

Leaders Enhanced & Applied Doctrine System (LEADS)

2023 - Current

Project Leader: David Nelson, Co Lead: David Cobbins







Background

Leaders Enhanced & Applied Doctrine System (LEADS): An Interactive Digital Version of Field Manual 3-0, is a basic research effort led by ICT's MxR Lab director, David Nelson and creative producer, David Cobbins, to identify how commander and staff learning can be accelerated through the application of interactive technologies and narrative based learning methods.

While digital storytelling tools have proven effective in supporting conceptual development and enhancing metacognitive skills in other domains, their utilization in Army Multi-Domain doctrinal learning is limited. This research aims to fill this gap by leveraging the principles of digital storytelling to create a highly interactive and immersive learning experience.

Objectives

To help commanders better understand the "transformational warfighting concept of multidomain operations", moving from a focus on counterinsurgency and counterterrorism to Large Scale Combat Operations (LSCO) (McConville, 2022), the Army recently updated its operational doctrine with the October 2022 revision to FM 3-0. The objective of the proposed effort is to validate a learning approach enabling users to be more active and engaged students of doctrinal concepts and increase their comprehension and mastery of the content.

Results

The team is working closely with subject matter experts from Army Futures Command, Mission Command Center of Excellence (MCCoE); Mission Command Battle Lab (MCBL), Mission Command Capability Development Integration Directorate (MC CDID). They have an initial design for the web-based application and are collaborating with U.S. Army Command and General Staff School to develop the prototype content and learning objectives.

Next Steps

The team will deliver a proof of concept application that will be further developed in the 2nd year of the project. They are working on organizing formal field testing of the application with a military population at Maneuver Battle Lab (MBL), and Training and Doctrine Command (TRADOC).

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.