THE EXPANDING MULTIVERSE: Adapting to a new culture of learning

Kristin Jones, Anat Mor-Avi, Carol Emmons

Illinois Institute of Technology (US)

The ongoing COVID-19 pandemic has heightened our awareness of how we teach, expanded the meaning of where we teach, and raised important questions about the relationship between on-site and on-line learning. Hybrid or “HyFlex” approaches to teaching and learning, which provide simultaneous onsite and online delivery, and allow students the flexibility to choose their mode of participation, are quickly becoming the norm. Thus, a new multiple-platform culture, a “multiverse” of teaching and learning, is emerging in which insights from each domain are influencing and challenging one another, and personal experience and informal settings are increasingly being accepted into the domain of formal learning.

This expanding multiverse presents an opportunity to develop new approaches to teaching and learning. These approaches require a holistic vision of technology and space, one that breaks down the walls between multiple platforms, including physical, online, virtual and augmented realities, and views affordances and tools from each domain, as a single entity. New ways to collaborate and engage require agility to effectively and seamlessly navigate across multiple learning platforms in real-time.

This paper explores these issues along with a vision of how we might curate physical, and now virtual “spaces,” to become one comprehensive view of the learning environment. This vision involves transforming an inventory of campus learning spaces into an advanced, dynamic knowledge base that connects physical and virtual “spaces” with
the learning behaviors and emotions they support, and is shaped and reshaped through active engagement of educators and learners. This knowledge base will increase educators’ awareness of new affordances in space and time within an emerging learning culture and empower them to realize the potential for teaching and learning in the new educational multiverse.

• Author(s) Biography (200 words each):
Kristin Jones, Ph.D. is a principal of the architecture firm Studio Integra, Ltd. and adjunct professor at Illinois Institute of Technology. Jones’ practice focuses on social and cultural impact work through educational, commercial and residential projects. Clients include the non-profit organizations Lawndale Christian Health Center, Oak Park Friends School and LEEDA Adult Developmental Services. Jones has taught at IIT since 2006, earning a Ph.D. in Architecture in 2016 with a dissertation on Visual Training within Architectural Education. In addition to teaching, she is also a doctoral research advisor, research associate in IIT’s Center for Learning Innovation and board member of the Mies van der Rohe Society, with work published in multiple exhibits, journals, and conference proceedings. Jones previously held positions at the Chicago architecture firms of OWP/P (Cannon Design), DeStefano + Partners, and Holabird and Root, working on projects for the Chicago Public Schools, Walgreens Corporate, and University of Chicago.

Anat Mor-Avi is an experienced architect and artist, as well as a faculty member and Ph.D. candidate in the College of Architecture at Illinois Institute of Technology in Chicago, IL. Over the last 25 years, she has focused on designing learning environments in the USA and Israel. Her research focuses on ways for architecture to immerse into learning activities and become an empowering, intelligent host for creative and collaborative processes, as in her forthcoming dissertation, “Architecture for the Art of Collaborative Creativity- Space WE-Q as a catalyst in forming a WE culture in Learning Driven-environments.” Mor-Avi is also the author of “Beyond Technical Performance: Affordances as Qualitative Building Performances (6/20/2020), and the co-author of “ A Space For Learning: An Analysis of Research on Active Learning Spaces” (12/19/2019).

By exploring new relationships between learning and architecture, architecture, and creativity, and user experience, her research has found different venues in which to contribute. As a pedagogical architect, Mor-Avi combines research and practice by consulting to Colleges of Education and the Ministry of Education in Israel. In parallel, she continues to design learning-driven environments while empowering the interrelation between evolving pedagogies, collaborative creativity, and architecture.

Carol-Ann Emmons, Ph.D. is a psychologist and current Director of Learning Research and Practice in the Center for Learning Innovation at the Illinois Institute of Technology. Emmons also teaches a course in Learning Theory for the Department of Psychology and oversees the assessment of student learning for all degree programs in the university. She was also the founding director of the General Learning Strategies program at Illinois Tech,
a program designed to teach time management and study skills to undergraduate students who are on academic probation. Prior to working at Illinois Tech, Emmons was a Senior Survey Director at NORC, a not-for-profit survey research center affiliated with the University of Chicago, and a Senior Associate at Abt Associates, a for-profit research firm headquartered in Cambridge, MA. Emmons received her doctorate in Psychology from The Johns Hopkins University and completed a post-doctoral fellowship in Psychosocial Factors in Mental Health from the University of Michigan in Ann Arbor. She has published in peer-reviewed journals in the fields of psychology and medicine.