced the lecture, the peer discussion and the design of their personal infographic on their role as teachers implementing IDN in the classroom.

Questions that can be asked are for example:

- How did you feel while interacting with your peers? What was easy/difficult? What did you bring home? How can you use it in your professional practice?
- What is one thing you have learned from the lecture that challenged your views on the role of the teacher when integrating interactive digital storytelling?
- Could you identify the most important take-away-lesson?

### **REFERENCES**



Barrett, H.C. (2006). Researching and Evaluating Digital Storytelling as a Deep Learning Tool. In C. Crawford, R. Carlsen, K. McFerrin, J. Price, R. Weber & D. Willis (Eds.), *Proceedings of Society for Information Technology & Teacher Education International Conference 2006* (pp. 647–654). Chesapeake, VA: Association for the Advancement of Computing in Education (AACE).

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## MODULE

Module 1 - Psychological-educational implications of storytelling and digital storytelling for learning and the development of emotional intelligence

## TRAINING UNIT

1.2 The role of the teacher in using Interactive Digital Storytelling in primary school teaching.

## OVERVIEW

In order to effectively implement emotion-driven interactive digital narratives (IDN) in primary schools, firstly teachers need to identify their role and the students' role in the process of learning. Rather than offering pre-packaged materials and content to the student, the teacher needs to create those conditions that permit the student to drive the story to realize the learning process both in terms of emotional growth and acquisition of contents.

Through lectures, peer discussions and application of concepts, the teachers will be made aware of what their role in the classroom is and how they can impact their students' lives and academic performance while using emotion-driven IDN in their teaching practice.

The training unit is divided into three parts. The first part focuses on gathering more knowledge on how the role of the teacher influences the classroom while using IDN. In the second part, the teachers are invited to fill out a template/worksheet through which they will share their opinions and thoughts on their newly acquired knowledge. The third and final part focuses on the personalization of knowledge by its application and adaptation to their own work context.

The expected outcome of this unit is to increase teachers' awareness and understanding on how they can effectively integrate IDN in the teaching and learning process.

## LEARNING OUTCOMES

At the end of this training unit the teachers will be able to:

### **Knowledge and understanding**

- Understand their role in using Interactive Digital Storytelling in primary school teaching.

### **Making judgments**

- Reflect on their role in the classroom to foster the development of the emotional intelligence and social empathy of the students.

**Communication skills**

- Interact with colleagues and exchange feedback explaining their perspective and viewpoints on how a teacher can influence the use of interactive Digital Storytelling.

TIMING	MATERIAL AND RESOURCES
90 minutes	<ul style="list-style-type: none"> <li><input type="checkbox"/> Individual writing tools (paper, pencils, pen etc.)</li> <li><input type="checkbox"/> Group writing tools (flipchart, markers, blackboard etc.)</li> <li><input type="checkbox"/> Digital individual devices (smartphone, tablet, laptop etc.)</li> <li><input type="checkbox"/> Digital group devices (computer &amp; projector, speakers etc.)</li> <li><input type="checkbox"/> Specific resources: Access to an online forum; access to a presentation tool (Prezi, Canva, PowerPoint, etc.)</li> </ul>

**DELIVERY MODE**

The training unit will be delivered through:

**Acquisition of knowledge**

Lecture and self-study

**Application of knowledge**

Peer discussion

**Personalisation of knowledge**

Individual exercise

**DESCRIPTION OF THE TRAINING ACTIVITY – METHODOLOGY**

**Activity 1 (30 min):**

The trainer introduces the theoretical part of the module supported by a synthetic presentation (by using PowerPoint, Canva or similar applications) based on the resources included in the

references' section. When integrating emotion-driven interactive digital storytelling in the classroom, the teacher assumes the role of a facilitator/moderator, being able to support the constitution and development of a community that works in a collaborative way, facilitating with active strategies an adequate level of organizational and operational autonomy the work of the children. The teacher encourages children's discovery and invention skills by creating a non-judging, positive and inclusive learning environment, where students feel comfortable sharing their stories and giving and receiving feedback (Yuksel, 2011). The teacher supervises the children during activities, using guiding questions, preparing the environment and the materials prior to the main activities, and helping consistency in the use of technologies. To do so, teachers are responsible for: 1) effectively planning and implementing digital storytelling activities that align with the curriculum and learning objectives, based on the Technological Pedagogical Content Knowledge (TPACK) framework (Barrett, 2006; Koehler & Mishra, 2005); 2) providing guidance and support to students as they work on their digital stories, helping them to develop their creativity, communication, critical thinking and emotional intelligence skills (Condy et al., 2012); 3) effectively using the digital tools and resources needed to create and share stories, and modelling and teaching these skills to their students (Bernard, 2016); 4) evaluating and providing feedback on the digital stories created by their students, by using the feedback to guide future instruction and support student learning (Ivala et al., 2013). Finally, the importance of the use of technology in all the above-mentioned activities is highlighted as a means of effective and engaging teaching (Tassell et al., 2013).

**Activity 2 (50 min):**

Peer discussions within a virtual discussion forum to gather insights and viewpoints on how the participants perceive their role and the incorporation of Interactive Digital Storytelling (IDN) in the classrooms. Teachers will reflect on the following aspects:

- d) how to create a positive and inclusive learning environment to incorporate emotion-driven IDN;
- e) how to clearly define learning objectives for the implementation of IDN;
- f) how to plan the implementation of IDN in the classroom.

Once they have answered the above aspects, they will provide their feedback to at least one of their peers.

**Personalisation of knowledge (40 min):**

Once the discussion is completed, the teachers will reflect on the feedback they received from their peers and they will create an infographic on their role in implementing IDN in their classrooms, by using Canva, Prezi or PowerPoint.

The individual infographics will be uploaded in a common online space.

**POSSIBLE DEBRIEFING/ASSESSMENT**

The debriefing will take place in the form of a class discussion. The participants are asked how they experienced the lecture, the peer discussion and the design of their personal infographic on their role as teachers implementing IDN in the classroom.

Questions that can be asked are for example:

- How did you feel while interacting with your peers? What was easy/difficult? What did you bring home? How can you use it in your professional practice?
- What is one thing you have learned from the lecture that challenged your views on the role of the teacher when integrating interactive digital storytelling?
- Could you identify the most important take-away-lesson?

**REFERENCES**

Barrett, H.C. (2006). Researching and Evaluating Digital Storytelling as a Deep Learning Tool. In C. Crawford, R. Carlsen, K. McFerrin, J. Price, R. Weber & D. Willis (Eds.), Proceedings of Society for Information Technology & Teacher Education International Conference 2006 (pp. 647–654).

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Yuksel P. (2011). Using Digital Storytelling in Early Childhood Education: A Phenomenological Study Of Teachers' Experiences. PhD thesis.

## MODULE

Module 1 - Psychological-educational implications of storytelling and digital storytelling for learning and the development of emotional intelligence

## TRAINING UNIT

1.3 The didactic methodology of storytelling to foster the student's emotional intelligence and social empathy.

## OVERVIEW

The emotional intelligence and social empathy skills of students are developed during their younger years and particularly in classrooms among other peers. The cognitive-emotional motivational theory, specifically the Lazarus model (1980; 1991), implies that meaning and values are important to activate the process of mental development and the connected emotional competences development of students. To encourage this process, storytelling can be used as the stimulus. Therefore, it is important for teachers to understand how they can use storytelling as a method to foster the student's emotional intelligence and social empathy in the classroom.

Through lectures, reading materials/resources, peer discussions, and laboratory exercises the training unit will create a basis for exploring how the application of appropriate didactic methodologies can integrate emotional intelligence and social empathy in the learning process.

The training unit is divided into three parts. The first part examines the topic of emotional intelligence with a particular focus on Daniel Goleman (1998) Emotional Intelligence model. The teachers will better understand the four domains in the Emotional Intelligence Quadrant in relation to the methodology of storytelling.

Secondly, the participants are asked to discuss the concept and topics that were highlighted in the lecture and will work together to integrate the methodology of storytelling with the theory/model previously presented.

In the last part, the participants will apply their acquired knowledge and will reflect on the situation in their classroom and how these four domains could be applicable to their students and/or teaching practices.

Based on the training unit's activities, the participant will improve their understanding of the potential that storytelling has in primary education to influence the development of emotional intelligence and social empathy of their students.

## LEARNING OBJECTIVES



At the end of this training unit, the teachers will:

**Knowledge and understanding**

- Become familiar with the Daniel Goleman (1998) Emotional Intelligence Model to foster students’ emotional intelligence and social empathy.

**Communication skills**

- Be able to communicate with colleagues explaining the use of storytelling in teaching practice and how this can influence the emotional intelligence and social empathy of their students.

TIMING	MATERIAL AND RESOURCES
60 minutes	<ul style="list-style-type: none"> <li><input type="checkbox"/> Individual writing tools (paper, pencils, pen etc.)</li> <li><input type="checkbox"/> Group writing tools (flipchart, markers, blackboard etc.)</li> <li><input type="checkbox"/> Digital individual devices (smartphone, tablet, laptop etc.)</li> <li><input type="checkbox"/> Digital group devices (computer &amp; projector, speakers etc.)</li> <li><input type="checkbox"/> Specific resources:</li> </ul>

**DELIVERY MODE**

The training unit will be delivered through:

**Acquisition of knowledge:**

Lecture and self-study

**Application of knowledge:**

Peer discussions

**Personalisation of knowledge:**

Laboratory exercise

**DESCRIPTION OF THE TRAINING ACTIVITY – METHODOLOGY**

**Activity 1 (20 minutes)**

A lecture will be provided to get familiar with resources that focus on the topic of didactic methodology of storytelling to foster the student's emotional intelligence and social empathy, with particular focus on Daniel Goleman’s model. Specifically, the lecture will focus on the four domains he proposes and the quadrant he created that accompanies those domains.

### *Introduction of Emotional Intelligence*

Emotional Intelligence is often referred to as the capacity to recognize and manage our feelings and to recognize/respond to those of others. Many theorists have established and developed models of emotional intelligence that highlight this type of social intelligence. This has a direct impact on ourselves, but also in our relationships.

### *Daniel Goleman's Emotional Intelligence Quadrant*

One of the most recognized theories and models related to Emotional Intelligence is that of Daniel Goleman. This model consists of four domains which are all connected to ourselves, others, regulation/control, and recognition/awareness. Each domain will be briefly explained with the meaning of the domain and the corresponding competencies: Self-Awareness, Self-Management, Social Awareness and Relationship Management.

### **Activity 2 (20 minutes)**

The participants are asked to reflect on the concepts that have been discussed in the lecture. The concepts and the methodology of storytelling is therefore to be investigated in relation to the theory/model that was previously mentioned.

A group discussion will be led by the trainer. Several questions will be asked to help reflect on the previously discussed concepts and topics. Every participant is encouraged to participate in answering and discussing the questions proposed:

- Do you have suggestions on how to develop your own emotionally intelligent teaching practice?
- What teaching styles did you recognize from the competencies connected to the domains?
- How could the concept of Emotional Intelligence be applied in teaching? And specifically through digital storytelling?

