Pedagogies of immersive training: co-designing a virtual reality (VR) framework for UK police training

This research seeks to examine how learning theories are integrated into VR police training, addressing the gap between technological innovation and pedagogical rigor.

Key details

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Police region	East Midlands
Project start date	September 2025
Date due for completion	September 2031

Research context

Virtual Reality (VR) has emerged as a transformative tool in police training, offering immersive experiences in safe environments for skill development. However, while UK police forces are investing in VR platforms, there remains a lack of a standardised framework to guide officers, trainers and VR developers to ensure these tools align with evidence-based learning theories.

This research seeks to examine how learning theories are, or could be, integrated into VR police training, addressing the gap between technological innovation and pedagogical rigor. The co-design of a framework will create a structured, theory-driven approach to immersive training in UK policing.

Research objectives

- how do police trainers and VR developers consciously or unconsciously incorporate learning theories into VR scenario design and delivery? (theory/practice alignment)
- what do officers and trainers identify as the most and least effective aspects of VR training for skill development? (perceived efficacy)
- what factors hinder or facilitate the adoption of pedagogically robust VR training across UK forces? (organisational barriers)
- what core pedagogical principles should underpin a VR police training framework, based on stakeholder inputs and theoretical findings? (framework design)

This research will contribute to theoretical, practical and policy aspects of VR in police training. It will evaluate how learning theories are currently applied within the UK context and will develop a theoretically grounded framework for the use of VR in police training. The co-design methodology will ensure that pedagogical best practices are linked with operational policing needs, offering a solution to the current lack of standardised approaches. These contributions will increase academic understanding of immersive learning and inform the development of more effective, evidence-based VR training programmes for UK police forces.

This research will contribute to existing literature by addressing the lack of research around the pedagogical foundations of VR in police training and co-designing an evidence-based framework.

Research methodology

Stage one

A comprehensive literature review of English Language literature relevant to the research objectives, including academic journals, 'grey' literature, professional publications and previous case studies will be conducted. This will identify gaps in the literature to assist in refining this project's research objectives.

Stage two

In collaboration with the Police Digital Service and College of Policing, identify which UK police forces are currently using VR, and for what application/purpose. If this information is not readily available, a brief survey will be sent to all 43 Home Office forces. This will create a database of how VR is being used within UK Police training and will form the basis for identifying relevant forces for

stages 3–5.

Stage three

VR training manuals from three or more UK police forces, College of Policing guidelines on immersive training and VR developer whitepapers will be analysed by coding implicit and explicit references to learning theories and comparing pedagogical approaches taken. This will create a record of how learning theories are applied in UK VR police training.

Stage four

Semi-structured interviews will be carried out with officers, trainers, developers and policy makers around the strengths and weaknesses of VR training. This will be followed by observations of VR training sessions focusing on officer engagement/experience and whether the use of VR is linked to learning theories. A thematic analysis of pedagogical disconnects and best practices will then be identified.

Stage five

Workshops will be carried out with officers, trainers, developers and policy makers where participants will evaluate VR scenarios using learning theory rubrics designed by the author. Participants will then rank framework components on a scale from mandatory to not necessary. A draft framework will then be produced including pedagogical standards and implementation guidelines. This will be refined by gaining expert feedback.

Research participation

I am looking for UK police forces who currently use VR in their training to observe VR training sessions and interview representatives of the force (officer, trainers, VR developers). I would also like to hear from external VR developers who create scenarios for the police. Following interviews and observations, I will be carrying out workshops with groups of officers, trainers, VR developers and policy makers to create a draft framework for how learning theories should be applied to VR police training.

Please contact the researcher for further information.