

This item was submitted to [Loughborough's Research Repository](#) by the author.
Items in Figshare are protected by copyright, with all rights reserved, unless otherwise indicated.

Digital storytelling to enhance active and deep learning within the Smithsonian Learning Lab [CONTEXTUAL PDF]

PLEASE CITE THE PUBLISHED VERSION

VERSION

NA (Not Applicable or Unknown)

LICENCE

CC BY-NC-ND 4.0

REPOSITORY RECORD

Liguori, Antonia. 2021. "Digital Storytelling to Enhance Active and Deep Learning Within the Smithsonian Learning Lab [CONTEXTUAL PDF]". Loughborough University. <https://hdl.handle.net/2134/13604228.v1>.

Antonia Liguori

Loughborough University

D27 English Literature and Language

Digital Storytelling to Enhance Active and Deep Learning within the Smithsonian Learning Lab

Co-design workshops with accompanying Smithsonian Learning Lab collections

"Conversation Circles" across the Atlantic
Smithsonian National Portrait Gallery, Washington D.C., US
In collaboration with DC Public Library, US, April 2018
<https://learninglab.si.edu/q/ll-c/w3DA7PWfKfYK00LT5>

"Pertenece": Using Museum Objects to Prompt Stories and Explore Sense of Place and Belonging
Smithsonian National Portrait Gallery, Washington D.C., US
Fairfax County Public School, Virginia, US, May 2018
<https://learninglab.si.edu/q/ll-c/0dpY76mxRzzGdVRc>

"Home and Away": Using museum objects to prompt stories and explore sense of place and belonging
Smithsonian Center for Learning and Digital Access, Washington D.C., US
Oyster-Adams Bilingual School, Washington D.C., US, May 2018
<https://learninglab.si.edu/q/ll-c/U2r9FpMuGNrzCvGA#/r/18875>

Explore Teaching with Digital Storytelling: An Interdisciplinary Workshop Paul Peck Humanities Institute at Montgomery College, Maryland, US
Smithsonian Center for Learning and Digital Access, Washington D.C., US, June 2018
<https://learninglab.si.edu/q/ll-c/XbHKgkU3zdYe0RpB#/r/18999>

Digital Storytelling to Explore Latinx History, Arts and Culture
Patricia & Phillip Frost Art Museum, Florida, US, Smithsonian Center for Learning and Digital Access, Washington D.C., US, January 2019
<https://learninglab.si.edu/q/ll-c/UpPci67JKLFpuT2V>

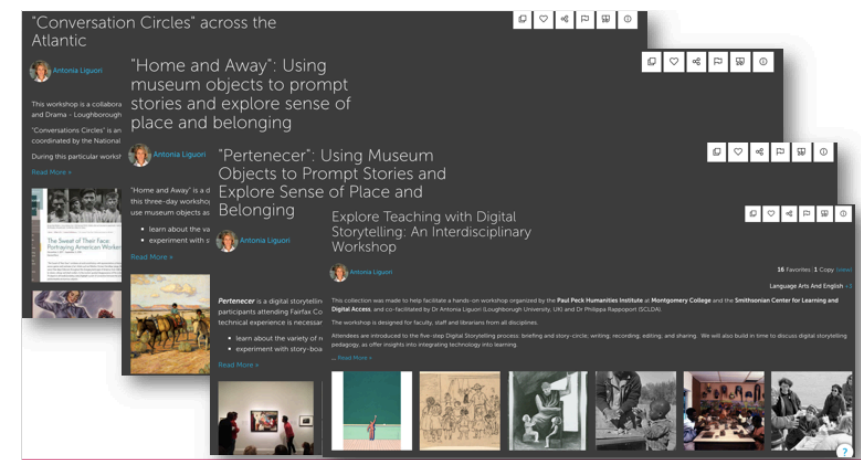


Figure 1 The Learning Lab collections created to facilitate the first workshops

Exploring the meaning of "social inclusion" through Digital Storytelling Dresher Center for the Humanities at University of Maryland Baltimore County, US, February 2019

<https://learninglab.si.edu/q/ll-c/7ncXfwJLWpTUAsp1>

Written output

Liguori, A. & Rappoport, P. (2018). Digital storytelling in cultural and heritage education: Reflecting on storytelling practices applied with the Smithsonian Learning Lab to enhance 21st-century learning. Loughborough University. Conference contribution.