### **Activity 3 (20 minutes)**

To personalize the acquired knowledge in the first two activities of the training unit, the participants are given an empty quadrant. They are asked to fill in the quadrant with working ways for teachers and how to teach based on four domains explained in the lecture. They are asked to start thinking about all the competencies that are connected to the domain. Every single quadrant should have some examples on how to apply them in their teaching practices. For example:

- For the domain of social awareness, a teacher can write down that they want to reflect and understand who their audience is and how they can address them with empathy. Examples could be making eye contact, asking direct questions, explaining expectations, etc.

Once the participants have all filled in the quadrants, they are asked to share their personal answers and experiences to inspire others. This discussion aims to share knowledge and viewpoints and to inspire others to reflect on the concepts taught in the training unit. The trainer will go through each domain separately and ask every participant to explain one thing they have written down. All the participants can learn from each other and ask questions.

### POSSIBLE DEBRIEFING/ASSESSMENT

The debriefing will take place in the form of a class discussion. The participants are asked how they experienced the lecture, filling in the quadrant and the group discussion. Particularly, the teachers are asked what insights they will bring back to the classroom with them and how this will benefit their teaching and students. The topic of emotional intelligence and social empathy of students are highlighted once again with the didactic method of interactive storytelling.

Questions that can be asked are for example:

- What is one thing you have learned that you will bring back into the classroom?
- How did you experience this training unit? Was it insightful?
- What did you learn from other teachers?

### REFERENCES

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<https://ohio4h.org/sites/ohio4h/files/imce/Emotional%20Intelligence%20Background.pdf>

Additional self-study material can be accessed here:

Aktaş, E., & Yurt, S. U. (2017). Effects of digital story on academic achievement, learning motivation and retention among university students. *International Journal of Higher Education*, 6(1).  
<https://files.eric.ed.gov/fulltext/EJ1126025.pdf>

Goleman, D. (1995). *Emotional Intelligence*. New York, New York: Bantam Dell.

Goleman, D. (1998). *Working with emotional intelligence*. New York: Bantam Books.

Goleman, D., Boyatzis, R. & McKee, A. (2002). *Primal Leadership: Realizing the Importance of Emotional Intelligence*, Harvard Business School Press: Boston.

Istenic Starčić, A., Cotic, M., Solomonides, I., & Volk, M., et al. (2016). Engaging preservice primary and preprimary school teachers in digital storytelling for the teaching and learning of mathematics. *British Journal of Educational Technology*, 47(1), 29–50. <https://doi.org/10.1111/bjet.12253>

Sulistianingsih, E., Jamaludin, S. & Sumartono, S. (2018). Digital storytelling: a powerful tool to develop student's emotional intelligence. *Journal of Curriculum Indonesia*, 1(2). <http://hipkinjateng.org/jurnal/index.php/jci/article/view/3/8>

Zarifsanaiey, N., Mehrabi, Z., Kashefian-Naeeni, S. & Mustapha, R. (2022). The effects of digital storytelling with group discussion on social and emotional intelligence among female elementary school students, *Cogent Psychology*, 9(1), 2004872. <https://www.tandfonline.com/doi/pdf/10.1080/23311908.2021.2004872?needAccess=true>

Lazarus, R. S. (1991). *Emotion and adaptation*, Oxford University Press on Demand.

## MODULE 2 – HOW TO BUILD EFFECTIVE DIGITAL STORIES

### MODULE

Module 2 – How to build effective digital stories

### TRAINING UNIT

2.1 The 7 elements of Digital Storytelling by Joe Lambert

### OVERVIEW

Everyone has a story to tell, and digital technologies provide a particularly effective way to tell these stories. Digital storytelling can enhance the learner's voice while also engaging the struggling learner who has not yet discovered the power of personal expression. One of the goals of digital storytelling is to allow the student to experience this power, and one way to achieve it is by taking into consideration the seven elements for effective digital stories proposed by Joe Lambert.

Through a lecture, activities, exercises and peer discussions, the training unit permits to discover and understand Joe Lambert's *Seven Elements of Effective Digital Stories*.

The training unit consists of three parts. The first part will introduce the learner to the *Seven Elements of Digital Stories* followed by a group discussion to take advantage of peer learning.

In the second part, the learners will apply the knowledge learnt in the first part by completing a worksheet where they will have to create a short story based on the seven elements.

And lastly, the third part will be a group activity focusing on possible ways to incorporate this method to the specific work reality of the teachers.

On the basis of these three parts the learner will learn how to build effective digital stories based on the seven elements and learn why these elements are more suitable in a classroom setting.

### LEARNING OBJECTIVES

At the end of the training unit the teacher will:

#### **Knowledge and Understanding**

- Be familiar with the seven elements for effective digital stories by Joe Lambert.

#### **Applying knowledge and understanding**

- Use the seven elements for effective digital stories by Joe Lambert to build a digital story.

TIMING	MATERIAL AND RESOURCES
90 Minutes	<ul style="list-style-type: none"> <li><input type="checkbox"/> Individual writing tools (paper, pencils, pen etc.)</li> <li><input type="checkbox"/> Group writing tools (flipchart, markers, blackboard etc.)</li> <li><input type="checkbox"/> Digital individual devices (smartphone, tablet, laptop etc.)</li> <li><input type="checkbox"/> Digital group devices (computer &amp; projector, speakers etc.)</li> <li><input type="checkbox"/> Specific resources: A worksheet for the second part of the training unit and a series of questions for the final part.</li> </ul>

**DELIVERY MODE**

The training unit will be delivered through:

**Acquisition of knowledge:**

Lecture and peer discussio

**Application of knowledge:**

Group exercise

**Personalisation of knowledge:**

Self-reflection activity

Peer discussion

**DESCRIPTION OF THE TRAINING ACTIVITY – METHODOLOGY**

**Activity 1 (30 min)**

The learner will be firstly introduced to the seven elements for effective digital stories by Joe Lambert (1. A point of view; 2. A dramatic question; 3. Emotional content; 4. Economy; 5. Pacing; 6. The gift of your voice; 7. An accompanying soundtrack) through a presentation (e.g.

PowerPoint), where he/she will explain one by one the elements, based on the resources and materials included in the References section.

Followed from the presentation the trainer will facilitate a peer discussion covering the questions below:

- Why are these elements suitable for a school/classroom setting?
- How are these elements more effective for digital stories?
- Why incorporate this method in your class/subject?

### **Activity 2 (40 min)**

After the learners are familiarized with the seven elements they will create a short digital story in order to apply the acquired knowledge.

Group work. It will be a group exercise, therefore the trainer will divide the learners into groups of 2-3. The trainer will hand each group a worksheet which the learners will use as a guide to create a short digital story. On the worksheet, the seven elements will be listed with a blank space below for learners to keep notes and structure their story - in other words, by answering/ filling in each section:

[https://www.canva.com/design/DAFXi02GYH4/yWFbtlwiNxixN\\_Ld3S7umQ/view?utm\\_content=DAFXi02GYH4&utm\\_campaign=designshare&utm\\_medium=link&utm\\_source=publishsharelink&mode=preview](https://www.canva.com/design/DAFXi02GYH4/yWFbtlwiNxixN_Ld3S7umQ/view?utm_content=DAFXi02GYH4&utm_campaign=designshare&utm_medium=link&utm_source=publishsharelink&mode=preview)

Learners can use their laptops, phones, and browse the internet.

After completing the worksheet and having a generic structure or a detailed one, each group will share the approach they followed and their final result with the rest of the group.

### **Activity 3 (20 min)**

After applying the knowledge and putting it into practice the trainer will return to the questions proposed in Activity 1 and compare the answers given before with the answers after the practical activity. A class discussion will then follow where the teachers will think and suggest possible ways to incorporate this method to their class based on their reality/context/discipline.

## **POSSIBLE DEBRIEFING/ASSESSMENT**

### **Class discussion**

The trainer will ask the educators to reflect on the lecture and the activities that took place, starting in that way a discussion. The discussion will include the following questions:

- How did I feel while working?
- What was easy/difficult?
- What do I bring home?
- How can I use it in my professional activity?

### **REFERENCES**

Lambert J. Digital storytelling cookbook (2010). Center for Digital Storytelling.

<https://wrd.as.uky.edu/sites/default/files/cookbook.pdf>

<https://research.auctr.edu/c.php?q=197213&p=1297353>

*Videos:*

*7 elements in 4 minutes- YouTube:*

[https://www.youtube.com/watch?v=NipDAd3\\_7Do](https://www.youtube.com/watch?v=NipDAd3_7Do)

*Story Center- YouTube:*

<https://www.youtube.com/@StoryCenter>

*Digital Storytelling in the Language arts classroom*

<http://edml260.pbworks.com/w/file/fetch/44929215/7%20elements%20of%20DS.pdf>



## MODULE

Module 2 – How to build effective digital stories

## TRAINING UNIT

2.2 Reflection on the learning outcomes of the Digital Story and definition of the initial idea of Digital Storytelling through a brief description, a diagram, a question.

## OVERVIEW

Digital stories increase students' willingness to express themselves and communicate their thoughts and feelings, encourage them to be creative, enrich their vocabulary, develop focus and social skills, while also help them develop a sense of empathy and thus develop a cultural understanding. But in order for students to benefit from digital storytelling, teachers need to acquire a well-rounded understanding of its structure and be able to guide students towards the creation of effective digital stories. Hence, the purpose of this unit is for teachers to learn how to define the initial idea of Digital Storytelling through a brief description, a diagram, or a question.

Through the lecture, the activities performed, and the peer discussion, the learners will gain a better insight on the digital storytelling process and will be able to move their first steps towards the creation of an effective emotion-driven interactive digital story.

This training unit is made up of three parts. In the first part the learners will attend the lecture prepared by the trainer presenting several complementary approaches and tools to define the initial idea of digital storytelling. The second part consists of a group activity. Learners will work in groups to put into practice the knowledge acquired. Finally, the third part is a peer discussion to personalize the understanding of the training topic.

The aim of this unit is for teachers to define the initial idea of Digital Storytelling, as a fundamental step for the successful implementation of Interactive Digital Narratives in their classrooms.

## LEARNING OBJECTIVES

At the end of the course the teacher will know how to:

Knowledge and understanding

- Define the initial idea of Digital Storytelling through a brief description, a diagram, a question.

Applying knowledge and understanding

- Use different approaches for the definition of the first idea for storytelling.

Communication skills

- Communicate with colleagues to incorporate the approaches for the definition of the first idea for storytelling in their teaching practice.

