Evidence-Based Approach to Leadership Development

HHMI/NCPRE Labs That Work... For Everyone is designed to support professional development for lab members to become more effective leaders, team-members, and problem-solvers.

We have rooted our work in the research on effective adult learning, which reports that it is important to reach both hearts and minds. Engaging, memorable learning includes:

- Creating an emotional connection through vivid storytelling rooted in the contexts and experiences of the target audience
- Designing activities to integrate information and skills across the program, using repeated practice with feedback
- Designing regular reflection opportunities to enhance self-awareness and connection to the concepts
- Providing lessons in a modular, self-directed form, so learners can move through the program at their own pace

Labs that Work... For Everyone is not about compliance, it’s about building a healthy and productive lab culture. Adult learners learn best through storytelling and active learning approaches, participants are expected to understand the concepts in relation to their own experiences enabling those concepts to be applied to their own working environments. Because learning is particularly effective as a social endeavor, learners will be encouraged to move through the episodes with a contemporaneous cohort, whether that be their lab colleagues or another cohort formed in a way to be meaningful for the individuals and their environment. To facilitate this aspect of learning, the online platform will incorporate discussion groups for cohorts which are not progressing through the material in the same physical location.

As part of the commitment to participate, each HHMI lab leader should commit to in-person interaction with lab members around program topics; lab leader interaction is essential for demonstrating that these topics and concepts are important and relevant to the life of each lab.

STORYTELLING

Module One is the story of two labs in the midst of a troubled collaboration. When all the scenes are combined, the narrative portion is approximately the length of a feature film, although they are written and designed to be reviewed and discussed individually. The storyline and scripts are based on information from interviews with HHMI lab leaders and lab members, and revised through iterative feedback. Our goal is for participants to relate to the events and characters in the storyline, because it is close to something they have experienced or see around themselves.
ACTIVE LEARNING
Each scene is accompanied by structured activities and reflection moments designed to address specific skills and concepts connected to the content of the scene. This creates an opportunity for participants to practice and integrate skills and concepts across the arc of the program by wrestling with their ideas, expectations, and reactions to the scenarios.

REFLECTION
Reflection is fundamental to adult learning for building habits, solidifying concepts, and integrating ideas. Among other activities, participants will be prompted periodically to stop and write short reflections.

SELF-DIRECTED MODULAR PROGRAM
An episode comprises a narrative scene, online content including videos interviews or concept presentations, focused group discussions, and individual and partner activities. Each “episode” should take between 20-30 minutes to complete, and the course as a whole should take approximately 8-10 hours to complete over a selected time period. Because people learn at different rates and are able to engage at different times, the modular content allows learners to work in very small time commitments or to work through large segments of the course at once. The autonomy to choose how to engage with the content enhances intrinsic motivation.

Selected references:
Christensen, I. M. F., Kjær, C., & Hansen, P. S. (2018). Can self-paced, online learning provide teachers with the competences needed to successfully implement learning technologies?. Blended and Online Learning, 44.