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Performance in Pedagogy: Ethical and Pedagogical Dilemmas Shaping Virtual Survivor Testimony

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ABSTRACT

Digital first-person testimonies have become increasingly more available and utilized to engage students. However, with its increase, digital first-person testimonies are facing significant ethical and pedagogical challenges, especially within the field of Holocaust Education which has historically relied on survivor testimony. With the era of living survivors rapidly coming to an end, understanding the role of digital first-person testimonies within Holocaust Education is paramount. This article summarizes the work of a larger empirical study on the use of Virtual Interactive Holocaust Survivor Testimony (VIHST) in place of live Holocaust survivor testimony at the National Holocaust Centre and Museum (UK). The overview of the findings answers two research questions concerning the implementation of VIHST at the National Holocaust Centre and Museum (UK): 1) How do stakeholders perceive the value, utility, and challenges of learning from and with VIHST? 2) What are the interactional forces shaping pedagogical decisions around the use of VIHST in museums?

Keywords: Holocaust education, digital testimony, historical memory, museum education

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INTRODUCTION

Digital first-person testimonies have become increasingly available and utilized to engage students. However, digital first-person testimonies face significant ethical and pedagogical challenges, especially within the field of Holocaust Education which has historically relied on survivor testimony (Ballis, et. al., 2025; Marcus, et. al., 2021; McGregor, et. al., 2022; Tirosh & Mikel-Arieli, 2023; Traum, et. al., 2015; Walden, 2021). With the era of living survivors rapidly coming to an end, understanding the role of digital first-person testimonies is paramount. This article summarizes the work of a larger empirical study on the use of Virtual Interactive Holocaust Survivor Testimony (VIHST) in place of live Holocaust survivor testimony at the National Holocaust Centre and Museum (UK).

THE RESEARCH

The Forever Project at the National Holocaust Centre and Museum (UK) was developed in response to the decreasing availability of Holocaust survivors to participate in the Centre's educational programs. The Forever Project was created using 3D recording technologies to capture the testimonies of 10 survivors. Students visiting the Centre can now 'experience' a survivor's testimony through a 3D digital representation projected onto a screen. When the Forever Project is working as intended, students speak into a microphone asking the 3D representation of the survivor a question, speech recognition software then transcribes the question, and then a nearest neighbor search software matches that question as closely as possible with a 3D pre-recorded response to that question.

The overview of the findings below answers two research questions concerning the implementation of VIHST at the National Holocaust Centre and Museum (UK):

1. How do stakeholders perceive the value, utility, and challenges of learning from and with VIHST?

2. What are the interactional forces shaping pedagogical decisions around the use of VIHST in museums?

Data were generated primarily through three methods: interviews with six staff members and six survivors; observational data of the educational programs including live survivor testimony and VIHST sessions with student groups; and focus group interviews with student groups. Student groups visiting the Centre ranged from upper primary grades to lower secondary grades from four schools. Through thematic analysis of interview transcripts and observational data, we identified several key findings related to student engagement, authenticity, and the ethical implications of virtual testimony.

FINDINGS

Our research (Marcus, et. al., 2021) found that the stakeholders (museum staff and leadership, visiting educators, students, survivors, etc.) grappled with several pedagogical and ethical challenges in the implementation of VIHST resulting in intended and unintended educational experiences. The biggest challenge revolved around technological issues. Day-to-day obstacles, such as the technology simply not working or the 'survivor' not answering a question or providing an inappropriate answer to a student's question, broke the illusion of interacting with a survivor. Moreover, the museum staff's presence became more front and center. Rather than their traditional role which mostly encompassed introducing a live survivor and facilitating a Q&A session, museum staff were forced to act more as stagehands to introduce the technology, make it sound intriguing, explain why students will be listening to survivors, organize the timing of the performance, pass out 3D glasses, and troubleshoot any technological issues that arose. When the technology went awry, museum staff would ad lib or stick to a preselected set of questions rather than allowing students to generate their own questions organically. Furthermore, museum staff began specializing in specific survivor testimonies so that they could be more prepared to think on their feet as issues arose—across the ten virtual survivors, there were more

than 15,000 distinct answers to questions and museum staff were expected to be able to know and anticipate questions and answers. In short, the goal of creating a plausible and coherent illusion of an actual survivor was constantly broken. Similarly, students expressed skepticism about the technology, questioning whether the responses were "real" or "scripted" despite evidence showing students demonstrate empathy and historical thinking skills after viewing the digital testimony.

