UF College of Education

Key Initiatives *in* STEM Education

(Science-Technology-Engineering-Mathematics)

1) UF TEACH: Adding Science and Math Majors to the Teaching Equation

To ease the critical shortage of mathematics and science teachers, the *UF Teach* program uses innovative recruiting strategies to enlist UF's best and brightest math and science majors and prepares them to teach effectively. *UF Teach* received STEM*florida's* Best Practices Award for excellence and accountability in targeted STEM teacher recruitment and retention efforts.
http://education.ufl.edu/uf-teach/

2) TRANSFORMING MIDDLE-SCHOOL SCIENCE EDUCATION

Researchers at the College of Education and P.K. Yonge Developmental Research School (UF's K-12 laboratory school) will lead a $5 million effort, funded by the National Science Foundation, to transform how science is taught in Florida's middle schools, The researchers are banking on an award-winning, on-the-job graduate degree program called Teacher Leadership and School Improvement to train "Science Teacher Leaders" in new, research-proven practices in science instruction.
http://education.ufl.edu/news/2011/11/08/coe-p-k-yonge-researchers-head-5-million-effort-to-transform-middle-school-science-education/

3) ASSESSING STUDENTS' GRASP OF STATISTICS

Supported by a $2 million grant from the National Science Foundation, University of Florida math education researcher Tim Jacobbe is leading a multi-center effort to create high-quality testing instruments in statistics, which will help teachers keep middle and high school students on track for meeting rigorous, new national math standards.
http://education.ufl.edu/news/2011/10/10/uf-receives-2-million-to-assess-students-grasp-of-statistics-under-new-national-math-standards/

4) SCIENCE & MATH TEACHER IMPERATIVE

UF is the newest member of a nationwide coalition of public research universities working to increase the number and diversity of high-quality middle and high school science and mathematics teachers in the U.S. UF is one of 125 institutions and 12 university systems to join the Science and Mathematics Teacher Imperative (SMTI), launched in late 2008 by the Association of Public and Land-grant Universities.
http://education.ufl.edu/news/2010/10/27/uf-joins-national-imperative-to-boost-ranks-diversity-of-science-math-teachers/

5) 'VIRTUAL' INTERNSHIPS: Preparing Student Teachers for New World of Online Schooling

UF's College of Education is preparing a new breed of "virtual" teaching interns, who spend part of their last spring semester in a four-week apprenticeship with the Orlando-based Florida Virtual School. UF's college is one of five in the nation to offer a virtual school internship. Student-teachers can work either from their own laptop or from a college computer lab.
http://education.ufl.edu/news/2010/04/13/virtual-internships-prepare-student-teachers-new-world-of-online-schooling/

6) DEVELOPING MASTER TEACHERS IN SCIENCE AND MATH

UF's Lastinger Center for Learning is giving as many as 500 math and science teachers a shot at advanced degrees and professional development training. It's part of the Center's effort to develop master teachers who can improve student achievement in the STEM subjects. Under the four-year initiative, launched in 2009, about 100 teachers will be eligible to earn a free master's degree in exchange for a five-year teaching commitment to their schools. The remaining 400 will be enrolled in the center's professional development activities.
http://lastingercenter.com/developing-master-teachers/

7) SCIENCE FOR LIFE

With about $2.7 million in grant support from the Howard Hughes Medical Institute, the college has teamed with nine other UF colleges in an ambitious initiative—called Science For Life—to close the critical gap in science education and groom prospective scientists and science teachers from among school-aged and college students. Science For Life offers the largest early undergraduate research program in the state.
http://sfl.chem.ufl.edu/

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