

Title:

Reflection on strategies for teaching SD through applied, community-based course collaboration:
10 years of CBSD in Social Work and Public Health

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Abstract:

System dynamics has long been proposed as a foundational competency for learners to address complex challenges of the future, extending back to Forrester's and Richmond's visions for the future of the field. While literature in the system dynamics field provides examples of coursework and learning approaches for modeling, we see few documented approaches to training that blend competencies in SD with applied, community-based and project-based learning with community partners.

This paper presents an approach to teaching community based system dynamics through experiential learning and applied community-based projects in graduate schools of Social Work and Public Health developed over 10 years. It describes the learning goals and core components of the course design, approaches to introductory multi-week experiential group model building workshops, and presents three configurations of applied projects with community project sponsors.

Between 2016-2026 the applied course in Community Based System Dynamics taught at the Brown School of Social Work at Washington University in St. Louis, USA has been taught for 16 semesters, with over 270 Master's and PhD level students and 56 semester-long projects with 47 different community partners and project sponsors. Impacts of the course are reported through student professional outcomes applying system dynamics tools in community based organizations in St Louis and globally after graduation, and through impacts of community-based projects on sponsoring organizations.

Based on 10 years of iteration, the paper closes with recommendations and insights for interested teachers and practitioners focusing on:

- Prioritizing products and concrete process outputs in addition to exposure;
- Expanding time horizons of learning and teaching;

- Embracing opportunities for experimentation and iteration in dialogue between classroom and professional practice;
- Challenging assumptions learning goals and impact; and
- CBSD for building core capabilities for future workforce.