<https://hdl.handle.net/2134/35051>

A selection of audio recordings of participants' post-workshop reflections are included in this pdf.

Research Funding

The research described here has been underpinned by two separate peer-reviewed research grants from AHRC (AH/R000700/1, **Storying the Cultural Heritage**, £5670) and EU Commission ([2015-1-NL01-KA201-009021](#), **DICHE**, €307,189).



Figure 2 Warm-up activity organised by the Smithsonian Institution in collaboration with Oyster-Adams public School in Washington DC

Index of Contents

Introduction/Context	4
Research Questions/Challenges	4
Methods/Processes	5
Workshops participants' reflections	8
Insights	9
Dissemination	10



Figure 3 The first Digital Storytelling workshop delivered at the Smithsonian National Portrait Gallery

Introduction/Context

This portfolio represents a practice-led research workstream across two projects interrogating how digital storytelling can be adapted to a variety of education environments (both formal and non-formal) to facilitate active and deep learning. This work initially grew out of Liguori's work on a variety of EU funded projects focusing on new digital tools for School and Adult Education and was expanded and implemented during her Fellowship in 2018 at the Smithsonian Center for Learning and Digital Access, where she had the opportunity to co-design a new inclusive teaching practice. Liguori subsequently disseminated this practice through additional EU funded projects, collaborative work with NGOs in the global South and during public lectures in the US and in Europe.

This work has enabled the Storytelling Academy at Loughborough University to explore new theories on digital storytelling in Education and methods of practice-led storytelling research, whereby the benefits of the creative process foster the learning process. As a result, some of the Institutions involved in the co-design workshops, such as the Montgomery College in Maryland, US, and George Washington University, D.C. US, implemented digital storytelling as a teaching strategy and assessment tool in their practice. The work underpins a REF2021 Impact Case Study: 'Digital Storytelling for Active and Deep Learning: Transforming Educational Practices for Hard to Reach Groups across the US and Europe'.

Research Questions/Challenges

The following questions informed the evolution of the research:

- How can '**storying**' the cultural heritage represent a way of making information come **emotionally alive** in a learning process aimed at improving the **21st Century skills**?
- How can **digital storytelling** be applied to enhance the **4Cs** (Creativity, Critical thinking, Collaboration, Communication) in formal and informal learning?
- How might **digital storytelling** process be embedded as a teaching strategy in the **Smithsonian Learning Lab**?

Methods/Processes

This research aspired to challenge DS as a method by emphasising the importance of co-designing the process itself with participants, and by moving from the five-step process (briefing/story-circle, story-writing, audio editing, video editing, screening/sharing) to a context-tailored approach.

Multiple audiences were engaged not only to evaluate potential diverse impacts on different stakeholders, but mainly to co-design the workshop itself in a way that would identify specific needs and objectives and maximize participation. In particular, because incorporating DS in the Smithsonian Learning Lab as a teaching strategy for both formal and informal learning was planned, participants' engagement at an early stage of the research process was essential to understand how to balance the digital component with the human touch in a way that would facilitate deep and active learning.



Figure 4 A workshop participant presents his storyboard to the group during a session at the Smithsonian National Portrait Gallery.

After a few warm-up activities run in collaboration with the Smithsonian National Portrait Gallery and the Oyster-Adams Bilingual Middle School in Washington, D.C., to test ways in which to cross multiple barriers and challenges (emotional, linguistic, cultural) and also how to structure the workshop when working with large groups, the two main activities were developed and carried out in chronological order:

1. a workshop entitled “*Pertenecer*: Using Museum Objects to Prompt Stories and Explore Sense of Place and Belonging” to test the approach in an informal, multigenerational education setting;
2. a workshop entitled “Explore Teaching with Digital Storytelling: An Interdisciplinary Workshop” with participants who wanted to experiment with DS and the Learning Lab in formal education.

