## **Design Charrettes**

A design charrette is an intensive, collaborative experience that brings together stakeholders to develop a shared understanding of the diverse needs a design must meet, and to brainstorm possible ways to address those needs through engaging directly in design. It is a fast-moving experience that involves "thinking with your hands" and pushes the boundaries of how we expect to interact with our colleagues around research and development. Participant-designers are tasked with developing models, experiences, objects or materials that address particular goals, constraints, and scenarios of use. Whole group and sub-groups engage in design-based activities that can include hands-on modeling, role-play, story boarding, etc. Ideas under development are presented and discussed throughout the session to promote discussion and innovation.

## Designing for Student Agency and Authority around Issues of Climate Change

Victoria Hand, CU-Boulder Leilah Lyons, University of Illinois at Chicago Chrystalla Mouza, University of Delaware Elizabeth Walsh, San José State University)

**Description**: The effects of climate change may be most profoundly felt starting ten years from now. Today's young people, then, will be the primary inheritors of these effects. In response, organizations are investing resources in opportunities for youth to take action in political and social spheres around climate and pollution (e.g., Green Ninja; UN Children, Youth and Climate Change; Energy Action Coalition). This design charrette will contribute to this effort by drawing on powerful media and educational resources to develop materials for civic engagement of middle school students. The design process will involve high school students and learning scientists in activities that that inspire creative and systems-level thinking around climate change. High school students will be positioned as key contributors to this process.

## The Learning Theater: Designing a Flexible Reconfigurable Space for Ambitious Learning and Teaching on Campus

Gary Natriello, Columba University Hui Soo Chae, Columbia University

**Description**: A renewed interest in experimentation with new forms and formats for learning and teaching on college and university campuses is creating pressure to re-think the spaces available for students and faculty to come together for learning. Projects as diverse as the ASU Decision Theater (http://dt.asu.edu) the MIT TEAL Project (http://web.mit.edu/edtech/casestudies/teal.html), and the Learning Space Toolkit (http://learningspacetoolkit.org/) illustrate the growing spirit of experimentation that is driving the creation or renovation of spaces intended for learning. All too often learning scientists are brought into such projects late in the design and development process or not at all. This design charrette will engage learning scientists in the design of a space to support ambitious learning and teaching.