TIMING	MATERIAL AND RESOURCES
90 minutes	<ul style="list-style-type: none"><li><input type="checkbox"/> Individual writing tools (paper, pencils, pen etc.)</li><li><input type="checkbox"/> Group writing tools (flipchart, markers, blackboard etc.)</li><li><input type="checkbox"/> Digital individual devices (smartphone, tablet, laptop etc.)</li><li><input type="checkbox"/> Digital group devices (computer &amp; projector, speakers etc.)</li></ul>

**DELIVERY MODE**

**Acquisition of knowledge:**

- Lecture
- Self-study material

**Application of knowledge:**

- Group practical exercise

**Personalisation of knowledge:**

- Class discussion
- Self-reflection

## DESCRIPTION OF THE TRAINING ACTIVITY – METHODOLOGY

### Activity 1 (40 min)

Through a lecture the trainer will dive into different, but complementary approaches on the definition of the first idea for storytelling by Joe Lambert, Jason Olher and Samantha Morra supported by the resources included in the References section (see Resources for Activity 1). The trainer will provide an overview of Joe Lambert and Jason Olher's approaches to story map and scripting (i.e. the 4\*6 Index Card<sup>7</sup> by Joe Lambert) and their suggested resources and tools. Then the trainer will present the eight steps to digital storytelling by Samantha Morra by focusing on the first three: 1. Start with an idea; 2) Plan; 3) Outline script, and by presenting specific tools (i.e. ReadWriteThink-Webbing Tool, EdTechTeacher – Mind Mapping, ect.) for each step (see materials in the References section).

### Activity 2 (40 min)

Once the learners are familiarized with story mapping/scripting they will perform a group exercise to apply their newly acquired knowledge. It will be a group exercise, therefore the trainer will divide the learners into groups of 2-3. The trainer will hand each group a worksheet (created by using Canva or similar applications - see Templates in the References section) which the learners will use as a guide to design the initial idea of a short digital story. The learners can autonomously use their laptops to test the methods/tools presented in Activity 1.

### Activity 3 (10 min)

After completing the worksheet and having a generic structure or a more detailed one, each group will share the approach they followed and their final result with the rest of the group. A class discussion will then follow where the teachers will reflect and suggest possible ways to incorporate this method to their class based on their reality/context/discipline.

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<sup>7</sup> Lambert J. Digital storytelling cookbook (2010). Center for Digital Storytelling. <https://wrds.as.uky.edu/sites/default/files/cookbook.pdf>

## POSSIBLE DEBRIEFING/ASSESSMENT

### Class discussion

The trainer will ask the educators to reflect on the lecture and the activities that took place, starting in that way a discussion. The discussion will include the following questions:

- How did I feel while working?
- What was easy/difficult?
- What do I bring home?
- How can I use it in my professional activity?

## REFERENCES

Resources for Activity 1:

Lambert J. Digital storytelling cookbook (2010). Center for Digital Storytelling.

<https://wrd.as.uky.edu/sites/default/files/cookbook.pdf>

Ohler, J. (2006). The World of Digital Storytelling. Educational Leadership, v63 n4 p44-47

<https://www.ascd.org/el/articles/the-world-of-digital-storytelling>.

Educational Uses of Digital Storytelling. (n.d.). Educational Uses of Digital Storytelling.

<https://digitalstorytelling.coe.uh.edu/page.cfm?id=23>

Morra, S. (2014). 8 Steps To Great Digital Storytelling. Transform learning.

<https://samanthamorra.com/2013/06/05/edudemic-article-on-digital-storytelling/>

SHARE YOUR STORY A How-to Guide for Digital Storytelling. (n.d.). SAMHSA.

[https://www.samhsa.gov/sites/default/files/programs\\_campaigns/brss\\_tacs/samhsa-storytelling-guide.pdf](https://www.samhsa.gov/sites/default/files/programs_campaigns/brss_tacs/samhsa-storytelling-guide.pdf)

Templates:

[http://www.jasonohler.com/pdfs/storyboard\\_template.pdf](http://www.jasonohler.com/pdfs/storyboard_template.pdf)

<https://www.canva.com/create/storyboards/>

## MODULE

Module 2 – How to build effective digital stories

## TRAINING UNIT TITLE

2.3 How to build a storyboard and implement the Digital Storytelling creation process.

## OVERVIEW

According to J. Lambert, a storyboard is a place to plan out a visual story in two dimensions. The first dimension is time: what happens first, next, and last. The second is interaction: how the audio—the voice over narrative of your story and the music—interacts with the images or video. The construction of a storyboard is a crucial step before implementing the digital storytelling creation process. Storyboarding is like a visual blueprint of the story idea and it includes selecting pictures, words, text, and video to map the flow of the project. Storyboards help storytellers picture the entire story from the start to finish.

Through a theoretical lecture, group activities and peer discussions, this training unit will present a step-to-step process of how to build a storyboard for digital storytelling while also explaining its significance and illustrating the main elements of storyboarding.

The training unit is made up of three parts. In the first part, through a lecture the trainer will introduce the storyboard technique to the learners and its relation with digital storytelling. In addition, the trainer will present the main elements of storyboards and proceed with a step by step guide on how to build one.

For the second part, learners will apply the knowledge acquired by cooperating to create an example of a storyboard.

Lastly, the third part will be a peer discussion. Following the presentations of the learners' findings and results, they will exchange feedback with their peers in an effort of personalization of the works produced in their own working context and reality.

On the basis of those three parts the learners will familiarize themselves with the storyboard usage and its importance during the digital storytelling process.

**LEARNING OBJECTIVES**

At the end of the course the teacher will:

**Knowledge and understanding**

- Be familiar with different approaches to create a storyboard.

**Applying knowledge and understanding**

- Build a storyboard and implement the Digital Storytelling creation process;

TIMING	MATERIAL AND RESOURCES
90 minutes	<ul style="list-style-type: none"> <li><input type="checkbox"/> Individual writing tools (paper, pencils, pen etc.)</li> <li><input type="checkbox"/> Group writing tools (flipchart, markers, blackboard etc.)</li> <li><input type="checkbox"/> Digital individual devices (smartphone, tablet, laptop etc.)</li> <li><input type="checkbox"/> Digital group devices (computer &amp; projector, speakers etc.)</li> <li><input type="checkbox"/> Specific resources: <a href="https://www.canva.com/create/storyboards/">https://www.canva.com/create/storyboards/</a></li> </ul>

**DELIVERY MODE**

The training unit will be delivered through:

**Acquisition of knowledge:**

Lecture

**Application of knowledge:**

Group activity

**Personalisation of knowledge:**

Reflection

Peer discussion

**DESCRIPTION OF THE TRAINING ACTIVITY – METHODOLOGY**

### **Activity 1 (30 min)**

A storyboard is a visual representation of how a story will play out, scene by scene. It's made up of a chronological series of images, with accompanying notes. The trainer will introduce through a lecture the storyboarding technique based on the resources included in the References section. The lecture will recall the knowledge acquired on the definition of the idea of storytelling and explore how the fathers of digital storytelling, J. Lambert and J. Olier propose to approach storyboarding. The lecture can be complemented and enriched by resources that specifically refer to emotional-storyboarding.

### **Activity 2 (30 min)**

After the learners are familiarized with the elements of storyboarding, and divided into groups of 2-3 people, they will work in order to apply their knowledge by building their own storyboard and presenting it to the rest of the group at the end. Examples of storyboarding templates are included in the References section.

Learners can use their laptops, phones, and browse the internet.

### **Activity 3 (20 min)**

After completing the activity and having a generic structure or a detailed one, each group will have to share the approach they followed and their final result with the rest of the group.

A class discussion will then follow where the teachers will have to think and suggest possible ways to incorporate this method to their class based on their reality/context/discipline.

## **POSSIBLE DEBRIEFING/ASSESSMENT**

### **Class discussion**

The trainer will ask the educators to reflect on the lecture and the activities that took place, starting in that way a discussion. The discussion will include the following questions:

- How did I feel while working?
- What was easy/difficult?
- What do I bring home?
- How can I use it in my professional activity?

## REFERENCES

Resources for Activity 1:

<http://www.jasonohler.com/storytelling/storyeducation-old.cfm>

<http://storyconcepts.blogspot.com/>

Ohler, J. (2006). The World of Digital Storytelling. Educational Leadership, v63 n4 p44-47.

<https://www.ascd.org/el/articles/the-world-of-digital-storytelling>

Lambert J. (2012). Designing in Digital: Working with Digital Imaging, Audio, and Video. Routledge. 9780203102329

Lambert J., (2010). Digital storytelling cookbook. Center for Digital Storytelling.

<https://wrd.as.uky.edu/sites/default/files/cookbook.pdf>

Chung H., Gerber E. Emotional-Storyboarding: A Participatory Method for Emotional Designing for Children. Northwestern University, McCormick School of Engineering/Segal Design Institute.

Hill, J. (2022). *Emotion is your end goal as a storyteller*. StoryboardArt.

<https://storyboardart.org/your-end-goal-as-storyteller/>

LibGuides: Digital Storytelling: Home. (n.d.). <https://research.auctr.edu/c.php?g=197213>

Educational Uses of Digital Storytelling. (n.d.-b).

<http://digitalstorytelling.coe.uh.edu/page.cfm?id=23>

How to Storyboard: Step-by-Step Storyboarding Guide (2022 Edition) | Boords. (2023, January 11). boords.com. <https://boords.com/how-to-storyboard>



Hagen, J. (2021). Building Empathy with Storyboarding - Joelle Hagen. Medium.  
<https://medium.com/@joellewhagen/building-empathy-with-storyboarding-bbc0eed615b>

Templates:

[http://www.jasonohler.com/pdfs/storyboard\\_template.pdf](http://www.jasonohler.com/pdfs/storyboard_template.pdf)

<https://www.canva.com/create/storyboards/>

## MODULE

Module 2 – How to build effective digital stories

## TRAINING UNIT

2.4 The use of pedagogical approaches and evaluative scenarios of Digital Storytelling.

## OVERVIEW

Digital storytelling has great pedagogical and evaluative importance for teachers and can be used in education in many ways. The right use of pedagogical and evaluative scenarios of Digital Storytelling can promote increased emotional intelligence and social learning of students.

Through lectures, peer discussions, and hands-on exercises the training unit will introduce to the teachers the use of pedagogical and evaluative scenarios of Digital Storytelling.

The unit is made up of three parts. The first part is a lecture on pedagogical approaches of digital storytelling, followed by the connection of those approaches to adapted frameworks for evaluative scenarios.

The second part is a individual reflection exercise to help teachers apply the knowledge acquired to their work context and subject.

The final part proposes a peer learning activity to share ideas and experiences. The aim of this unit is for teachers to understand how to use pedagogical and evaluative scenarios of Digital Storytelling.

## LEARNING OBJECTIVES

At the end of the course the teacher will know how to:

**Knowledge and understanding**

- Be familiar with different pedagogical approaches to Digital Storytelling.
- Use evaluative scenarios of Digital Storytelling.

**Applying knowledge and understanding**

- Accompany students in the creation of digital stories in the class.
- Evaluate the stories created by students helping them to increase their emotional intelligence and social empathy.

**Communication skills**

- Communicate with colleagues about pedagogical approaches and evaluative scenarios of Digital Storytelling.