“Perteneceer: Using Museum Objects to Prompt Stories and Explore a Sense of Place and Belonging”

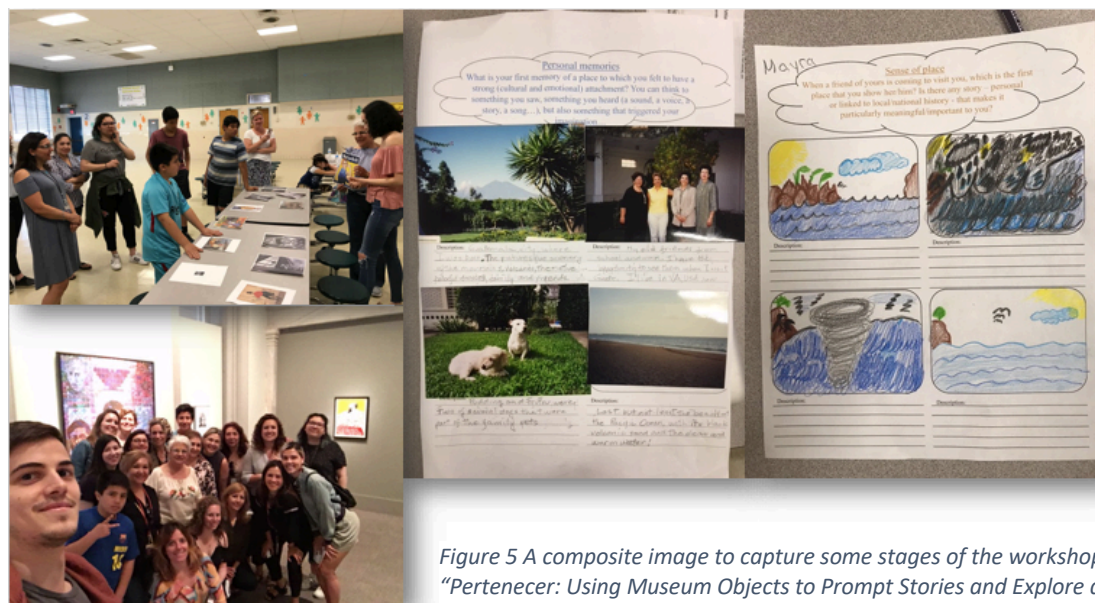


Figure 5 A composite image to capture some stages of the workshop “Perteneceer: Using Museum Objects to Prompt Stories and Explore a Sense of Place and Belonging” in Virginia and Washington D.C. (US)

The theme, structure, and aims of the workshop “Perteneceer” were identified and co-designed with educators Micheline Lavalle and Florencia Lavalle from the Fairfax County Public Schools’ Family Literacy Program, Beth Evans of the Youth and Family Programs division of the Smithsonian’s National Portrait Gallery, Elizabeth Scotto-Lavino of George Mason University in Virginia, Philippa Rappoport from the Smithsonian Center for Learning and Digital Access.

“Perteneceer” was offered as an extension of the Family Literacy Program, an ongoing collaboration between the Smithsonian Institution and Fairfax County Public Schools that promotes English Literacy and supports learning for the whole family. The primary target audience of this programme is immigrants in Fairfax County, Virginia (United States). Some immigrants are recent, others have lived in the United States for a long time, but all are in the programme to learn English and develop advocacy and leadership skills.

Few families in this programme have had exposure to the arts, given that they came from low-income families in rural areas, and lack formal education. During the three-day workshop (3 hours a day), Dr Liguori adapted the five-step Digital Storytelling process to encourage active intergenerational dialogue, overcome language and digital barriers, enhance participants’ learning, and explore how to integrate the use of artifacts as prompts for the storytelling process.

