

## Preparing STEM teachers

IUPUI leads in efforts to increase math and science teachers in Indiana

**Date:** March 26, 2009

**Duration:** 2:58

### Transcript

[K. Marrs] The state has set aside federal stimulus money to improve math and science teacher preparation as part of a nationwide effort to create job opportunities and transform our economy to, really, better compete in the 21st century, especially given the crisis situation that our nation finds itself in today. Really important for our state's economy to have well-prepared math and science teachers. Indiana is positioned to be a leader in life and health science economy, and having better-prepared teachers in the classroom translates to having better prepared students who are ready to enter college and be successful in science.

In recent years, the IUPUI campus has really become a leader in the preparation of new STEM teachers - science, technology, engineering and mathematics. In just the last four years or so we have received several grants from the federal government that allow us to provide scholarships and some cases full-tuition scholarships to students who want to become a STEM teacher in one of those disciplines.

Another program that we have at IUPUI is called the [Woodrow Wilson Indiana Teacher Fellowship](#). Students who accept this very prestigious fellowship, which is funded by the Lilly Endowment, as well as the Woodrow Wilson Foundation, and some funding from IUPUI, is a scholarship program for students again, in STEM disciplines, who would like to get a master's degree in one year. The first group of Woodrow Wilson Fellows will begin at four campuses in the state of Indiana: IUPUI, Ball State, Purdue University, and University of Indianapolis.

Typically when students are completing their undergraduate years, a lot of times it is not common for their professor to encourage them to go into the profession of teaching. A lot of times their professors don't really understand what teacher preparation is all about or what the life of a teacher is about. And they're encouraged to go into other careers that may be seen as more professional.

For many students now who are in their professions, the idea of giving up a career to go back into a teacher education program is difficult if not impossible. Fellowships like the Woodrow Wilson Indiana Teacher Fellowship, by providing a very generous stipend, allows people to consider taking a leave from their job—consider leaving their job—and changing to another career.

Increasing the quantity, quality, and diversity of STEM teachers in the state of Indiana is really crucial. For instance, there's over 23,000 physics teachers in the country. Of that 23,000, less than one third actually had a major in physics. One reason that there may be so few physics majors at the college level, is because there are so few physics teachers who are there at the high schools to encourage students to become interested in physics at the high school level so that they can then become excited about it at the university level.