

## HOW CAN LEARNING SPACES BRIDGE THE GAP BETWEEN ACADEMIC AND CIVIC LIFE?

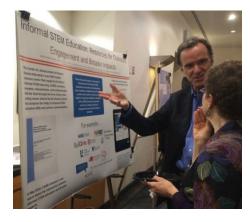
"The questions I brought to this conversation are: 'what is the purpose of what we do?' and 'how do the answers to that question matter to how our students use the spaces?' Our purpose is to teach students so they learn, grow and have productive, meaningful careers and lives. It is more than scoring on tests. The purpose of the enterprise is actually that students become richer and more engaging people who can function and contribute well to society. What are the spatial factors that make that happen?"

"We all agreed we are talking about more than spaces we usually identify as classrooms. We all agreed that it is spaces outside such formal spaces that offer the greatest opportunity to create spaces that serve the purpose of the **enterprise.** All projects have only so much square feet and so many funds, so the challenge is to make the case to those responsible for final decisions about the project that these informal, student-owned spaces are essential in the context of the 'purpose' of what we are about."

How do we create such spaces? How do we measure their impact on learners and learning? How do they serve the purpose of the enterprise?"

"I agree with starting with the purpose of the enterprise in mind, but I am thinking in a different way about classrooms, about our mental image of a formal classroom. I am wondering if all our classrooms need to be on campus. Could engineering students be taught in a power plant? Could we use communities and cities as formal spaces for enhancing the learning experience? Could we develop an assessment protocol to determine what it is about a formal classroom space that serves our purpose—perhaps merely a space in which students learn to solve real-world problems?"

"We thought about the idea of spaces that enable connections, specifically connections between campus and civic life. Campuses are often seen as an ivory tower, with few conversations about town-gown relationships. The reputation, deserved or not, is that academe is distant, becoming increasingly specialized, inaccessible to members of the public. We went beyond the on-campus undergraduate experience in the physical spaces on a campus and began to consider the community beyond the campus as learners in our spaces. Our community is on our campus a lot now. We should know how the spaces we are planning nurture such connections."



"We propose an assessment question something like: 'How can learning spaces bridge the gap between academic and civic life?' A auestion like this rarely makes it to the planning table, it just doesn't fit into the normal things people talk about when thinking about spaces for learning."

SENCER courses and programs strengthen student learning and interest in science, technology, engineering, and mathematics (STEM) by connecting course topics to issues of critical local, national, and global importance.

Students and faculty report that the SENCER approach makes science more real. accessible, "useful," and civically important.

SENCER improves science education by focusing on real world problems, and extends the impact of learning across the curriculum to the broader community and society. We do this by developing faculty expertise in teaching "to" basic, canonical science and mathematics "through" complex, capacious, often unsolved problems of civic consequence. Using materials, assessment instruments, and research developed through SENCER, faculty members design curricular projects that connect science learning to real world challenges.

SENCER uses methods and strategies derived from existing knowledge concerning undergraduate STEM education to ensure both STEM learning and curricular reforms are durable. John Bransford, a member of the Board on Science Education of the National Academies and Mifflin Professor of Education at the University of Washington, claims that SENCER is "bringing to life the recommendations we made in How People Learn."

> 2017 LSC Roundtable University of Missouri Kansas City