Museum staff also faced several ethical dilemmas. The first was selecting which survivors that worked with the National Holocaust Centre and Museum (UK) would be recorded. Museum staff chose the ten survivors based on a variety of factors including the survivors' performance and personal appeal with audiences, the compelling nature of the testimony, background variables such as the perspective range of the testimony, the context, the nationality of the survivor, and their gender, first language, and health. The range of the selected survivors was also meant to be appropriate for younger and older students. However, given the personal relationships museum staff had built with the survivors over many years of working together, they struggled with not showing bias despite the robust criteria they created. A more complex ethical dilemma facing museum staff centered on editing the recorded testimonies. Traditional live survivor testimonies would be over 60 minutes long at times, and this was reflected in the 3D recordings for the Forever Project. Editing testimonies could make them more digestible for school groups, both in terms of length and content. Moreover, testimonies, at times, had historical inaccuracies. The museum grappled with whether or not to correct these inaccuracies given they never corrected mistakes made by live survivors. Similarly, students could ask questions in which there is no direct recorded answer. Given the museum staff's knowledge of the survivor and answers to similar questions, museum staff felt conflicted by the ethical considerations of providing their own responses.

PRACTICAL IMPLICATIONS FOR TEACHERS

VIHST is operating in an increasingly sophisticated field with ongoing studies

continuingly uncovering the potential and limitations of digital first-person testimonies with practical implications for teachers. Our research investigated digital testimonies that are static and fixed to the context in which they were recorded. The power of live presentations was that they can adjust their narratives, drawing parallels between their experiences and current social and political issues and adjusting to the audience, but digital testimonies, as we observed, cannot. This raises questions about the flexibility of testimony as a teaching tool. Moreover, teachers might have more success teaching testimony as a source to be analyzed alongside other sources. From our research and others (Schweber, 2006), students tend to hold reverence for live survivors, treating them as exceptional humans not to be questioned or challenged. Digital testimonies provide the opportunity to break from this by framing testimony as a historical source for critical analysis: 1) analyzing how testimonies are created and framed, asking students to consider what is included, what is left out, and how digital testimony shapes historical narratives; 2) corroborating testimony with other survivor narratives, highlighting similarities and discrepancies; 3) comparing testimony with archival documents (e.g., newspapers, survivor memoirs) to explore how different sources represent history; 4) encouraging students to reflect on nature of memory by discussing how survivors recall and narrate past events; and 5) looking at digital testimony with a historiographical and media/technological preservation eye to understand process and product, not simply novelty items but efforts to save the past. Other projects, such as the Inside Kristallnacht project, have begun this work by incorporating VIHST from multiple survivors and historical artifacts within an immersive mixed-reality environment. Teachers would still need to take care of preparing students for this work, making sure to debrief, reflect, and use historiographical skills, but this project does go beyond a single story.

Additionally, given the limitations of VIHST, teachers will need to scaffold and structure student inquiry. Virtual eyewitnesses cannot respond to unanticipated questions that have not been previously recorded. Teachers will need to aid students in developing thoughtful historical grounded inquiries and structure engagement with

these testimonies in thoughtful and aware ways; students need to understand what these testimonies are, why they are being used, and what their limitations are, no differently than how students understand other primary sources. Students need to understand testimony in historical and place-based context, that these stories come from a different time and place, utilizing maps, photos, and other sources to support this understanding and aid the development of appropriate historical questions that can be explored with sources including the testimony.

