Understanding Co-production in Urban Ecological Design: Design processes to support “Designed Experiments”

Christopher A. Sanchez¹, Paul Coseo², Chingwen Cheng²
¹ASU School of Sustainability, ²ASU Herberger Institute for Design and the Arts, The Design School

Introduction

1. **Designed experiments** are urban design projects as ecological tests to improve our understanding of how urban ecological infrastructure (UEI) performs (Felson & Pickett, 2005).

2. The co-production of designed experiments links urban ecologists, practitioners, stakeholders and students to collaboratively generate designs, monitoring and maintenance for designed experiments.

3. How this process unfolds in UEI-based projects is not well understood.

Goals

1. Understand how co-production processes contribute to CAP LTER designed experiments, and how they can support equitable, sustainable, and resilient UEI design outcomes.

2. Develop, pilot, and refine a survey instrument to function as a reflexive feedback mechanism for future CAP LTER designed experiment projects.

Experimental design and methods

1. We surveyed students and researchers that participated in three (3) different UEI projects in Phoenix, Tempe, and Buckeye, AZ. These projects were associated with one (1) undergraduate and two (2) graduate landscape architecture studio courses.

2. Survey content was developed to identify challenges and opportunities associated with UEI-based projects.

3. Pre-survey participants (n=11) responded to post-survey content that was approved by the Institutional Review Board (IRB) and was conducted online.

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Discussion and conclusions

1. **UEI definitions vary in scope (project- to city-scale) and outcome focus**

2. ** Going forward, this pilot study will be refined to more specifically assess co-production processes and learning exchange**

3. **Survey will continue to be administered to students, researchers, and practitioners associated with UEI-based CAP LTER projects**

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