

Translating Complexity Through Creativity: Arts-Based Approaches to Science Communication, Equity, and Public Engagement

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Abstract— Purpose of the Session

To provide interdisciplinary educators, artists, researchers, and communicators with

actionable strategies for using creative methods to enhance science communication,

promote equity, and improve public engagement across diverse populations.

Target Population

Educators, researchers, artists, science communicators, nonprofit leaders, public health

professionals, and students working at the intersection of science, social justice,

education, and the arts.

This session explores how arts-based methods can be used to effectively communicate

complex scientific, technological, and social concepts to broader audiences. By

integrating practices from performance, visual storytelling, and digital media, the session

offers strategies for improving scientific literacy, fostering emotional engagement, and

encouraging inclusive participation in public discourse.

Drawing from interdisciplinary frameworks across science communication, education,

cultural studies, and public health, the session outlines how creative tools—such as

narrative, metaphor, sensory learning, and artistic expression—can support public

understanding of issues ranging from climate change and health equity to artificial

intelligence, digital ethics, and social justice. The talk will also highlight ways to build

trust and resonance across cultural, generational, and educational divides, using realworld

examples and interactive reflection.

Participants will leave with foundational approaches they can adapt to their own

disciplines, as well as insight into how to use creativity not only to inform but also to

engage, empower, and connect communities—particularly in addressing the evolving

intersections of health, technology, and human experience.

Learning Objectives

- Describe the value of arts-based methods in science communication, public

- education, and health promotion.

- Identify strategies to translate complex or technical information—including topics

- like AI and digital ethics—into accessible, emotionally resonant narratives.

- Explore the role of creativity in advancing equity, inclusion, and social justice in

- public engagement and health communication.

- Apply at least one creative approach to their own discipline or outreach work in the

- context of science, technology, or community health.

- Reflect on ethical and cultural considerations in community-centered communication,

- particularly when addressing public health, AI, or marginalized populations..

Keywords— Educators, Researchers, Artists, Science Communicators, Nonprofit Leaders, Public Health

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