TIMING	MATERIAL AND RESOURCES
90 minutes	<ul style="list-style-type: none"><li><input type="checkbox"/> Individual writing tools (paper, pencils, pen etc.)</li><li><input type="checkbox"/> Group writing tools (flipchart, markers, blackboard etc.)</li><li><input type="checkbox"/> Digital individual devices (smartphone, tablet, laptop etc.)</li><li><input type="checkbox"/> Digital group devices (computer &amp; projector, speakers etc.)</li><li><input type="checkbox"/> Specific resources: A worksheet for the second part of the training unit and a series of questions for the final part.</li></ul>

**DELIVERY MODE**

The training unit will be delivered through:

**Acquisition of knowledge:**

Lecture

**Application of knowledge:**

Individual exercise

**Personalisation of knowledge:**

Peer discussion

## DESCRIPTION OF THE TRAINING ACTIVITY – METHODOLOGY

### Activity 1 (40 minutes)

The trainer introduces the theoretical part of the module supported by a synthetic presentation (by using PowerPoint, Canva or similar applications) based on the resources included in the references' section or other, adapted to the audience. The lecture covers the topic of pedagogical approaches of digital storytelling, in order to connect to them a framework for evaluative scenarios. Below an example of possible topics for the lecture.

### Pedagogical approaches

Various approaches/methodologies are available in the implementation of digital storytelling activities in the school classroom. The most common approaches/methodologies include project-based methodology, creative writing-based approach, flipped learning, blended learning and workshop-based digital storytelling. Examples of how these approaches/ methodologies can be implemented in classroom activities involving digital storytelling are included in INTERACTed Learning toolkit.

### Evaluation rubric

In addition to classroom observations, a scoring rubric is used by teachers to assess the quality of the digital stories created by the students. This stage has two different aims: to assess the level of student engagement, and document the educational outcomes achieved through digital storytelling. The level of engagement is a quantity that can be measured with the help of a scoring rubric. According to Sadik (2008), it is appropriate to use an assessment instrument, such as a scoring rubric, to evaluate ICT-based learning projects.

Therefore, the role of digital storytelling was assessed by means of an evaluation rubric. An evaluation rubric created by the University of Houston (2011) was chosen as a guide to create

the rubric for this training unit. The evaluation rubric includes nine criteria; these are: Purpose, Plot, Pacing of Narrative, Dramatic Question, Story Content, Grammar and Language Usage, Technological Competence, Emotional Content and Economy of Content. Four levels of descriptors were given for each category, with scores of 4, 3, 2, or 1 possible, depending on the level of success in that area.

In addition to the University of Huston's evaluation rubric, interesting material for evaluating digital storytelling is produced by Jason Olher and available on his website (links in the References section)

### **Activity 2 (20 minutes)**

Individual activity. The trainer asks each learner to answer the following questions (20 minutes):

1. What could be the pedagogical approaches more suitable for you and your students?
2. Why are those approaches more suitable?
3. Which criteria you would include in the evaluation and why?

### **Activity 3 (20 minutes)**

Peer discussion. Eager learners will present to the class their answers and reflections to start a conversation about it, keeping the attention on how the development of emotional intelligence and social empathy can be taken into account in the evaluation process.

## **POSSIBLE DEBRIEFING/ASSESSMENT**

### **Class discussion (10 minutes)**

The trainers ask the trainees to reflect on the lecture and individual exercise performed and comment, starting a discussion about it. The trainer stimulates a reflection through the following questions or others relevant questions:

How did I feel while working?

What was easy/difficult? What do I bring home?

How can I use it in my professional activity?

At the end of the evaluation phase, the trainers ask the trainees to choose an image/word that represents what they bring home at the end of the training course.

## REFERENCES

Resources for Activity 2:

INTERACTed Learning toolkit

<https://www.interactedproject.eu/project/>

<http://creative.eun.org/home>

Sadik, A. (2008). Digital storytelling: A meaningful technology-integrated approach for engaged student learning. *Educational technology research and development*, 56, 487-506.

Robin, Bernard. (2011). The educational uses of digital storytelling. Proceedings of Society for Information Technology & Teacher Education International Conference 2006.

<https://www.researchgate.net/publication/228342171> *The educational uses of digital storytelling*

Robin, Bernard. (2008). Digital Storytelling: A Powerful Technology Tool for the 21st Century Classroom. *Theory Into Practice - THEORY PRACT.* 47. 220-228. 10.1080/00405840802153916.

[\(PDF\) Digital Storytelling: A Powerful Technology Tool for the 21st Century Classroom](#)

[\(researchgate.net\)](#)

Smeda, N., Dakich, E. & Sharda, N. The effectiveness of digital storytelling in the classrooms: a comprehensive study. *Smart Learn. Environ.* 1, 6 (2014). <https://doi.org/10.1186/s40561-014-0006-3>

*The effectiveness of digital storytelling in the classrooms: a comprehensive study | Smart Learning Environments | Full Text (springeropen.com)*

Landrum, R. & Brakke, Karen & McCarthy, Maureen. (2019). The pedagogical power of storytelling.. Scholarship of Teaching and Learning in Psychology. 5. 10.1037/stl0000152.  
*(PDF) The pedagoqical power of storytelling. (researchgate.net)*

Pedagogical Analysis of Educational Digital Storytelling Environments of the Last Five Years. (n.d.). ScienceDirect. <https://www.sciencedirect.com/science/article/pii/S1877042812014061>  
*Pedagoqical Analysis of Educational Diqital Storytelling Environments of the Last Five Years - ScienceDirect*

[https://www.samhsa.gov/sites/default/files/programs\\_campaigns/brss\\_tacs/samhsa-storytelling-guide.pdf](https://www.samhsa.gov/sites/default/files/programs_campaigns/brss_tacs/samhsa-storytelling-guide.pdf)

## MODULE 3 - USE OF TOOLS FOR THE CREATION OF DIGITAL STORYTELLING

MODULE	
Module 3 - Use of tools for the creation of digital storytelling	
TRAINING UNIT	
3.1 Use of the main tools for storytelling.	
OVERVIEW	
<p>A digital story can take different forms, such as photos, films, audio, text, etc. Depending on the form we want to give to our end product, we will need to use a different digital tool. Nowadays, it is possible to realize beautiful creations without needing a lot of digital knowledge.</p> <p>Through tutorials and hands-on exercises the training unit provides some examples of easy apps and shows how to use them. Learners don't need professional devices; they can just get started with their own tablet or smartphone. In order to continue searching for apps after this module, the unit will explain how to find useful tools in the wide range of online options to make digital stories even more beautiful.</p>	
LEARNING OBJECTIVES	
<p>At the end of the course, the teacher will be able to:</p> <p><b>Knowledge and understanding</b></p> <ul style="list-style-type: none"><li>- Know how to choose from different apps in the App or Play Store.</li><li>- Know the advantages and disadvantages of a free app.</li><li>- Be familiar with different ways to create a digital story and some apps to get started.</li></ul> <p><b>Communication skills</b></p> <ul style="list-style-type: none"><li>- Explain what Play Store and App Store are and how to choose the right app.</li><li>- Introduce the different apps and their potential uses to others.</li></ul>	
TIMING	MATERIAL AND RESOURCES
150 minutes	<input type="checkbox"/> A large, green sheet of paper (A3 or larger) or a green wall.

- Personal devices (smartphone, tablet, laptop etc.)
- Group devices (computer & projector, speakers etc.)
- Specific resources: WiFi and code

#### DELIVERY MODE

The training unit will be delivered through:

**Acquisition of knowledge:**

Lecture

**Application of knowledge:**

Tutorial

Practical exercise

**Personalisation of knowledge:**

Reflection

Peer discussion

#### DESCRIPTION OF THE TRAINING ACTIVITY – METHODOLOGY

**Activity 1 (5 minutes)**

The trainer introduces the topic of the lesson.

If we want to make a digital story, we should think ahead about the end product we want to create. Do we want to make a photo report, a vlog, or a spoken text with images? These are just a few examples of the forms a digital story can take. Depending on the chosen form, we will also need to select an app. In this module, the trainer will explain some apps, but the teachers are invited to check out our more extensive suggestion list for more options. The trainer will also show the teachers where to find them (see resources in the References section) and how to make a choice from the infinite options.

**Activity 2 (30 minutes)**



Lecture. The trainer shows a series of apps for digital storytelling. The devices of the participants are connected to the Wi-Fi network, so everyone can participate in the session using their own device.

Example of a simple language to be used to present the topic:

Before we can work with an app, we must install it on our device. Just like in the real world, we have a store on our tablet or smartphone where we can find those apps. There are two stores: the App Store for devices that work with iOS (Apple) and the Play Store for Android devices. This digital shop is automatically installed on your device and can be recognized by these symbols.



Open the correct store on your device.

If you tap on the magnifying glass, you can search for apps by name or keyword. For example, type the word “photography”. You now get a whole list. But which one is best to choose?

### Do you want a free or paid app?

You can download many free apps, but be aware that they often contain visible advertising or store your user data and pass it on to third parties. Making an app costs money, so it must be paid for by someone - either the advertisers or the users (or both). If you don't pay with money, you may pay with your user data. Some apps may seem free, but only offer a limited number of options in the free version and will still ask you to pay for the full version.

Are free apps therefore inherently bad? Not necessarily! Today you'll discover some free apps we recommend you try.

Which one should I choose?

Thanks to the experiences of others and the number of downloads, you can determine for yourself whether an app is worth it. Be sure to also view the images; these give you a first impression of what to expect.

The trainer presents the following apps (or other similar) to the teacher, supported by the tutorials if need be.

App 1: Green Screen by Do Ink (paid app!)

Tutorial: <https://www.youtube.com/watch?v=ycXMdPqZcJQ>

App 2: ScratchJr

Tutorial: <https://www.youtube.com/watch?v=s6XvwEH0xpg>

App 3: Stop Motion Studio

Tutorial: [https://www.youtube.com/watch?v=G\\_OnX9nVjfM](https://www.youtube.com/watch?v=G_OnX9nVjfM)

App 4: [The built-in camera app of your device]

Tutorial: <https://www.youtube.com/watch?v=V2Fy9VdOy5c>

**Activity 3** (50 minutes)

Practical exercise. For the rest of the time, the teacher will split the class into four groups. Each group will experiment with one app the given assignment (the teacher can have access to the tutorial). After 15-20 minutes, they will move on. Not everyone will have done every app, but that's okay.

App 1: Green Screen by Do Ink (paid app!)

Assignment: Make your own greenscreen video and use your fingers as figurants. To do this, use the green wall or green sheet of paper as a greenscreen background. You can download nice images from the internet (e.g. Google Images).

#### App 2: ScratchJr

Assignment: Create your own short animation about your favorite activity in your free time (e.g. playing basketball, sleeping, making music, dancing, etc.).

#### App 3: Stop Motion Studio

Assignment: Find objects in the room and bring them to life. Place your device in the same spot to ensure each photo is taken in the same way.

#### App 4: [The built-in camera app of your device]

Assignment: Take the best possible picture of each other in both portrait and full body formats.App2

### Activity 4 (25 minutes)

Peer discussion. Each group will reflect on how the apps tested can be used in their working contexts (10 min). Afterwards the four groups will present their feedback on the apps and their reflections on how their use might be integrated in their classes to the rest of participants.

### POSSIBLE DEBRIEFING/ASSESSMENT

Have a short conversation about each app with the whole group. Possible questions could include:

- How did you feel while using the apps?
- Do you feel ready to use them in your classes?
- How could you overcome potential difficulties met while using the apps?

