

Using virtual reality technology for research, teaching & learning with young people in Kenya & Rwanda during the Covid-19 pandemic





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This article shares our international research project led by UK and East African stakeholders. This was framed as a consolidation of learning in our analysis and evaluation of findings from four Arts & Humanities Research Council (AHRC) Global Challenges Research Fund (GCRF) projects.

- Mobile Arts for Peace (Rwanda)
- Young people's interpretations of civic national values (Kenya)
- Connective Memories (Rwanda)
- · Reanimating Contested Spaces (Rwanda).

These research projects emerge from a larger AHRC GCRF project known as Changing the Story (Cooke, 2021). This asks how arts, heritage and human rights education can support youth-centred approaches to civil society building in post-conflict settings across the world.

To generate the research project's consolidated learning aims, face-to-face seminars were to be held at the University of Rwanda in autumn 2020 with our stakeholders including teachers, policymakers, civil service organisations (CSOs), community leaders and young community activists. However, the Covid-19

pandemic prevented this and imposed a reframing of the project in its strategy for knowledge transfer and data collection. The project communicated online from March 2020 to August 2021. This led to our conceiving and creating a cross-cultural 3D virtual reality (VR) learning space (Moncrieffe et al., 2021), meaning that all four projects could be brought together as one to consolidate the learning. We consider the constraints of this approach to research, and the learning possibilities created by this innovative way of communicating for teaching and learning, and in disseminating knowledge with educators and young people in East Africa.

THE RESEARCH

We wanted to understand how formal and informal citizenship and peace education for teaching and learning with young people in the Changing the Story East African region has been transformed by the infusion of arts-based methodologies. In our critical review of findings from the four projects, a congruent theme emerging through the voices of young people was 'community values'. Where all four projects enabled young people's creativity and empowerment in redefining their sense of 'community values', this appeared clearly as extremely valuable in their formal and informal citizenship education. We also identified

the need to establish safe spaces for dialogue in teaching and learning through peace education, and that new knowledge for peace education must be generated by voices of young people at the centre of dialogue. This enabled three key research aims to emerge from our critical review.

- 1. To create the space for cross-cultural collaborations
- **2.** To provide continued opportunity for the voicing of diverse narratives
- **3.** A commitment to narrowing the knowledge gap.

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DIGITAL MULTIPLICATION OR DIVISION?

A series of online focus group meetings were held via Zoom between winter 2020/21 and spring/summer 2021. The purpose was to create space and opportunity for cross-cultural collaboration, including the collation, analysis and sharing of best practice examples with CSOs across the projects for evidencing impact and advancements with peace education teaching and learning in the East African region. We were able to advance and sustain a community of practice for peace education, in which all four projects could be brought together to consolidate learning in a shared space, via Mozilla Hubs¹ – online 3D virtual rooms – and an innovative arts-based approach to education and development (Moncrieffe et al., 2021).

BRIDGING THE DIGITAL DIVIDE

This research collaboration via the 3D VR teaching and learning platform provided new opportunities for CSOs to provide local, regional, national and international online seminars for the dissemination of best practice. Our work adds to research evidence that international digital collaborations of this kind can change perceptions and lead to improved pedagogy, affording educators and learners an opportunity to develop 21st century skills (Rhodes Crowell, 2021). This pedagogy can potentially be used more widely, for example in

modelling a response to Sustainable Development Goal (SDG) 4 on quality education (UN, 2015), in formal and informal teaching, through digital education, and particularly in light of the changes to education and the dissemination of knowledge enforced by Covid-19. We also see that 3D VR platforms could be used internationally to encourage development agencies and multilateral bodies to compile and share knowledge for more extensive interactive programmes on postconflict resolution. The opportunity for this learning tool to multiply knowledge exchange is clear. However, one of the learning points was that a digital divide can cause exclusion (Twesige et al., 2021) – some of the young people could not fully participate in our online meetings for sharing ideas and discussion. The digital divide is not a phenomenon attributed solely to the Global South; the pandemic exposed a similar exclusion of young people accessing digital learning opportunities across the UK (Holmes & Burgess, 2020). This shows that in both the UK and East Africa, investment in digital resources and the equitable sharing of these, fused with continued professional development for educators, is needed for genuine sustainability and scalability of new digital learning opportunities. In the context of our project, we conclude that VR learning spaces give new creative opportunities to young people in voicing their diverse narratives on peace education, and that the digital world can enable this. However, there is a need to ensure that access to this digital world is available to

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¹ https://hubs.mozilla.com