

After years of toil, sustaining change in education still a vexing problem

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Jeanne Century is the director of science education at the Center for Elementary Mathematics and Science Education at the University of Chicago. Credit: Dan Dry

Researchers in the Center for Elementary Mathematics and Science Education (CEMSE) this year finished poring over more than 65,000 abstracts and nearly 600 full-text articles for insights regarding how to make lasting change in the literature of education, health, marketing, business and economics.

One of the articles pertained to sunscreen use in Australia. The article reported that it took 10 years for the researchers to see a positive change in sunscreen use.

"Sunscreen! How easy is that?" asked Jeanne Century, CEMSE's Director of <u>Science Education</u>. "It's cheap, keeps you from getting a disease that will kill you and people don't do it."



The article on sunscreen-use and other related research highlights the difficulty of making lasting reform in education and other fields of endeavor, according to Century. "People don't do things just because they're effective," she said.

The center will convene a working group with expertise in the sustainability of innovation from Tuesday, Sept. 15 to Thursday, Sept. 17 to grapple with these and related issues. The National Science Foundation funded the meeting, titled "Sustaining Change in Education: Finding Shared Language and Common Ground."

The meeting, which may be viewed live via the UStream link at the end of this article, is part of a larger project on sustaining innovation in science, technology, engineering and mathematics. This project has become part of a larger cross-disciplinary open research initiative called Researchers Without Borders. Century said currently there is no shared understanding among educators as to what sustaining innovation actually means.

"One of the fundamental goals of the project is to give us a conceptual framework and shared language so we can begin to accumulate knowledge about it," she said.

There is far more involved in addressing the problem than simply identifying best practices and scaling them up.

"What really is an effective practice?" Century asked. "Just because something works in a particular setting or context, does that mean it's effective?" Century has doubts.

"When you're talking about replicating best practices, the research tells us that that doesn't happen. It's a fallacy," she said. Educators instead need to think about how practices inevitably change as they move from



place to place, Century said. Rob Schnieders of the University's Urban Education Institute agreed.

"The term for effective adoption has been 'fidelity,' yet we know that those who take on a change often adapt it in very powerful ways," said Schnieders, UEI's director of national engagement.

Schnieders will be among the more than 30 education professionals who will attend this month's workshop. "My interest in attending this event is wanting to see how others are thinking about the innovation cycle and where we're seeing powerful changes take root and productively adapted over time," he said.

UEI is pioneering a new approach for higher education institutions to engage directly in improving the quality of pre-K-12 education.

"Our approach is unique, in that we identify problems of practice in our work in operating four charter campuses as well as through the applied research of the Consortium on Chicago School Research," Schnieders said. "We then develop innovations that are intended to address these problems of practice."

Finally, the institute disseminates these innovations through networks of schools—including districts and charter management organizations—and commercial partnerships.

Schnieders noted that most K-12 programs perform poorly at all phases of the innovation cycle. "To date, two types of organizations that would seem to be beacons of innovation—charter schools and universities—have not demonstrated consistent success with improving K-12 outcomes."

The Researchers Without Borders project aims to change all that.



Century launched a wiki earlier this year so that all interested parties could discuss how to make lasting changes in education.

She chose the wiki format in deference to another insight gleaned from her literature search: sitting in an office, writing reports and publishing them is ineffective for disseminating knowledge and understanding.

More effectual, according to the literature, is to engage the ultimate recipients in a collaborative process. The RWB seeks to do this without regard to disciplinary, academic or professional boundaries.

"You don't actually have to be a researcher to participate," Century said. Educators are welcome too, because they acutely understand the barriers that block the enactment of desirable practices in their schools. "We need their perspective," Century said.

She admitted to some discomfort with the informality of a wiki. "We are literally making our notes public—our ugly, unfinished, un-thought-out notes, but that's what we have to do," she said.

"As long as we're comfortable, we're doing the same old thing. We need to be uncomfortable in our effects to improve <u>education</u>."

Source: University of Chicago (<u>news</u> : <u>web</u>)

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