

Introduction to a New Field of Study

For many of the grant PIs, it was their first foray into the field of educational research. They found both differences and similarities in contrast to their discipline-specific research, and shared about feeling enriched professionally by the experience of doing educational research.

As an adjunct lecturer in engineering management and systems engineering, Kellie Grasman felt that the mini-grant funding gave her a great opportunity to explore new options for her course. “For me it opened my eyes to the body of research that was available and encouraged me to explore,” she said. “It opened my eyes of other ways of thinking. And that became a habit of looking into what was out there when I made changes to courses. I’m a total convert.”

Dave Westenberg, associate professor of biological sciences, said the timing was just right for him to do something that had been on his radar for quite awhile. “The mini-grant funding gave me the kick in the pants to actually do all these things I had heard about and read about,” he said. “I have been going to educational research conferences for a long time and have been hearing about active learning. “This was the opportunity for me to actually take those lessons and apply them myself to a course that I felt really needed to change. It was incredibly valuable to help me practice what I was learning. The timing was very good.”

Daniel Forciniti, professor of chemical engineering, became interested in the field almost in spite of himself. “I never thought I was going to get into this,” he said. “I ventured into a very foreign territory -- territory that I have actually criticized, which was educational research.” But he wanted to prove his hypothesis about student learning, and getting into educational research was the way he saw to do that. Forciniti’s project involved measuring whether using alternatives to traditional textbooks in the classroom affected student learning in terms of lifelong education. “I was forced to read material I had never read before in my life. It had a different vocabulary.

“I began asking myself about this business of how people learn,” he said. “For many, many years, I didn’t care. That was the starting point. I realized there were people who knew what they were talking about. Now I am educating myself as much as I can.” He has also applied for an NSF grant in educational research to further his quest.

The mini-grant program was Beth Cudney’s first exposure to educational research. “There were things that I wasn’t even aware of and that I never would have been exposed to (without the grant program),” said the associate professor of engineering management and systems engineering. “Because of what I learned, I started going after more external NSF educational research grants and wrote three proposals in one year. I never would have been able to write them without the knowledge I gained.”

Doug Ludlow, professor of chemical engineering, said the mini-grant was the first time he had gotten any money for educational research. “I’ve always tried to change my course every year. Sometimes you have ideas about doing something and you think, ‘Oh, I don’t want to do it,’ but by getting the money, that forced me to go on through it,” he said. “I thought it was pretty interesting.”

Katie Shannon, associate teaching professor of biological sciences, was a part of the Bio Scholars program through the American Microbiology Society. The mini-grant program gave her the funding to actually put into practice what she had been taught there. “I learned how to do an IRB and how to

design an experiment in education, which is really different than doing stuff in a lab because you don't have the same type of controls," she said. "It was really helpful for me."

For Nick Libre, assistant teaching professor of civil engineering, the mini-grant was his first introduction to the world of pedagogical research, and he has been keenly involved in this type of research ever since then.

"As an instructor you always want to improve the way that you are teaching, but having the grant helps you do the research in a more scientific way," he said. "Doing something, measuring student performance, comparing the effect on student learning with those who are not doing that, this is much more scientific."

"Sometimes educational research is not valued enough. But as a person who has done both types of research, I can say that both of them are valuable. In some ways, educational research is more valuable because you can see the feedback directly in your class."

"My advice is to do it!" says Libre. "We need to do this and value it more. I'm not saying we should stop doing other types of research, (but) we should not undervalue educational research. I think we need to emphasize it more on our campus."