Lastly, teachers must account for the ethical considerations of using digital testimonies. Our research focused on a museum setting, but as this technology advances, potential use in the classroom is a looming reality, particularly with resources like the USC Shoah Foundation's IWitness program which is available online. Teachers will have to juggle some of the ethical considerations we've outlined above and may not have the expertise. Survivor testimony inherently deals with conceptually and affectively difficult histories, histories that are both difficult to understand and may elicit negative emotions (Walsh, Hicks, & van Hover, 2017), that teachers will have to navigate thoughtfully to maintain cohesion and sense-making of these difficult stories. Moreover, they will have to engage students in ethical and reflective discussions: 1) What does it mean to "bear witness" in the digital age and at a time when AI can create and modify digital testimonies online? 2) How are digital and live testimonies different in terms of authenticity, emotion, interpretation, look and feel, and how they are received? 3) What risks associated with relying on digital testimonies should influence the decision to use them?

CONCLUSION

Our research on VIHST shows both an opportunity and a challenge for Holocaust education. As we transition into an era where survivors are no longer living, virtual witnesses can preserve survivor voices, foster historical thinking, and encourage ethical reflection. However, acceptance depends on how teachers and museum educators use it. By contextualizing, scaffolding, and critically engaging with digital

testimony, educators can ensure that students not only remember the Holocaust but also develop the analytical skills necessary to confront historical and contemporary injustices.

Q & A WITH IAN MCGREGOR, DAVID HICKS, AND JEREMY STODDARD

Teacher's Question #1: What are examples of "significant ethical and pedagogical challenges" of using digital first-person testimonies that may be unique to perspectives of K-12 education?

Authors' Response: Some of the pedagogical challenges overlap with simple logistical challenges. Our study focused on a museum site which brings with it all the normal challenges of bringing students on a field trip, i.e., busing, food, permission slips, adult-to-student ratios, parent volunteers, etc. And just like any field trip, pre-trip preparation is essential. However, students might not have any experience with digital first person testimonies and despite efforts from the teacher, may not be able to anticipate what that experience will be like. Post-trip, teachers might possibly be navigating the challenges associated with conceptually and affectively difficult history. Teachers will have to take care not to impose secondary trauma.

Additionally, as these technologies inevitably make their way into the classroom, the teacher inherits all the roles the museum staff carry. They now are stagehands, tech experts, hosts, producers, directors, etc. Museum staff currently carry the burden of cutting testimonies short or answering questions on behalf of the digital survivor when the technology goes awry. Teachers would now have to make those decisions, and possibly do so without the content expertise, familiarity with the survivor, and careful consideration that the museum staff have.

Teacher's Question #2: Is incorporating artificial intelligence the next logical and perhaps unavoidable step in VIHST and what are the potential positive as well as

negative effects?

Authors' Response: It's hard to say if Gen AI is the next logical step. There is a world in which Gen AI is used in the Q&A sessions. Given the generative power of large language models, Gen AI might enable interactive dialogue, that is no longer constrained by a finite set of prerecorded answers. In such a scenario, even video itself may no longer be necessary. However, the museum staff in our study were very careful in crafting a specific experience that was in large part predictable and known. The staff sought to deliberately constrain variability to maintain coherence, reliability, and emotional pacing. The introduction of Gen AI could compromise that design, introducing unpredictable or unvetted responses that complicate the learning experiences or raise new ethical challenges. Unlike curated, finite testimony, Gen AI carries the risk of fabricating or hallucinating responses, as well as introducing unintended perspectives, biases, and misinformation, especially when it draws from large, uncurated datasets. Even when trained on carefully vetted material, Gen AI functions by recognizing patterns in language and predicting the most likely next word or phrase. This predictive mechanism could lead to the blending of distinct testimonies or the construction of composite narratives in ways that were never intended by the original witnesses, thus distorting meaning, context, or emotional nuances.

A potential positive is the ability to create an amalgamation of stories with a fictional main character. The film industry does regularly, and educators are still able to use those films as educational tools. In fact, the museum in our study has an exhibit focused on the Kindertransport in England. The exhibit follows the amalgamated story of a fictious child to create a more fully encompassing perspective. It serves as a sort of "one stop shop" exhibit. An obvious negative of this approach is the lack of nuance and perspective. Moreover, testimonies are given by average people who were put through extraordinary experiences. An amalgamation may cast survivors as superhuman or portray their experiences as so extraordinary students may doubt their trustworthiness. There is also a danger of erasing individual experiences in favor of thematic generalization.

