

## CHEX Sponsored Workshop Series: Cultivating Standards for Immersive Learning Environments through Design

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**Abstract.** Join CHEX leadership and other iLRN members for a series of workshops designed to reveal and define standards for Immersive Learning Environments. Your participation will help shape our understanding of technical, engagement, and narrative standards that contribute to the way we create and utilize these environments. This five part series will take place over the course of the in-person conference and you may attend all or just a selection of these sessions. Pre-registration is encouraged, and materials will be shared in advance of the in-person workshop. These materials will include access to a collection of videos, highlighting projects that showcase a wide range of immersive learning environments designed and used by iLRN community members. During these in-person sessions we will use Design Thinking workflows to Discover, Empathize, Ideate, Define, and propose concrete Next Steps for the creation of standards around Immersive Learning Environments. Outcomes from this series of in-person sessions will shape ongoing collaborations with the IEEE Technical Committee on Immersive Environments (TC-ILE).

**Keywords:** Design Thinking, Immersive Learning, Technical Standards, Engagement Standards, Narrative Standards, CHEX.

### 1 Introduction

Your enthusiasm and engagement will drive the content and outcomes of these fast-paced design sessions. TC-ILE pre- and virtual conference activities include videos showcasing a wide variety of Immersive Learning Environments. The Video Showcase will be shared during the week before the in-person conference and will highlight important aspects of Immersive Learning Environments.

- **Session 1. Define the space: Discovery & Empathy.** Fast-paced introductory session to help define shape of the three main “Working Sessions.”

- **Session 2, 3, 4. Working Sessions: Technical, Narrative, and Engagement Standards.** Three design thinking sessions. Each session will focus on one type of standard. Participants will be guided through the following design thinking process: Discovery – Empathy – Ideation – Define – Testing – Feedback.
- **Session 5. Reporting Out.** The final goal is to create a descriptive style document that tells the story of these workshops and suggests iLRN community-defined standards for creating and using Immersive Learning Environments.

### 1.1 Topic and Relevance

To answer the call for the iLRN network to contribute to emerging standards through our partnership with IEEE Learning Society in describing methodologies for creating, employing, and assessing Immersive Learning Environments, with a focus on Technical Standards, Engagement Standards, and Narrative Standards.

We will use Design Thinking workflows to Discover, Empathize, Ideate, and Define the critical components and Next Steps in the creation of standards around Immersive Learning Environments. Our final workshop deliverable will be a descriptive style document that synthesizes the outcomes of these workshops that will be shared with the iLRN, the IEEE TC-ILE, and CHEX communities. This will also provide recommendations for next steps to be taken by iLRN and CHEX leadership around the topic of immersive learning environments.

### 1.2 Target Audience

Our first audience for these workshops is CHEX membership, as well as any other attendee at the in-person iLRN annual conference interested in immersive learning creating and/or using Immersive Learning Environments. Non-higher education participants will still find the style of workshop useful in shaping their own understanding of this important topic and opportunities to illustrate connections stemming from higher education will be included in the workshop process.

### 1.3 Outcomes

As a result of engaging with the design process, attendees will develop more empathy and a deeper understanding and a broader landscape of what to consider when designing all stages of Immersive Learning Environments. A better perspective of the current landscape of the Immersive Learning community and how individual efforts correlate with emerging community standards. We expect to design and share a document describing some best practices and ways forward around this topic. Additionally, participants will have the

opportunity to establish new personal connections with other members of the Immersive Learning community.

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**Fig. 1.** CHEX logo.