### REFERENCES

- YouTube Tutorials:

How To Use The Best Free Stop motion App | Stop Motion Studio Tutorial:

[https://www.youtube.com/watch?v=G\\_OnX9nVjfM](https://www.youtube.com/watch?v=G_OnX9nVjfM)

Green Screen by Do Ink Tutorial:

<https://www.youtube.com/watch?v=ycXMdPqZcIQ>

*Introduction to Scratch:*

<https://www.youtube.com/watch?v=s6XvwEH0xpg>

Webinar Story Of My Life:

[https://www.youtube.com/watch?v=PJMqN\\_8L5KA](https://www.youtube.com/watch?v=PJMqN_8L5KA)

## MODULE

Module 3 - Use of tools for the creation of digital storytelling.

## TRAINING UNIT

3.2 How to gather/create images, music and sound suitable for Digital Storytelling.

## OVERVIEW

With the development of new technologies, stories have taken on a digital form. In fact, the resource of tools that can be used to create a digital story is unlimited. Digital storytelling can combine and take different forms, but all of them need to gather and create images, music and sound.

Through lectures, group exercise and peer discussion, the training unit will introduce to the teachers the knowledge on how to gather and create the content suitable for Digital Storytelling. The unit is made up of three parts. The first part examines various forms of digital storytelling, together with tools that can support the work.

In the second part, the student will apply the knowledge gained by preparing the elements suitable for a digital story based on an already prepared template.

The final part proposes an individual practical exercise starting from a storyboard, followed by a peer discussion where the learners share their insights and difficulties that emerged during the creation of digital content.

On the basis of those three parts the learner will learn how to create and gather the content for Digital Storytelling.

## LEARNING OBJECTIVES

At the end of the training unit the teacher will:

**Knowledge and understanding**

- Know the different forms of digital storytelling (i.e. web stories, interactive stories, hypertexts, narrative computer games, comic strips, audio and video materials).

**Applying knowledge and understanding**

- Know how to gather/create images, music and sounds suitable for Digital Storytelling.

**Communication skills**

- Communicate with colleagues explaining the use of digital elements for the creation of Digital Storytelling.

TIMING	MATERIAL AND RESOURCES
120 minutes	<ul style="list-style-type: none"> <li><input type="checkbox"/> Group writing tools (flipchart, markers, blackboard etc.)</li> <li><input type="checkbox"/> Digital individual devices (smartphone, tablet, laptop etc.)</li> <li><input type="checkbox"/> Digital group devices (computer &amp; projector, speakers etc.)</li> <li><input type="checkbox"/> Specific resources:</li> </ul>

**DELIVERY MODE**

The training unit will be delivered through:

**Acquisition of knowledge**

Lecture

**Application of knowledge**

Tutorial

Individual exercise

**Personalization of knowledge**

Individual exercise

Peer discussion

**DESCRIPTION OF THE TRAINING ACTIVITY – METHODOLOGY**

### **Activity 1 (30 min)**

Lecture. The trainer introduces the theoretical part of the training supported by a synthetic presentation (by using PowerPoint, Canva or similar applications) based on the resources included in the references' section or other, adapted to the audience. The lecture starts with an introduction on the different forms of digital storytelling (i.e. web stories, interactive stories, hypertexts, narrative computer games, comic strips, audio and video materials). After the introduction, the trainer explains different ways to gather/create images, music and sound suitable for Digital Storytelling.

In particular, the trainer mentions that digital stories are multimedia presentations that combine a variety of digital elements within a narrative structure. Unlike traditional storytelling, which uses material on physical media such as paper, tapes or disks and film, digital storytelling uses material that exists in electronic files. As such, digital stories can include not only text, images, video and audio, but also interactive elements such as maps and social media elements such as tweets. In order to optimize all the elements to add to these stories, the trainer presents how to use tools such as Audacity, Wikimedia Commons, Jamendo Canva, Openverse, YouTube, Freepik etc. For each tool, the trainer can show a digital story created by using it.

Examples of tools:

**Audacity**

Audacity is an open source audio editing software. Audacity has many dedicated users and it is easy to get help online if you have problems with the program. The interface is not as refined as commercial products, but Audacity is a very powerful programme. Audacity's many features can be further extended with plug-ins.

**Wikimedia Commons**

A wiki database containing Creative Commons or Public Domain images.

**Jamendo**

A site that makes music available with all legal tracks.

**Canva**

Canva is a very simple graphics programme that has many useful features. Creating projects in it mainly involves adding photos, moving and positioning images and shapes, as well as changing the background and font size, type and color.

Openverse

Open source image, audio and video search engine

YouTube

The most popular website where you can upload, live stream, rate and comment on videos for free. To use the free creativity on youtube, search for something and then use the "Filters" button under the search box to further filter the search results to "Creative Commons"

Freepik

On Freepik you will find vectors, various ready-made designs, icons and even photos and much more. This service makes life very easy. With Freepik, you can easily and for free create a variety of projects.

### **Activity 2 (20 min)**

After the lecture, teachers in groups of several will go through the tools for creating digital stories (at least 2 tools per group). After testing the listed programmes, each group discusses the pros and cons of the programmes that help to create digital stories. After creating these pros and cons, one of the group representatives presents the results of the analysis of the given programmes and the teacher collects all the conclusions by making notes on the board and summarizing the programmes.

### **Activity 3 (20 min)**

Then, the next step will be for the learners to apply the knowledge they have gained by gathering/creating images, music and sound suitable for a digital story.

Individual exercise. Each learner will create his/her own set of text/audio/visual resources. They can use the tools that have been presented to them for this in Activity 1, starting from the ready-made Canva template related to 'My diary of feelings':



<https://www.canva.com/p/templates/EAFEJIBX8Ps-pastel-illustration-diary-of-feelings-comic-book/>

The learner's task will be to collect and create the necessary content to describe how they feel in certain moods, by using different resources.

The willing learners will present their digital materials to the teacher, who will collect all the interactive scenarios, presenting them to the whole class and contributing to the discussion of the whole group of participants. The teacher may ask the class if the elements presented for each feeling are coherent, effective in describing the specific feeling, if one is more effective than others, etc.

#### **Activity 4 (50 min)**

Each learner, starting from the storyboard created in Training unit 2.3, Activity 2, or other storyboards provided by the trainer and adapted to the audience, will search or create appropriate digital elements (text, images, audio and video).

Whatever they choose will influence and set the tone for their digital story. Concepts such as visual hierarchy, tone and illustration will be introduced by the trainer.

Peer learning will take place through presentation of stories, discussion and reflection on what the learners gained from this training unit. Eager students, after completing the exercise, present their work. Other trainees can ask questions.

Supportive questions: Is the story clearly presented? Has it been presented in the correct form? Is the story interesting to the group?

#### **POSSIBLE DEBRIEFING/ASSESSMENT**

Class discussion

The trainers ask the trainees to reflect on activity performed and comment, starting a discussion about it.

The trainer stimulates a reflection through the following questions or others relevant questions:

How did I feel while working?

What was easy/difficult?

What do I bring home?

How can I use digital content in my professional activity?

At the end of the evaluation phase, the trainers ask the trainees to choose an image/word that represents what they bring home at the end of the training course.

## REFERENCES

[https://www.samhsa.gov/sites/default/files/programs\\_campaigns/brss\\_tacs/samhsa-storytelling-gui-de.pdf](https://www.samhsa.gov/sites/default/files/programs_campaigns/brss_tacs/samhsa-storytelling-gui-de.pdf)

Tools:

<https://sourceforge.net/projects/audacity/>

[https://commons.wikimedia.org/wiki/Main\\_Page](https://commons.wikimedia.org/wiki/Main_Page)

<https://licensing.jamendo.com/it/catalogo>

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

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

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

<https://wordpress.org/openverse/>



### TRAINING UNIT MODULE

Module 3 - Use of tools for the creation of digital storytelling.

### TRAINING UNIT TITLE

3.3 How to assemble and reassemble the material (text, images, narration, music and / or video clips) to create the final version of the digital story.

### OVERVIEW

The process of creating materials for digital stories allows to use digital technologies in a creative way. An ordinary story through the use of photos, videos or audio recordings gains a new dimension. There are many free programs with the help of which students can edit photos, video or audio recordings to then use them to create a non-repeatable digital story. So, how can learners use digital tools and how to assemble the resulting material to use it in the final story? This unit will cover this topic as well as focus on such aspects as Creative Commons, Fair Use, Copyright.

Through lectures, group work and peer discussion, learners will gain knowledge on how to assemble the material to create the final version of a digital story.

The unit is made up of three parts. The first part will be in the form of a lecture and will focus on the presentation of available online tools for editing photos, videos and recordings.

In the second part, the learner will apply the knowledge gained by editing and assembling a 2 minute video of the Window Movie Maker program.

The final part proposes a reflection and peer discussion on the topic.

On the basis of those three parts the learner will learn about tools for editing the videos, movies and audio and how to edit and assemble the material to create the final version of digital story.

### LEARNING OBJECTIVES

At the end of the training unit the teacher will:

#### **Knowledge and understanding**

- Know different types of content editing tools.
- Know how to edit and assemble the material.
- Know how to create the final version of a digital story.

- Know about Creative Commons, Fair Use and Copyright.

**Applying knowledge and understanding**

- Be able to assemble and reassemble the material (text, images, narration, music and / or video clips) to create the final version of the digital story.

**Communication skills**

- Communicate with colleagues explaining the advantages and limitations of programs for digital storytelling.

TIMING	MATERIAL AND RESOURCES
120 minutes	<ul style="list-style-type: none"> <li><input type="checkbox"/> Group writing tools (flipchart, markers, blackboard etc.)</li> <li><input type="checkbox"/> Digital individual devices (smartphone, tablet, laptop etc.)</li> <li><input type="checkbox"/> Digital group devices (computer &amp; projector, speakers etc.)</li> <li><input type="checkbox"/> Specific resources:  <a href="https://moviemaker.minitool.com/moviemaker/use-movie-maker.html">https://moviemaker.minitool.com/moviemaker/use-movie-maker.html</a> </li> </ul>

**DELIVERY MODE**

The training unit will be delivered through:

**Acquisition of knowledge:**

- Lecture
- Self-study

**Application of knowledge:**

- Tutorial
- Peer discussions

**Personalization of knowledge:**

- Individual exercise
- Peer discussion

## DESCRIPTION OF THE TRAINING ACTIVITY – METHODOLOGY

### Activity 1 (20 min)

This unit begins with a lecture on available tools for editing, assembling the content.

The digital storytelling response tools presented are user-friendly and customized. There is no doubt that digital storytelling tools are beneficial online spaces that help shape learners' opinions and narratives. The trainer will introduce and, together with the learners, will analyze a few selected tools. Below some examples:

#### Pixton

Pixton cures boredom in the classroom and empowers each student, unlocking their artistic and writing potential. It allows to create and share drawings, cartoons and it is easy to use.

#### Comic Master

It permits the creation of personal graphic novels. It is an interactive comic creation tool that uses quick questions to help the user. Students can create their own comic strip or short graphic novel. The app is quite easy to use with a drag-and-drop function to add backgrounds, layouts, characters and props that appear in the scene. In addition, it allows to add dialogues, captions and effects to tell the story.