Ultimately, the question is really whether Gen AI is technically possible, but whether its use will enhance or diminish the ethical and pedagogical goals of Holocaust/Genocide education. If Gen AI tools are employed, they must be developed with care, human discernment, and transparency. Teachers and museum educators must remain central in shaping how these tools are used, ensuring that students can engage with testimony responsibly, critically, and reflectively.

Teacher's Question #3: It is recommended that "teachers will need to scaffold and structure student inquiry." If teachers play a hand in adding structure to student inquiry, how does this potential impact students' natural curiosity?

Authors' Response: Scaffolding may enhance student curiosity. Without, especially when teaching conceptually and affectively difficult histories, students may feel overwhelmed or unsure how to engage meaningfully. Well-designed scaffolds—such as essential questions, inquiry prompts, or frameworks for observation—can channel curiosity productively, helping students make connections and think critically. The key is to strike a balance: offering enough structure to support exploration while still leaving space for student-driven questions and discoveries.

Teacher's Question #4: Can you discuss more in-depth the implications of "place-based learning?"

Authors' Response: There has long been an assumed power of place in understanding the past. How can someone really understand how Scottish clans under William Wallace were able to defeat the English at the Battle of Stirling Bridge if they do not understand how the bridge itself served as a chokepoint for the English soldiers (not as depicted in the film Braveheart). In terms of developing empathy, it has also been assumed that to understand the experiences of those from the past, as much as that is possible, students need to understand where these experiences took place and how those spaces, environments, and landscapes shaped that memory. Place-based learning emphasizes the significance of geographic and historical contexts in

deepening student understanding. With digital testimonies, students will hear narratives rooted in specific places, such as a ghetto or camp, without being physically present.

Some aspects of place and environment are difficult to imagine and understand. For example, the winter of 1944 in Europe was one of the coldest recorded – with clear implications for both those held in concentration camps as well as soldiers fighting in the Battle of the Bulge. However, other aspects of place, such as understanding the immense size and industrial machinery of the Holocaust, can be examined alongside the survivor's story through photographs, 360 degree images, and now virtual and augmented reality environments. Teachers can begin to bridge this physical gap by contextualizing testimony with maps, archival materials, and local histories. For example, when students hear a survivor describe an event in a certain country or camp, they can explore historical sources, timelines, maps, digital exhibits related to those specific sites. Even localizing learning, such as investigating and learning about Holocaust survivors who lived or are living in student's own communities, can make testimony more immediate and relevant. What is key is engaging students in considering space, place, and environment and the impact these things have on peoples' experiences – and how students might inquire into these impacts through VHST and other sources. Place-based learning encourages students to understand testimony not just as memory, but as situated history, shaped by the physical and emotional landscapes in which it occurred.

Teacher's Question #5: What work can you recommend that teachers engage in to gain more "expertise" and prepare themselves for the ethical considerations of teaching with digital testimonies?

Authors' Response: There are several key ethical considerations when using digitized testimonies of individuals who witness historical political violence and trauma. First, teachers need to carefully consider their students and goals for using testimony – particularly the potential emotional or affective responses students may experience.

Students should be prepared to engage in discussions related to genocide and survivors' experiences, and teachers should be attentive to students who may have strong personal reactions given their own backgrounds and experiences. In some cases, it may be appropriate to offer alternative assignments. Second, teachers need to help students understand what testimony is: memory shaped by the survivors to help others understand their experiences. These narratives are deeply personal and are also influenced by the present-day context in which they are told. Teachers need to make clear the differences between witness testimony and other historical sources, emphasizing that testimonies are not neutral artifacts but lived, remembered, and mediated accounts. Finally, teachers should consider the limits of digital testimonies, especially when used in a question-response format. These formats may lack context and nuance creating confusion and emotional distance. As we note in the article, teachers should think carefully about the structures needed to prepare students for this kind of engagement, as well as how to process and debrief the experiences afterward. These pedagogical choices can help ensure that students develop a nuanced understanding of the Holocaust through the humanizing lens of the survivor.

