



Project Description

UCI FOCUS! is a member of Cohort 1 of the national NSF Mathematics and Science Partnership (MSP) program, one of only seven comprehensive MSPs established in the first cycle of this program.

Teacher Leader Cadre (TLC)

- Strengthen and establish a collective PreK-12 regional team of teacher leaders with the capacity as professional development providers and site teacher
- •Identify and address the PD needs of FOCUS teachers
- •Collaborate with Partnership School Districts on the development of curriculum guides

Future Teacher Highway (FTH)

- •Enhance undergraduate preparation of future teachers through development of academic programs for UCI STEM majors
- •Recruit and support Community College transfer students who plan to become future teachers

Faculty Outreach Collaboration (FOC)

•Develop new models of collaboration to strengthen and discover the most effective ways that university faculty and their resources can be engaged to assist PreK-12 in teaching the content standards.

PreK-SMARTS

- •Model purposeful math, science and literacy lessons appropriate for Preschool children
- •Support change in Preschool classroom practice, climate, and intentionality
- •Develop a leadership cadre of Preschool professional development providers

UCIrvine FOCUS! Math Science Partnership

Project Successes

Teacher Leader Cadre (TLC)

- Continued use of FOCUS! lessons
- •Regional PDPs continue to provide PD in other districts
- •Seque to two California Postsecondary Education Commission (CPEC) grants
- Segue to three Noyce grants (Master teacher and undergraduate internships)

Future Teacher Highway (FTH)

- •Institutionalized in 2006 as UCI California Teach
- •Undergraduate Minor in Educational Studies was revamped to include strands for students interested in math & science teaching
- •Two living/learning communities for future teachers were established under the leadership of the MSP staff--the first living/learning communities of their kind in the UC system
- •Community college future teachers were supported by the MSP via the UCI TEACH Math & Science summer residential program, and cross-enrollment in introduction to math and science teaching courses.

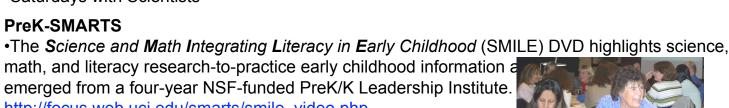
Faculty Outreach Collaboration (FOC)

- Current research appropriately explained and demonstrated or all grades levels
- Continued demand for FOC visits to school sites
- Nuclear Outreach (now has alternate funding)
- •AP Chemistry Program
- •FOC's broader impact NSF's
- Models for STEM Faculty Engagement
- Models of Assessment Tools for STEM Faculty
- Saturdays with Scientists

PreK-SMARTS

math, and literacy research-to-practice early childhood information a emerged from a four-year NSF-funded PreK/K Leadership Institute. http://focus.web.uci.edu/smarts/smile video.php

Continued PreK PD parallel to CPEC grants















Compton Unified School District Santa Ana Unified School District Newport-Mesa School District







Publications & Presentations

- Smecker-Hane, T.A., Mauzy-Melitz.D.K., Hood M.A. (2009, September) Expanding the UCI Astronomy Outreach Program to New Heights. Presentation at the Astronomical Society of the Pacific's Astronomy Education Conference. Millbrae, California. (To be publish in ASP Conference Series, Vol. TBD, 2010)
- Shanahan, T., Swigert, S., Kazi, A., Lockhart Opii, T., Nam, H., & Tran, C. (2009, April) Connectedness and trust as a feature of effective mathematics and science professional development. Paper presented at the annual National Association for Research in Science Teaching conference, Anaheim CA.
- Shanahan, T., & Swigert, S. (2009, January). What do teacher leaders value about regional STEM professional learning communities? Presentation at the Learning Network Conference for the National Science Foundation Math and Science Partnership Washington, DC.
- Soto, R. (2009, January). "Institutional & Environmental Factors Impacting the Decision of Community College Students to Remain in the Future Math & Science Teacher Pipeline: A Study of UCI TEACH Math & Science Participants from 2003-2007". Presentation at the Partnership, Washington, DC.
- Swigert, S., & Shanahan, T. (2008, December), Building and sustaining teacher leader professional development networks between multiple school districts. Presentation at the California Educational Research Association 87th annual Conference, Rancho Mirage, CA.
- Shanahan, T., Hyde, K., Marshall, S., & Soto, R. (2008, January). Early development of a student-centered perspective in science and math pre-service teachers. Paper presented at the annual Association for Science Teacher Education conference in St Louis, MO.
- Shanahan, T., Mann, V., & Manrique, C. (2006, October), Continued integration of curriculum auides, auarterly benchmark assessments, and professional development to improve student learning in mathematics and science. Paper presented at the annual National Science Foundation Math and Science Partnership Evaluation Summit Minneapolis, MN. Website: http://focus.mspnet.org/index.cfm/14135
- Shanahan, T., Hyde, K., Mann, V., & Manrique, C. (2005, September), Integrating curriculum auides, auarterly benchmark assessments, and professional development to improve student learning in mathematics. Paper presented at the annual National Science Foundation Math and Science Partnership Evaluation Summit, Minneapolis, MN.
- Brant, D. & Soto, R. (2005, March). Ramping up STEM Teacher Education in the UC Environment: The Future Teacher Highway for Single and Multiple Subject Candidates. Paper presented at the National Science Foundation SCALE/QED/FOCUS Education Partnership Conference
- Soto, R. (2003, June) *Creating a Regional Future Teacher Highway".California* Paper presented at the K-16 Partnerships and Student Success Conference.

