CRITICAL PRACTICE IN AN AGE OF COMPLEXITY - AN INTERDISCIPLINARY CRITIQUE OF THE BUILT ENVIRONMENT

• Paper / Proposal Title:
Water/Energy/Food NEXUS in Built Environment Education

• Format:
verbal presentation

• Author(s) Name:
Linda Keane, AIA

• University or Company Affiliation:
The School of the Art Institute of Chicago

• Abstract (300 words):
Water is essential for Life. Food is the third necessity. Water and Fuel are necessary for generation of Electricity. Their consumption and production are all intertwined with access to and use of water. Built Environment Education introduces systems thinking across diverse sets of knowledge about water, water use, water quality, conservation and policy in consideration of the construction and demolition of built and natural environments. Parsing piecemeal development with the impact and influence on sites, neighborhoods, cities, regions and the populations that inhabit them, architects and developers must temper decisions based on financial gain with simulation models that predict water, energy and food needs and use. Beyond envisioning livability is necessary global participation creating and sharing resources across time zones and continents that consider local and global sustainability. Urban areas address short, medium and long term goals concerning water supplies, food safety, and energy delivery and consumption as integrated, first in the face of natural disasters needs, and strategically in response to long term population growth. Integrated resources like Architecture 2030’s Palette, DPZ’s Transect, Calthorpe’s Smart Growth Guidelines,
Girardet’s Regenerative Cities, and Ellen MacArthur’s Circular Economy Research introduce students to architecture as an eco-system service or as UECP defines sustainability services to a diverse population’s well being. WikiWatersheds, Richard Saul Wurman’s Urban Observatory, OECD Better Life Index and OXFAM’s Safe and Just Space for Humanity open study of cities of similar size around the world.

This presentation shares as a prototype, architecture students as citizen scientists investigating water policies and politics in use, consumption, quality, and conservation.

Eco Design
ChicagoRiverworks(http://www.saic.edu/academics/departments/aiado/eco-design-riverworks-water-essential-life) is an interactive transient sound mapping and community engagement series of classes that reimagines and visualizes the sustainable water/energy/food world above and beneath the surface of the Chicago River. Presented at the UK’s Balance Unbalance Sense of Place conference last summer, connecting the water/food/energy NEXUS as sensing a place is essential in the education of the architect.

- **Author(s) Biography (200 words each):**

An educator, artist, architect, and researcher, Keane is an innovator in designing learning experiences that blur work, play, and fun. Co-creator of the eLearning DESIGNopedia, NEXT.cc, Keane works to network place-based opportunities in K16 informally raising curiosity and awareness about design as cultural and social response to larger interconnected systems in the built and natural environments.

Keane combines an ecological urbanism practice with writing, public speaking and community engagement workshops. Collaborating with multi-disciplinary teams, she envisions transformative learning experiences and as Co-founder of STUDIO 1032 contributes to sustainable initiatives along the Milwaukee-Chicago corridor with diverse community groups. Founder of the city’s third transdisciplinary Masters of Architecture program at the School of the Art Institute of Chicago she serves as Professor of Architecture and Environmental Design

The APA American Association WI Chapter, Art Institute of Chicago, American Institute of Architects, American Architectural Foundation, Association of Collegiate Schools of Architecture, Graham Foundation, National Endowment for the Arts, PBS Chicago, United States Green Building Council and Union of International Architects recognize Keane’s creative contribution to architecture and design.