#### Slidestory

It permits to create a 32-second slideshow from photos and short clips from videos. The user can create a unique slideshow through this programme.

It is not only online tools that are important when creating material, good software for creating final digital versions of stories should also be mentioned. Below some examples:

#### Windows Movie Maker

The programme is a simple program for creating and editing videos. It was bundled with various versions of the Windows operating system, and can create films from video files as well as from photos themselves. The programme is mainly used for simple editing of video clips or creating a sequence of displayed images with selected background music.

### Adobe Slate

A virtual storytelling app. Allows the user to transform words and images into a story that he/she can publish easily and beautifully. Adobe Slate has everything the user needs to quickly create eye-catching content for any project.

### Puppet Pals

Allows the user to create animated cartoons and presentations. Allows the user to create his/her own unique shows with animation and sound in real time. Operation is requiring only the selection of actors and backgrounds, dragging them onto the stage and pressing the record button. Chosen movements and sound will be recorded in real time, which can then be played back in animation.

### StoryPlace

StroyPlace is an interactive site for young learners. The stories created are completely animated, the site offers various videos, games and interesting animations. It is a good website for creating different stories through animation and a good homework idea for pupils.

After analyzing a selection of tools useful for learners, the teacher will present general notions related to Creative Commons, Fair Use and Copyright.

Creative Commons is a non-profit organization that provides copyright holders with licenses that allow their work to be shared and used by others. Creative Commons licenses are free and can be applied to all types of creative work, including writing.

Fair Use is a legal doctrine that allows the unlicensed use of copyrighted material in certain circumstances without requiring permission from the copyright owner.

A good example of Fair use is when a learner uses a small part of an article in their work. The learner is using the article for educational purposes and not to make money or profit from it.

Copyright is the exclusive right to reproduce, distribute, perform or display a work of authorship. Copyright is a form of intellectual property. It gives the creator of an original work exclusive rights to use and distribute it.

### **Activity 2 (20 min)**

The trainer will introduce Windows Movie Maker as an example of a programme for video editing and animation. The trainer will show a video related to Windows Movie Maker and then give learners a useful tutorial on how to create video animations from photos.

Guides related to Windows Movie Maker:

<https://www.vvvd.org/cms/lib/IL01905528/Centricity/Domain/4252/GuidetoWindowsMovieMaker.pdf>

[https://technologiesforteaching.weebly.com/uploads/1/6/3/3/16335480/jzc\\_moviemaker\\_handout.pdf](https://technologiesforteaching.weebly.com/uploads/1/6/3/3/16335480/jzc_moviemaker_handout.pdf)

Video Guide:

<https://www.youtube.com/watch?v=bu7UUBZX7nU>

Group work. The trainer divides the class into two groups and asks each group to reflect on the following question (10 min):

What are the advantages and limitations of creating digital stories in this programme? Are there interactive elements in creating a film from photographs? If so, which ones?

Group discussion (5 min) Each group presents its thoughts synthetically to the other participants.

### **Activity 3 (60 min)**

Exercise 1. Individual exercise – Each participant is asked to create an interactive story in the form of a video through Windows Movie Maker. Each learner can choose a topic or use one from the list below.

Possible topics:

- Create your own interactive storytelling of your holiday using your own photos from your recent holiday.
- Create your own video encouraging people to watch a film/book/ or listen to an artist.
- Create an historical story related to an event.
- Create an interactive video presentation related to the biography of a character or protagonist in a novel.

The chosen activity needs to take into account the identification of didactic content and contribute to the development of students' social-emotional intelligence and empathy.

Exercise 2. Discussion

At the end of the exercise, each student will be able to comment on the exercise and reflect on what they have learned during the learning unit focusing on the students' emotions.

### POSSIBLE DEBRIEFING/ASSESSMENT

#### **Class discussion (20 minutes)**

The trainers ask the trainees to reflect on the lecture, on the individual exercise performed and to comment, starting a discussion on the topic.

Trainer asks participants to identify and evaluate the best video.

The trainer stimulates reflection through the following questions or other relevant questions:

How did they feel while working?

What was easy/difficult?

What did they bring home?

How can they use this in my professional activity?

At the end of the evaluation phase, the trainer asks participants to list what their further training needs are related to this topic.

### REFERENCES



[https://www.samhsa.gov/sites/default/files/programs\\_campaigns/brss\\_tacs/samhsa-storytelling-guide.pdf](https://www.samhsa.gov/sites/default/files/programs_campaigns/brss_tacs/samhsa-storytelling-guide.pdf)

<https://moviemaker.minitool.com/moviemaker/use-movie-maker.html>

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

<http://www.comicmaster.org.uk/>

<https://apps.apple.com/us/app/slidestory-create-a-slideshow-movie-and-a-snap-video/id689859603>

<https://www.wizcase.com/download/windows-movie-maker/>

<https://express.adobe.com/page/2qRqI/>

<http://www.polishedplay.com/puppetpals1>

<https://www.storyplace.org/>

## MODULE 4 – COLLECTING FEEDBACK AND CONTINUOUS LEARNING

MODULE
Module 4 – Collecting feedback and continuous learning
TRAINING UNIT
2.5.1 How to receive feedback and think about how to improve the digital story
OVERVIEW
<p>Too often in education, students are not taught or do not have time for reflection and feedback. What did I learn? What do I know about myself that I didn't know before? How can I do better next time? Students need to be taught how to reflect on their own work and give feedback to others, which is constructive and valuable (Morra,2014). For that reason it is important for teachers to know how to use feedback in order to improve their students' digital stories but equally important for students is peer assessment in order to improve their own work.</p> <p>Through lectures, peer discussions, and hands-on exercises the training unit proposes an approach on how to receive feedback and think about how to improve the digital stories.</p> <p>In the second part, some examples of practical application of how to provide storytelling assessment are shown and critically analyzed by the learners.</p> <p>In the third part the learner will personalize the knowledge acquired by performing an exercise to raise awareness on how to assess students and their digital stories and to contribute to the development of students' socio-emotional intelligence and empathy by giving and receiving valuable feedback.</p> <p>On the basis of those three parts the learner will improve his/her understanding of how to receive feedback and think about how to improve the digital story.</p>
LEARNING OBJECTIVES

At the end of the course the teacher will:

**Knowledge and understanding**

- Understand the importance of receiving feedback and think about how to improve the digital story

**Applying knowledge and understanding**

- Give effective feedback that help students to improve their digital stories and their skills

**Making judgments**

- Think about how to improve the story and how to give and receive feedback about it

**Communication skills**

- Communicate with colleagues the importance of giving/receiving feedback and how to give/receive feedback

TIMING	MATERIAL AND RESOURCES
120 minutes	<ul style="list-style-type: none"> <li><input type="checkbox"/> Individual writing tools (paper, pencils, pen etc.)</li> <li><input type="checkbox"/> Group writing tools (flipchart, markers, blackboard etc.)</li> <li><input type="checkbox"/> Digital individual devices (smartphone, tablet, laptop etc.)</li> <li><input type="checkbox"/> Digital group devices (computer &amp; projector, speakers etc.)</li> <li><input type="checkbox"/> Specific resources: Worksheet for Activity 4</li> </ul>

**DELIVERY MODE**

The training unit will be delivered through:

**Acquisition of knowledge:**

Lecture

**Application of knowledge:**

Role play

Group discussion

**Personalisation of knowledge:**

Individual and group exercise

**DESCRIPTION OF THE TRAINING ACTIVITY – METHODOLOGY**

**Activity 1 (15 minutes)**

The trainer divides the class into subgroups of four people and asks them to answer the question “How to guide students in providing/receiving relevant feedback on the interactive digital narratives created?”. Participants have 5 minutes to reply to the question based on their knowledge and experience. Afterwards, one representative of each group presents the results of the discussion and the trainer takes notes on the blackboard, by summarizing the intervention using keywords.

**Activity 2 (35 minutes)**

The trainer introduces the theoretical part of the module supported by a synthetic presentation (by using PowerPoint, Canva or similar applications) based on the resources included in the references’ section. The lecture gives information to the statements below.

**The importance of providing feedback in education**

Feedback and assessment are an important part of teaching. Feedback can indicate levels of learning and student progress by referencing a grade or mark. It is feedback, rather than the assessment “task”, that is the key to unlocking new learning and helps students to improve.

Explicit criticism of a student’s work or response is not useful feedback, as it will most likely lead to negative reactions and a decline in motivation. Instead, teachers should focus first on students’ achievements and then, where appropriate, offer steps or prompts for improvement and development. This might be done informally through verbal interactions or more explicitly via written comments.

Feedback also needs to be clear, specific, personalized and should, where possible, be linked to particular goals or criteria set out for students. Phrases such as “good work” or “well done”, while encouraging, do not offer valuable feedback. The comments that really have an impact on

learning are related to how students' work or understanding measures up to expected outcomes. These comments help students to see where they are in terms of their learning and what they need to replicate or retain.

### **What aspects should you focus on to provide feedback on digital storytelling?**

Students need to be taught how to reflect on their own work and give feedback to others that is both constructive and valuable. So it is very important for a teacher to know how to help his/ her students assess their work and provide valuable feedback.

Especially about storytelling, in order to achieve that teachers need to take into consideration a few certain aspects: according to Jason Ohler the first step is to set clear goals. It is really important when it comes to storytelling for the following reason. When students prepare written work a teacher can always judge the quality of their writing, whether they know much about the subject or not. But when students prepare new media like digital stories, this changes because most teachers don't feel comfortable assessing new media narrative. This is understandable, given that many teachers have created little new media themselves, and certainly weren't taught how to assess it in their teacher education programs. So, it is important for them to be able to answer the question: did students meet the goals of the project?

The assessment of everything is the next step that needs to be taken into consideration. The final story is the outcome of a process which involves: writing, creating artwork, preparing planning documents, and a number of other activities that produce tangible, accessible artifacts that address a number of intelligences, literacies and emotional skill areas. So it is really crucial to assess as much of the formative work as they can.

What follows and is equally important is the assessment of the process. Did students plan everything well? Was their teamwork successful? And finally, it is highly important to include self-assessment and peer review whenever it is possible and appropriate. Media development relies on risk taking and honest self-assessment of the outcome. It also relies on a community of learners sharing their skills and insights (Ohler, 2013).

The trainer can show the following videos on how to provide effective feedback:

### **How to Give Constructive and Actionable Feedback to Students: Staff to Students**

<https://www.youtube.com/watch?v=HB5HpEgcg-w>

### **Providing Effective Feedback for Students**

<https://www.youtube.com/watch?v=ENy0Q0vtfgQ>

#### **Activity 3 (30 minutes)**

Role play in pairs. The trainer asks each learner to do a simple drawing of a house in 2 minutes. Then in pairs each learner examines his/her companion drawing and provides feedback on it, making sure it also contains some “room for improvement” areas.

Group discussion. Each couple shares about the exercise. The trainer can ask the following questions: How did you feel while receiving feedback? After the feedback, did you feel more or less confident, up or down? What have you learnt from the feedback? How did you feel while providing feedback? What have you found easy/difficult?

