

Teachers learn to reduce learning barriers through STUDI

by **Tim Holdsworth - Wednesday, August 31, 2011**

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Today's classrooms include students with diverse abilities and backgrounds —those with physical and learning disabilities and different cultural and language backgrounds to others with varied learning styles and motivation.

As education moves toward more flexible instructional approaches, teachers have a need to understand how to create lessons that can be customized and adjusted for individual students' needs.

Through the Science Teaching through Universal Design and Inquiry (STUDI) program, at the University of Wisconsin Oshkosh College of Education and Human Services, Wisconsin educators are learning how to create science lessons that reduce learning barriers and optimize levels of challenge to meet the needs of all learners from the start.

The unique, two-year-old STUDI program recently was awarded a \$440,000 Wisconsin Improving Teacher Quality (WITQ) grant to continue operating through 2014. WITQ is a competitive grants program intended to increase student achievement in core subject areas by enhancing teachers' content knowledge and skills.

"Today, teachers need to have strong content knowledge, a clear understanding of the goals their students need to meet, and a range of methods they can use to teach their students," said Stacey Skoning, associate professor of special education. "The STUDI project supports all of these through its focus on student learning through the inquiry process and on strategies that can be used to meet individual student needs."

Skoning co-leads the program with John Lemberger, associate professor of curriculum and instruction, and Peter Meyerson, associate professor of educational foundations.

This summer, 26 teachers representing eight Wisconsin school districts and all grade levels participated in the free, week-long program, during which they learned core standards for science, inquiry-based instruction, principles of universal design for learning (UDL) and developed science inquiry units that are inclusive of all students.

Second-year STUDI program participant Debra Van Dalen, gifted and talented education middle school resource teacher with the Hortonville Area School District, said the idea that the lesson goal does not need to be the same for all students freed her to plan to meet individual needs.

"Previously, the science content the students needed to learn was at the center of my planning. Now the inquiry process and needs of individual students are the focal point," Van Dalen said. "One of the biggest advantages of the inquiry lessons is the engagement of the students. Engaged students are ones who are learning concepts and gaining interest in science."

UW Oshkosh alumna Erron Sagen '84, a third-grade teacher at Oakwood Elementary in Oshkosh, also attended STUDI last summer.

“I always tried to adjust things as I go along, but the STUDI made me look at the unit and my special ed. population before I developed the lessons,” Sagen said.

After attending STUDI, Sagen implemented a unit on oil spills during the last school year.

“The unit really gave the opportunity for my students to design their own inquiry. I also modified my presentation of the lessons to meet the needs of my ELL students and those with learning disabilities, which in turn, helped my ‘regular’ students,” Sagen said.

This fall, she will be revamping a unit on sound to meet the needs of two ELL students, a student with learning disabilities and four speech and language students.

STUDI participants can receive \$250 for classroom materials needed to complete an inquiry based, hands-on science unit and two graduate-level credits. They also take part in fall and spring follow-up sessions about the science units they developed during the program. For additional information, visit uwosh.edu/go/studi.

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