Leadership for Integrated Middle-School Science (LIMSS)

LIMSS was funded by the U.S. Department of Education's Institute of Education Sciences (IES) to develop a teacher leadership program for middle school science teachers. Dr. Robert Potter, CSL Associate Director and Associate Dean of the College of Arts and Sciences, was the Principal Investigator (PI) for the project. Ms. Pam Caffery, Middle Grades Science Supervisor for Hillsborough County Public Schools, and Dr. Dana Zeidler, Professor of Science Education in USF’s College of Education, were co-PIs.

The project developed and implemented a three-year professional development (PD) program to build a cadre of 30 Teacher Leaders in 10 middle schools in Hillsborough County. After two years of PD, LIMSS’ Teacher Leaders planned and facilitated a four-day summer institute for their science colleagues (Second Generation Teachers) and mentored these science teachers at their schools to implement inquiry-based science and increase student achievement in science.

By the end of the grant in February 2012, LIMSS’ Teacher Leaders had received extensive PD in leadership skills and effective inquiry-based science instruction, delivered through 18 days of summer institutes, 18-20 workshop days, 15-25 hours of collaborative team learning, and classroom modeling by a LIMSS Resource Teacher. LIMSS’ Second Generation Teachers participated in a four-day summer institute facilitated by Teacher Leaders, 15-25 hours of collaborative team mentoring/learning, and 1-4 workshop days.

Collaborative team learning included lesson study, peer observations, book study, discussion and reflection via an electronic learning community, 5E (Engage, Explore, Explain, Extend or Elaborate, and Evaluate) lesson planning for inquiry, vertical and horizontal articulation, and learning to use ongoing formative assessments.

Core resources for LIMSS teachers include Ready, Set, Science! (Michaels, Shouse, & Schweingruber), Science Formative Assessment (Keeley), Teacher Leadership in Mathematics and Science (Miller, Moon, & Elko, with Spencer), Leadership for Learning (Glickman), Teacher Leadership that Strengthens Professional Practice (Danielson), Mentoring Matters: A Practical Guide to Learning-Focused Relationships (Lipton & Wellman, with Humbard), Science Inquiry Activities (Chew), and Science Scope (NSTA Middle Grades Journal).