#### **Activity 4 (40 minutes)**

Exercise 1. Individual activity – The trainer shows to participants the following list (according to Jason Ohler) of some basic and digital story assessment traits. Each participant is invited to think on how these traits might be applied to his /her assessment plan in the classroom. The trainer asks participants “Which of the above digital story assessment traits would you use and how?”. Are there any other traits missing? If yes please name them and explain their importance to you”.

Basic and digital assessment traits

- Story
- Research
- Writing
- Project planning
- Content understanding
- Digital craftsmanship
- Voice,creativity, originality

- Media Development process
- Assignment criteria
- Presentation and performance
- Sense of audience
- Media Grammar
- Other.....?

Exercise 2. Group work. The participants are divided into groups of four people. The task for each group is to discuss the four individual ideas, and choose at least one to present in plenary. The activity chosen needs to include the identification of the assessment traits that will be chosen in order to assess students and their digital stories and to contribute to the development of students' socio-emotional intelligence and empathy by giving and receiving valuable feedback.

Exercise 3. Group discussion. Each group presents their didactical application of assessment to the rest of the participants, focusing on students' emotions.

### POSSIBLE DEBRIEFING/ASSESSMENT

#### **Self-evaluation (15 minutes)**

The trainers will ask the trainees to reflect and comment on the group activity and the individual task they had on about the importance of receiving feedback and think about ways to improve their stories based on this information, by answering the questions below about it.

The trainer stimulates a reflection through the following questions or others relevant questions:

How did I feel while working?

What was easy/difficult? What do I bring home?

How can I use it in my professional activity?

At the end of the evaluation phase, the trainers ask the trainees to choose an image/word that represents what they bring home at the end of the training course.

### REFERENCES

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<https://slejournal.springeropen.com/articles/10.1186/s40561-014-0006-3>

<https://www.jasonohler.com/storytelling/assessmentWIX.cfm>

<https://www.tes.com/magazine/archive/pedagogy-focus-feedback-and-assessment>

<https://www.educationperfect.com/article/how-to-provide-the-most-effective-feedback-in-the-classroom/>

<https://education.nsw.gov.au/teaching-and-learning/professional-learning/teacher-quality-and-accreditation/strong-start-great-teachers/refining-practice/feedback-to-students/feedback-practices-and-strategies>

<https://idriesshahfoundation.org/blog-the-importance-of-storytelling-for-children/>



## MODULE

Module 4 - Collecting feedback and continuous learning

## TRAINING UNIT

4.2 Analysis of the teacher's training needs related to digital and pedagogical skills to integrate emotion-driven interactive digital storytelling in their classes.

## OVERVIEW

Educators need to be equipped with the right resources to integrate digital storytelling in the teaching and learning process. By resources we do not refer only to technological skills, but also to the specialized training that corresponds to teachers' individual needs on a larger scale, and that also embrace content and pedagogical knowledge. This training unit proposes a teacher's needs analysis approach based on the TPACK model. The TPACK model enables teachers, researchers, and teacher educators to move beyond oversimplified approaches that treat technology as an afterthought, redirecting their attention to the ways in which the connections among technology, content, and pedagogy, unravel within the classroom setting (Mishra & Koehler, 2009).

Through lectures, peer discussions, and hands-on exercises the training unit proposes an in-depth analysis of teachers' training needs.

The unit is made up of three parts. The first part contains a group activity to self assess the teachers' training needs. The second part presents the theoretical basis of the TPACK model in order to permit teachers to categorize their training needs into the TPACK model's area of knowledge (Content Knowledge, Pedagogical Knowledge, Technological Knowledge). In the last part the learners will personalize the knowledge acquired by performing an exercise to reflect and fine-tune the definition of their own training needs regarding digital storytelling.

## LEARNING OBJECTIVES

At the end of the training unit the teacher will:

**Knowledge and understanding**

- Be familiar with the TPACK model (Mishra & Koehler, 2009).

**Ability to learn (learning skills)**

- Analyze his/her training needs related to digital and pedagogical skills for the structuring of storytelling.

**Communication skills**

- Define the three dimensions present in storytelling (digital, pedagogical and content).
- Communicate with colleagues explaining his/her training needs on digital storytelling.

TIMING	MATERIAL AND RESOURCES
120 minutes	<ul style="list-style-type: none"><li><input type="checkbox"/> Individual writing tools (paper, pencils, pen etc.)</li><li><input type="checkbox"/> Group writing tools (flipchart, markers, blackboard etc.)</li><li><input type="checkbox"/> Digital individual devices (smartphone, tablet, laptop etc.)</li><li><input type="checkbox"/> Digital group devices (computer &amp; projector, speakers etc.)</li><li><input type="checkbox"/> Specific resources:</li></ul>

**DELIVERY MODE**

The training unit will be delivered through:

**Acquisition of knowledge:**

Peer discussion

Lecture

**Application of knowledge:**

Group work

**Personalisation of knowledge:**

Group work

## DESCRIPTION OF THE TRAINING ACTIVITY – METHODOLOGY

### Activity 1 (15 minutes)

The trainer divides the class into subgroups of four people and asks them to answer the following two questions:

1. Based on what you learned in the previous training units, what are your training needs?
2. How do you evaluate your skills regarding digital storytelling?

Participants have 5 minutes to discuss their needs and skills regarding the use of storytelling in primary schools. Afterwards, one representative of each group presents the results of the discussion and the trainer takes notes on the blackboard, by summarizing the intervention using keywords.

### Activity 2 (30 minutes)

The trainer introduces the theoretical part of the unit by showing the video “What is the TPACK Model?” (<https://www.youtube.com/watch?v=yMQiHJsePOM>) supported by a synthetic presentation (by using PowerPoint, Canva or similar digital tools) based on the resources included in the references’ section. The lecture explains each component of the TPACK model, accompanied by practical examples.

### Activity 3 (15 minutes)

The trainer prints out the following worksheet and gives it out to learners:

TPACK Model - Application of Knowledge [Worksheet](#)

Group work - The trainer divides the class in subgroups and asks each group to work on the worksheet. In Part A the teachers need to rewrite the training needs that they reported in Activity 1 (copy the notes from the blackboard). Then, they need to categorize these training needs into the right area of knowledge (Content Knowledge, Pedagogical Knowledge, Technological Knowledge).

Group discussion - Each group presents their categorization and reports if they faced any difficulties.

#### **Activity 4 (45 minutes)**

Group work - The trainer divides the class in subgroups and asks each group to work on the jamboard.

The teachers brainstorm additional training needs regarding digital storytelling (in terms of technological, content and pedagogical knowledge), discuss in which area they excel/need training and are asked to reflect how they can access the training they need. This Activity is guided by the jamboard presentation which contains the following questions:

1. Can you report any additional training needs in the area of Content Knowledge?
2. Can you report any additional training needs in the area of Pedagogical Knowledge?
3. Can you report any additional training needs in the area of Technological Knowledge?
4. In which of these areas do you mostly need support/ training?
5. In which area are you an expert?
6. How can you enhance your digital storytelling skills and knowledge regarding the area of Content Knowledge?
7. How can you enhance your digital storytelling skills and knowledge regarding the area of Pedagogical Knowledge?
8. How can you enhance your digital storytelling skills and knowledge regarding the area of Technological Knowledge?

After discussing and exchanging ideas and opinions on the jamboard, teachers can discuss in depth the questions on the jamboard and each one can present his/her own needs regarding digital storytelling.

#### **POSSIBLE DEBRIEFING/ASSESSMENT**

#### **Class discussion (15 minutes)**

The trainer asks the trainees to reflect on the lecture and activities performed and starts a discussion about it. The discussion is fueled with the following questions:

How did you feel while working on this Training Unit?

What was easy/difficult?

What will you bring home?

Have you identified your personal training needs?

What are your training needs?

At the end of the evaluation phase, the trainer asks the trainees to choose a GIF that represents what they bring home at the end of the training session.

## REFERENCES

Koehler, M., & Mishra, P. (2009). What is technological pedagogical content knowledge (TPACK)?. *Contemporary issues in technology and teacher education*, 9(1), 60-70.  
<https://www.learntechlib.org/p/29544/>

Kurt S. (2018) website article on Educational Technology:

<https://educationaltechnology.net/technological-pedagogical-content-knowledge-tpack-framework/>

Instructional video (to show during the lecture) "What is the TPACK Model?"

<https://www.youtube.com/watch?v=yMQiHJsePOM>

TPACK Framework

<https://www.powerschool.com/blog/the-tpack-framework-explained-with-classroom-examples/>

## MODULE

Module 4 - Collecting feedback and continuous learning

## TRAINING UNIT

4.3 The most relevant sources to independently learn and update on the topic.

## OVERVIEW

Educators need to be equipped with the necessary knowledge and skills to be able to use digital storytelling in an optimal way in their teaching. They need to be able to find and use the most appropriate pedagogical methods and resources for the age group and subject they are teaching, and select resources based on their user-friendliness, privacy and safety for students. All of this, in a fast changing technological world. To achieve all the above, educators need to keep learning about digital storytelling independently and learn how to access the training they need.

Through brainstorming activities, lectures, group work and individual activities teachers will learn how to update on the topic of digital storytelling.

The unit is made up of three parts. In the first part, teachers complete a brainstorming exercise and are introduced to different digital storytelling resources and their classification through a lecture. In the second part the teachers gain practical experience with digital storytelling resources by classifying them in knowledge areas (content/technological/pedagogical). The third part proposes a self-reflection individual activity in which the teachers reflect on their training needs and plan their future self-study on the topic of digital storytelling.

By the end of the training unit teachers will feel empowered to keep learning independently on digital storytelling.

## LEARNING OBJECTIVES

At the end of the training unit the teachers will:

### **Knowledge and understanding**

- Know about digital storytelling learning resources in terms of content knowledge/pedagogical knowledge/technological knowledge.

### **Ability to learn (learning skills)**

- Analyze his/her training needs related to digital and pedagogical skills for the structuring of storytelling.
- Identify the most relevant sources to independently keep their knowledge on the topic up to date.
- Use adequate tools to monitor his learning, reflect on it and activate a review process in order to improve it.

**Communication skills**

- Discuss with colleagues available training opportunities to keep learning about digital storytelling.

TIMING	MATERIAL AND RESOURCES
100 minutes	<ul style="list-style-type: none"> <li><input type="checkbox"/> Individual writing tools (paper, pencils, pen etc.)</li> <li><input type="checkbox"/> Group writing tools (flipchart, markers, blackboard etc.)</li> <li><input type="checkbox"/> Digital individual devices (smartphone, tablet, laptop etc.)</li> <li><input type="checkbox"/> Digital group devices (computer &amp; projector, speakers etc.)</li> <li><input type="checkbox"/> Specific resources:</li> </ul>

**DELIVERY MODE**

The training unit will be delivered through:

**Acquisition of knowledge**

Brainstorming Activity

Lecture

**Application of knowledge**

Practical Group Activity

**Personalisation of knowledge**

Individual Reflection Activity

**DESCRIPTION OF THE TRAINING ACTIVITY – METHODOLOGY**

### **Activity 1 (15 minutes)**

Group work. The trainer divides the class into subgroups of four people and asks them to build a mind map on their training needs based on the findings of the previous training unit. To design the mind map Mural, which is a collaborative mind mapping tool, will be used. After that, the trainer asks them to use the mind map, to raise ideas about how the training gaps previously reported can be tackled.