“Explore Teaching with Digital Storytelling: An Interdisciplinary Workshop”

“Explore Teaching with Digital Storytelling” was a hands-on interdisciplinary workshop organised by the Paul Peck Humanities Institute at Montgomery College and the Smithsonian Center for Learning and Digital Access, designed for faculty in all disciplines, as well as other staff members and librarians. Montgomery College students’ ages range from 18 into the 70s. Some faculty and staff members had already had DS training sessions, but none had ever applied the methodology in their teaching or for any other professional use.

When Sara Bachman Ducey, Professor of Nutrition and Food, college-wide chair of integrative studies, and director of the Paul Peck Humanities Institute, invited the college staff to participate in this workshop, she was overwhelmed by requests from people wanting to attend, even though it was held during their vacation period when they were off campus.



Figure 6 A composite image to capture some steps of the workshop "Explore Teaching with Digital Storytelling: An Interdisciplinary Workshop" facilitated by Dr Liguori in Maryland, US.

In response to participants' requests, Dr Liguori designed two separate five-hour sessions at the school's Rockville campus, with two groups in two consecutive days, totalling 55 participants over the two sessions. A third workshop took place at the Smithsonian Center for Learning and Digital Access in Washington, D.C., for students as well as faculty members who had not yet completed their stories. It was a stimulating challenge to deliver such a short DS workshop, during which researchers still wanted to test how to integrate museum objects to prompt the storytelling process and include the DS method in the Learning Lab as a teaching strategy.

This challenge provided the opportunity for the researchers to reflect more on how to develop a Learning Lab collection (<http://learninglab.si.edu/q/ll-c/XbHKgkU3zdYe0RpB>) in which participants could find supporting materials to help them grasp the meaning and aims of the DS process within this specific context.

Additional workshops were delivered in partnership with a number of institutions from the US and Europe, such as: Institute for Digital Exploration (IDEx), University of South Florida, US; University of Maryland, US; University of Iowa, US; Patricia & Phillip Frost Art Museum, US; University of Roma Tre, Italy; Luigi Sturzo Institute, Italy; Siena School for Liberal Arts, Italy; UN Live – The Museum for the United Nations, Denmark; Hope Raisers, Kenya).

Workshop participants' reflection on the process [full audio on SoundCloud]

"We are all part of culture!"

<https://soundcloud.com/antonia-liguori/pertenecer-we-are-all-culture/s-XY7Ee>

"Was really touching to hear the connection they were making between the portraits and their personal lives".

<https://soundcloud.com/antonia-liguori/looking-at-artefacts-and-making-personal-connections/s-uG8Ct>

"Digital Storytelling helped participants to bridge 3 gaps".

<https://soundcloud.com/antonia-liguori/digital-storytelling-to-bridge-three-gaps/s-cO6J0>

"There is something very deep in this kind of experience".

<https://soundcloud.com/antonia-liguori/digital-storytelling-to-facilitate-emotional-impact-in-learning/s-4GDgc>

"Using DS and the Smithsonian Learning Lab helps to bring the power of teaching with objects into life".

<https://soundcloud.com/antonia-liguori/using-the-learning-learning-lab-and-ds-for-object-based-learning/s-hAhDY>

"The Smithsonian Learning Lab is appealing to our natural sense and ability to communicate and receive messages".

<https://soundcloud.com/antonia-liguori/using-smithsonian-resources-for-storytelling/s-e4St2>

"Digital Storytelling as assignment in the Learning Lab"

<https://soundcloud.com/antonia-liguori/digital-storytelling-in-the-smithsonian-learning-lab-as-assignment/s-tSRsj>

"Digital Storytelling gives you permission to be a creator of knowledge"

<https://soundcloud.com/antonia-liguori/digital-storytelling-makes-you-a-creator-of-knowledge/s-0Ek7U>

"DS would be a terrific way of sharing the final product of their research"

<https://soundcloud.com/antonia-liguori/digital-storytelling-for-sharing-research/s-q9tYv>

"DS is ideal for spreading knowledge and starting conversations"

<https://soundcloud.com/antonia-liguori/digital-storytelling-is-a-database-of-knowledge/s-iQmyD>

"We need people interested in learning!"