REFERENCES

Ballis, A., Gloe, M., & Hüttl, E. (2025). "Who will be interested in seeing this in 100 years?" Holocaust survivors' perspectives on 'Dimensions in Testimony' and the 'Forever Project.' In A. Ballis, F. Duda, & M. Gloe (Eds.), *Technology meets testimony. Holocaust Education: Digital pathways in Holocaust survivors' biographies*. Springer. https://doi.org/10.1007/978-3-658-45924-6_18

Marcus, A. S., Maor, R., McGregor, I. M., Mills, G., Schweber, S., Stoddard, J., & Hicks, D. (2021). Holocaust education in transition from live to virtual survivor testimony: Pedagogical and ethical dilemmas. *Holocaust Studies*, *28*(3), 279–301. https://doi-org.ezproxy.lib.vt.edu/10.1080/17504902.2021.1979176

McGregor, I., Hicks, D., Marcus, A., Stoddard, J., Schweber, S., & Mills, G. (2022). Performance in pedagogy: Interactional forces informing a museum's use of virtual interactive Holocaust survivor testimony. Paper presented at the Annual Conference of the American Education Research Association, San Diego, CA.

Schweber, S. (2006). "Holocaust fatigue" in teaching today. *Social Education, 70*(1), 44–49.

Tirosh, N., & Mikel-Arieli, R. (2023). What we talk about when we talk about digital Holocaust memory: A systematic analysis of research published in academic journals, 2010–2022. *The Communication Review*, *26*(2), 151–170. https://doi.org/10.1080/10714421.2023.2177489

Traum, D. (2015). New dimensions in testimony: Digitally preserving a Holocaust survivor's interactive storytelling. In H. Schoenau-Fog, L. Bruni, S. Louchart, & S. Baceviciute (Eds.), *Interactive Storytelling*, ICIDS 2015, Lecture Notes in Computer Science (Vol. 9445). Springer, https://doi-org.ezproxy.lib.vt.edu/10.1007/978-3-319-27036-4_26

Walden, V. G. (2021). Understanding Holocaust memory and education in the digital age: Before and after Covid-19. *Holocaust Studies, 28*(3), 257–278. https://doi.org/10.1080/17504902.2021.1979175

Walsh, B., Hicks, D., & van Hover, S. (2017). Difficult history means difficult questions. In J. Stoddard, A.S. Marcus, & D. Hicks (Eds.), *Teaching difficult history through film* (pp. 17-36). Routledge.

ABOUT THE AUTHORS

Ian McGregor
I am an Assistant Professor of Secondary Education at the University of Nevada, Reno. My ultimate goal is to prepare pre- and in-service teachers for the teaching of controversial topics and difficult histories. I am interested in human rights, civic actions, and teacher preparation. I have been spending my time learning about how educators frame labor and personhood. Outside of academia, I enjoy hiking with my family, watching my favorite sports teams lose regularly, and dreaming about a project car to wrench on. I have been fortunate enough to live and travel throughout the United States, from growing up and teaching high school for six years in Louisiana to now enjoying the abundant National Parks on the west coast.

David Hicks
I am a Professor of History and Social Science Education in the School of Education, College of Liberal Arts and Human Sciences at Virginia Tech. My ultimate goal is to prepare teachers who are teachers of children first and history and social science second. I am interested in way too many things but currently gravitate toward research that is practically orientated in terms of how to scaffold and evaluate inquiry-based learning using Gen AI (see https://genaiinhistoryeducation.com/), and also extended reality technologies to help young people visualize the past and make visible hidden and often hard histories. My own professional development efforts have been focused on learning how to work in transdisciplinary teams and workflow practices–typically this begins with drinking beer (Body by Boddingtons). Outside of my professional pursuits, I enjoy swimming (I am a member of FAT–faculty aquatic team), kayaking (floating next to the kayak), and mountain biking (laying on the ground next to my bike). I taught middle and high school history and social studies in England and then in upstate New York (Newfield and Oxford). I also taught in Job Corp (Oneonta) and later worked as a museum curator and educator.

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