Group discussion. One representative of each group presents the mind map and the trainer takes notes on the blackboard, by summarizing the main ways to address the teachers' training needs regarding digital storytelling.

### **Activity 2 (30 minutes)**

The trainer introduces the theoretical part of the module supported by a synthetic presentation (by using PowerPoint, Canva or similar applications) based on the resources included in the references' section. The lecture answers the questions below.

#### **What resources are available for addressing training needs in content knowledge?**

To address teachers' knowledge of digital storytelling including knowledge of concepts, theories, evidence, frameworks, the field's best practices a wide range of online and offline resources can be found. For instance, scientific articles, magazine articles, books, seminars, conferences, university lectures and invited talks can offer valuable insight regarding digital storytelling itself and its theoretical basis. For example, the StoryCenter website provides a wide variety of webinars, online workshops, online events and blog posts on the basics of digital storytelling in education, literature and media.

#### **What resources are available for addressing training needs in pedagogical knowledge?**

To address teachers' knowledge regarding the application of digital storytelling in the school classroom including instructional strategies, student needs, student learning styles, classroom management skills when conducting digital learning activities, lesson planning for digital storytelling and assessments, a wealth of resources is also available both online and offline. For



instance, scientific articles, magazine articles, books, seminars, webinars, MOOCs, university lectures and invited talks, networking among teachers and conferences can offer valuable insight regarding the application of digital storytelling in the school classroom. For example, the book entitled “Digital Storytelling in the Classroom: New Media Pathways to Literacy, Learning, and Creativity” ([https://www.amazon.com/Digital-Storytelling-Classroom-Pathways-Creativity/dp/1452268258/ref=sr\\_1\\_1?ie=UTF8&qid=1379529326&sr=8-1&keywords=jason+ohler](https://www.amazon.com/Digital-Storytelling-Classroom-Pathways-Creativity/dp/1452268258/ref=sr_1_1?ie=UTF8&qid=1379529326&sr=8-1&keywords=jason+ohler)) provides practical techniques to combine storytelling with the school curriculum content and tips on how to incorporate digital literacy into the school classroom.

### **What resources are available for addressing training needs in technological knowledge?**

To address teachers’ digital skills and enhance their familiarization with digital tools (collaboration tools, presentation tools, tools that stimulate creativity, assessment tools, audiovisual tools, etc.), a lot of resources are available. These resources can be mainly found online and include websites with collections of digital storytelling tools (for example <https://www.oppida.co/blogs/top-15-digital-learning-resources-for-storytelling-in-k-12/>, <https://www.educatorstechnology.com/2012/06/list-of-best-free-digital-storytelling.html>, <https://www.techlearning.com/tl-advisor-blog/30-sites-and-apps-for-digital-storytelling> ), tutorial videos, or online tool guides. Through these resources, teachers can learn how to use digital tools to create their own digital stories, through videos, animations, talking avatars, comic books, eBooks, digital poems, audio instructions, photo books etc. All these different kinds of digital stories can be designed through different digital tools, including Apps, websites, and downloadable programs.

### **How can training resources be classified?**

The training resources can be classified in the following categories:

1. Training courses/webinars/events

[StoryCenter](#)

2. Online platforms

<https://www.jasonohler.com/storytelling/assessmentWIX.cfm>

<https://www.storycenter.org/>

<https://storytellingacademy.education/>, <https://pro.europeana.eu/project/europeana-as-a-powerful-platform-for-storytelling>

3. Scientific articles

Digital storytelling in higher education | SpringerLink:

<https://link.springer.com/article/10.1007/bf03033420>

Digital Storytelling: A New Player on the Narrative Field - Learning & Technology Library (LearnTechLib): <https://www.learntechlib.org/p/73892/>

A systematic review of educational digital storytelling - ScienceDirect:

<https://www.sciencedirect.com/science/article/abs/pii/S0360131519303367>

4. European projects

Europeana as a 'powerful platform for storytelling' | Europeana Pro:

<https://pro.europeana.eu/project/europeana-as-a-powerful-platform-for-storytelling>

<https://www.imintalesproject.eu/>

<http://creative.eun.org/>

<https://www.includedeurope.eu/>

<https://eurospectives.info/>

<http://www.dist-stories.eu/>

5. Conferences

11th International Digital Storytelling Conference, June 20-23, 2023: Online the CfP |

Welcome to the Storytelling Academy:

<https://storytellingacademy.education/2022/12/15/11th-international-digital-storytelling-conference-june-20-23-2023-online-the-cfp/>

#### 6. Books

Amazon.com: Digital Storytelling in the Classroom: New Media Pathways to Literacy, Learning, and Creativity: 9781452268255: Jason Ohler: Books:

[https://www.amazon.com/Digital-Storytelling-Classroom-Pathways-Creativity/dp/1452268258/ref=sr\\_1\\_1?ie=UTF8&qid=1379529326&sr=8-1&keywords=jason+ohler](https://www.amazon.com/Digital-Storytelling-Classroom-Pathways-Creativity/dp/1452268258/ref=sr_1_1?ie=UTF8&qid=1379529326&sr=8-1&keywords=jason+ohler)

#### 7. Video Tutorials

How to Use Book Creator - YouTube:

<https://www.youtube.com/watch?v=Mlap3afudKk>

Getting Started On Storybird - YouTube:

<https://www.youtube.com/watch?v=FpE6z2AOK-I>

#### 8. Websites with collections of resources

Top 15 digital learning resources for storytelling in K-12 - Oppida:

<https://www.oppida.co/blogs/top-15-digital-learning-resources-for-storytelling-in-k-12/>

Some of The Best Free Digital Storytelling Tools for Teachers | Educational Technology and Mobile Learning: <https://www.educatorstechnology.com/2012/06/list-of-best-free-digital-storytelling.html>

Top Tools for Digital Storytelling | Tech & Learning: <https://www.techlearning.com/tl-advisor-blog/30-sites-and-apps-for-digital-storytelling>

#### 9. Online tool guides

Getting-Started-Guide-Scratch2.pdf (mit.edu):

[https://cdn.scratch.mit.edu/scratchr2/static/\\_709da8e5f3d72129538a4ccdbcbf5f2a\\_/pdfs/help/Getting-Started-Guide-Scratch2.pdf](https://cdn.scratch.mit.edu/scratchr2/static/_709da8e5f3d72129538a4ccdbcbf5f2a_/pdfs/help/Getting-Started-Guide-Scratch2.pdf)

#### 10. Local training opportunities

Ψηφιακή αφήγηση I – ΚΕΔΙΒΙΜ ΤΕΙ ΑΜΘ):

<http://kedivim.teiimt.gr/courses/%CF%88%CE%B7%CF%86%CE%B9%CE%B1%CE%BA%CE%AE-%CE%B1%CF%86%CE%AE%CE%B3%CE%B7%CF%83%CE%B7-i/>

#### **Activity 3 (30 minutes)**

The trainer divides the class into subgroups of four people and asks the teachers to look up the resources presented in the third part of *Activity 2 - How can training resources be classified?*, and organize them per knowledge area. Teachers look up these resources, read their descriptions, try them out and organize them in three different categories (content knowledge/pedagogical knowledge/technological knowledge) in a word document. Afterwards, groups compare and contrast their categorization and discuss if there are any inconsistencies. The trainer remains at teachers' disposal to help teachers and solve doubts (some of the resources can be placed in multiple categories).

#### **Activity 4 (15 minutes)**

After working on the categorization, each teacher reflects on his/her training needs, prioritizes them and makes a sort of plan on short/medium/long term goals to train and keep up to date on the topic of digital storytelling.

### **POSSIBLE DEBRIEFING/ASSESSMENT**

#### **Class discussion (10 minutes)**

The trainers ask the trainees to reflect on the activities conducted in this training unit. The trainer stimulates a reflection through the following questions or other relevant questions:

How did I feel during the activities in this training unit? What was easy/difficult? What do I bring home? How can I use it in my professional activity? At the end of the evaluation phase, the

trainers ask the trainees to choose an image/word that represents what they bring home at the end of the training session.

## REFERENCES

The resources are listed per knowledge area (the categorization is indicative, some resources are placed in multiple categories):

### Content knowledge

<https://www.storycenter.org/>

Digital storytelling in higher education | SpringerLink:

<https://link.springer.com/article/10.1007/bf03033420>

Digital Storytelling: A New Player on the Narrative Field - Learning & Technology Library (LearnTechLib): <https://www.learntechlib.org/p/73892/>

A systematic review of educational digital storytelling - ScienceDirect:

<https://www.sciencedirect.com/science/article/abs/pii/S0360131519303367>

11th International Digital Storytelling Conference, June 20-23, 2023: Online the Cfp | Welcome to the Storytelling Academy: <https://storytellingacademy.education/2022/12/15/11th-international-digital-storytelling-conference-june-20-23-2023-online-the-cfp/>

Ψηφιακή αφήγηση I – ΚΕΔΙΒΙΜ ΤΕΙ ΑΜΘ:

<http://kedivim.teiimt.gr/courses/%CF%88%CE%B7%CF%86%CE%B9%CE%B1%CE%BA%CE%AE-%CE%B1%CF%86%CE%AE%CE%B3%CE%B7%CF%83%CE%B7-i/>

<https://storytellingacademy.education/>

<https://pro.europeana.eu/project/europeana-as-a-powerful-platform-for-storytelling>

### Pedagogical Knowledge

<https://www.storycenter.org/>

<https://www.jasonohler.com/storytelling/assessmentWIX.cfm>

Europeana as a 'powerful platform for storytelling' | Europeana Pro

<https://www.imintalesproject.eu/>

<http://creative.eun.org/>

<https://www.includedeurope.eu/>

<https://eurospectives.info/>

<http://www.dist-stories.eu/>

Digital storytelling in higher education | SpringerLink:

<https://link.springer.com/article/10.1007/bf03033420>

<https://storytellingacademy.education/>

<https://pro.europeana.eu/project/europeana-as-a-powerful-platform-for-storytelling>

### Technical Knowledge

How to Use Book Creator - YouTube: <https://www.youtube.com/watch?v=Mlap3afudKk>

Getting Started On Storybird - YouTube: <https://www.youtube.com/watch?v=FpE6z2AOK-I>

Top 15 digital learning resources for storytelling in K-12 - Oppida:

<https://www.oppida.co/blogs/top-15-digital-learning-resources-for-storytelling-in-k-12/>

Some of The Best Free Digital Storytelling Tools for Teachers | Educational Technology and Mobile Learning: <https://www.educatorstechnology.com/2012/06/list-of-best-free-digital-storytelling.html>

Top Tools for Digital Storytelling | Tech & Learning: <https://www.techlearning.com/tl-advisor-blog/30-sites-and-apps-for-digital-storytelling>

Getting-Started-Guide-Scratch2.pdf:

<https://cdn.scratch.mit.edu/scratchr2/static/709da8e5f3d72129538a4ccdbcbf5f2a/pdfs/help/Getting-Started-Guide-Scratch2.pdf>

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