<https://soundcloud.com/antonia-liguori/digital-storytelling-to-engage-larger-audience/s-vLbYd>

Insights

This work gave Dr Liguori the opportunity to rethink and challenge Digital Storytelling as a practice and explore the potential of using this method to enhance 21st-century skills. In particular, incorporating Digital Storytelling as a teaching strategy in the Learning Lab supported a new workshop structure, one designed to facilitate effective intergenerational dialogue, overcome language and digital barriers, and enhance participants' learning. This research demonstrated an ideal fit to marry the use of the Learning Lab with DS, especially for object-based learning. In addition, the collections produced for the two workshops offer models to support replication.

For the general public involved in informal learning, applying DS in the Learning Lab was very rewarding because they had the perception of being knowledge producers, as if their intellectual production was as meaningful as an artifact in the museum. Seeing their digital story uploaded in the same place gave validation to the participants who could share their product through the web link, and it also enabled creativity since the Learning Lab collection can now be copied and adapted by other users. For the participants involved in formal learning, the combined use of the Learning Lab and DS during the training process effectively modelled the use of the Learning Lab and represented a new entree for digital users to the platform itself.

From a DS and workshop facilitation perspective, the main takeaways are that:

- co-designing the structure and aims of the workshop is essential especially when learning and social interaction are paramount to the experience and the process;
- facilitating a meta-workshop with educators involved in formal learning represented an enriching process for all the people involved (including the facilitators), and dismantled those potential barriers that teachers can build up when they assume the role of learners;
- removing the focus on the production of the stories and emphasising the importance of the process can appear controversial, but it enhances learning outcomes: even if the screening session did not include all the videos produced by the participants, or even if it involved only the sharing of some draft edits, the process did not lose its effectiveness. Further, the sharing phase was extended online as participants continued to complete and submit their digital stories after the end of the workshop for inclusion in the online Learning Lab collection.

Reflecting from a 21st-century learning perspective, this research project exemplifies how using both DS and the Learning Lab together unlocks creativity and demystifies the use of cultural artifacts for teaching. It also shows how the combination of the two increases accessibility in different ways for different stakeholders. Regarding the 4Cs (Creativity, Critical thinking, Communication, and Collaboration) researchers learned that these skills are often combined, and it is difficult to separate them. Skills are developed through different stages of the DS process, and the primary challenge – still to be explored in future research – is how to assess these skills through DS. The majority of the educators involved in this project acknowledged that “Crea-tical thinking” (meaning a combination of Creativity and Critical thinking) is the essential skill to be enhanced in the younger generation, to help them cope with complexity and change in today's digital world (Trilling & Fadel 2009). As a remedy to this lack of abilities and dispositions in identifying, understanding, and creating multiple perspectives, this research suggests bringing multiple voices to the fore and using storytelling as a way to do so.

Dissemination



Dissemination of this work has taken place (and continues to take place) in four ways:

1. The Learning Lab Collection made available on the website of [The Storytelling Academy](#).
2. Written academic outputs, such as the edited book *Story Work for a Just Future - Co-creating Diverse Knowledges and Methods within an International Community of Practice* to be published by the Smithsonian Scholarly Press in 2022.
3. Presentation of the research at the International DST conference in Greece (2018) and at the DRHA Conference - Creative Legacies: Collaborative Practices for Digital Cultural Heritage, Malta (2018).
4. Presentation and discussion of the work in the context of other projects with new partners.

Figure 7 Dr Liguori presenting her work with a colleague from the Smithsonian Institution at the National Gallery of Modern Art in Rome and at the University of Roma Tre, Italy.