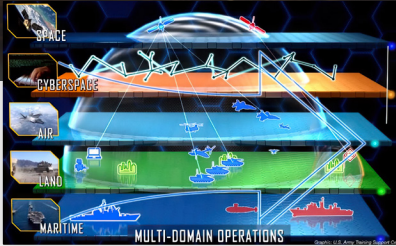


Leaders Enhanced & Applied Doctrine System (LEADS)

2023 - Current

Project Leader: David Nelson, Co Lead: David Cobbins



Background

“Every 40 years the Army experiences a major transformation.”

- GEN (ret) James McConville, former US Army Chief of Staff

In line with the current JADC2 prioritization, Army leadership has identified a need to improve comprehension of FM 3-0 Operations, enabling Division commanders and their staff to have a bedrock understanding of the updated manual. Particularly in its transformational shift in focus to the principles of leveraging modernized, multi domain capabilities against near-peer threats.

ICT’s Mixed Reality Lab posits that the development of a web-based digital Field Manual 3-0 and the use of interactive narrative and scenario-based learning will improve comprehension and decrease learners’ time to mastery of the doctrinal content. The MxR Lab will investigate storytelling’s ability to improve learning and make things easier to retain.

Objectives

Storytelling improves learning and makes things “sticky.” The MxR team will create a proof-of-concept prototype of the digital, scenario-based FM 3-0. This will enable users to be more active and engaged when studying doctrinal concepts. In addition, the MxR team will deliver a design document to support building a generalizable framework, enabling the creation of low-cost, engaging content. This will integrate instructional design principles, support learning objectives within system architecture, facilitate development of interactive content, and provide the ability to log user-learning performance and progress.

Results

MxR is working closely with the Command and General Staff College (CGSC) and the Mission Command Center of Excellence (MCCOE) to develop narrative scenario-based lessons that support learning objectives and formal user-study design.

Next Steps

In Year 2 the team will continue to develop training material and plan to conduct a pilot user-study to examine the effects of narrative and interactive training modalities on learners' retention, comprehension, engagement, motivation, and satisfaction.

Published academic research papers are available from <https://ict.usc.edu/research/publications>

(Search engine keyword: USC ICT Publications)

Project Leader: David Nelson, Co Lead: David Cobbins

Established in 1999, the USC Institute for Creative Technologies (ICT) is a Department of Defense (DoD) University Affiliated Research Center (UARC), sponsored by the US Army. Harnessing Hollywood-derived creativity with academic innovation and military-domain expertise, ICT conducts award-winning R&D in Artificial Intelligence (AI), Computer Graphics, Geospatial Sciences, Human Performance, Learning Sciences, Modeling, Simulation & Gaming, Mixed Reality (MxR), Medical VR, Narrative, and Virtual Humans.