

a collaboration of the University of Northern Iowa, Iowa State University and the University of Iowa

The (Education) Journey is the Destination for Teachers This Summer

Teachers became learners this summer thanks to several IMSEP sponsored teacher-training workshops held across the three public universities. From *Numbers & Operations: Yes! It's for Preschool! No! It's not Calendars!* Workshop offered by Dr. Carla Peterson, professor of early childhood education and associate dean for research and graduate education in ISU's College of Human Sciences, to UNI's Assistant Professor Chad Heinzl and University of Iowa's Dr. John Dunkhase collaborative *O'My Iowa Geology-Loving Outdoor Learning (OMIG-LOL) Camp* to University of Iowa's Dr. Walter Seaman's *EMPOWERR (Elementary Mathematics Partnership Opening Windows to Excellence, Rigor and Relevance) Institute*, K-12 math and science teachers from around the state expanded their knowledge while earning college credit. According to comments by workshop participants, the greatest benefit is the influence on student interest and achievement. For more information about these and other projects underway, go to <http://www.iowamathscience.org/competitivegrants.shtml> or <http://www.iowamathscience.org/news.shtml>.



Water quality testing at O'My Iowa Geology-Loving Outdoor Learning (OMIG-LOL) Camp

Real World Extern Sees Project from Inside Out

Lisa Roose didn't know that when she was asked to be on a working committee for the Peet Junior High Addition and Renovation Project that she'd get an up close and personal view of the renovation this summer. Lisa is IMSEP's Real World Extern working with Waterloo's [Struxture Architects](#), a full service firm specializing in educational building construction and the architect for the school's renovation. When Lisa joined Struxture to help categorize construction data for the company, she quickly became an "education insider" resource to the company for answers and ideas in redesigning classrooms. One of 10 teachers from Iowa schools accepting the challenge to gain real world examples to take back to classrooms this fall, Lisa will now give her students real time career information about opportunities available right in their own home town. To learn more about this year's IMSEP Real World Externship Program, go to <http://www.iowamathscience.org/externships/>.

I-Teach Intern Makes Cooking Mathematical



I-Teach intern Tracey Faust

What do fried sweet potato chips and math have in common? They are both a part of the educational programming that Tracey Faust has planned as part of her summer internship through IMSEP's I-Teach Math and Science Program. Faust, a junior math education major at the University of Northern Iowa (UNI), talks about her experience with I-Teach, "I like the I-Teach Program because I received first-hand experience by not only talking to teachers and principals about what it's like to be in the classroom, but also going into the classroom and teach myself." This summer Tracey has worked with over 100 children through 4-H Youth Services and the Black Hawk County Extension Office gaining practical teaching experience and finding ways to include math and science knowledge into fun summer programs for area students. I-Teach Mathematics and Science is a program designed to recruit talented and diverse candidates to the math and science teaching profession. Participants are eligible for competitively-awarded scholarships as well as internships. The I-Teach Program is currently offered at UNI, Iowa State University (ISU) and North Iowa Area Community College (NIACC) and is sponsored by the Iowa Mathematics and Science Education Partnership. To date, over 75 students, at no cost to them, have participated in this popular program at all three campuses. For more information, go to <http://www.iowamathscience.org/i-teach/>.

Summer of Stars: Science as Magic Mesmerizes Science Center of Iowa (SCI) Patrons

Magic filled the air – or at least radio waves did – recently as University of Iowa Physics & Astronomy Professor **Vincent Rodgers** and Physics & Astronomy Instructional Designer **Dale Stille** wowed over 300 kids, parents and grandparents this month at SCI's "Magic of Science Day." In partnership with IMSEP, faculty and students from each of Iowa's public universities volunteered this summer to educate Iowans about the many ways math and science works around us. Dr. David Acker, Associate Dean for Academic and Global Programs, College of Agriculture and Life Science, will oversee the last SCI presentation on Saturday, August 8, for a lesson in "Farming Fun." For more information about the Science Center of Iowa, go to www.sciowa.org.



University of Iowa's Dr. Stille and Dr. Vincent demonstrate the magic of solar energy.

News and Updates

A Dynamic Duo: Iowa's Community Colleges & Public Universities Collaborate on STEM Education

A number of IMSEP programs bring together the expertise of community colleges and public universities to advance STEM education in Iowa. *North Iowa Area Community College* joined UNI out of the gates to pioneer the "I-Teach Math & Science" recruitment program. *Hawkeye Community College* committed to join the program this fall. A number of community colleges, including *Northeast Iowa Community College*, *Southwestern Community College*, and *Iowa Valley Community College* were engaged in the roll out of the IMSEP core program "Community College STEM Instructor Preparation and Updates" at Iowa State University during 2008-09. And, numerous sub-contracted projects led by university faculty members in support of IMSEP engage community college partners. *Kirkwood Community College* is a partner in a UI project to draw more middle schoolers into STEM related fields of interest. *Des Moines Area Community College* partners with ISU in the IMSEP-supported 2009 [IT-Olympics](#). *Iowa Western Technology Community College* is partnering on an ISU project to draw young women from throughout Northwest Iowa into STEM fields of study. And, *Marshalltown Community College* has joined an ISU researcher in delivering math and science concepts to youth through gardening. Iowa's unrivaled higher education assets, including our community colleges and public universities, are delivering on a commitment to restore the state's leadership in STEM education.

Fall ConFABS on the Horizon

The Iowa Area Education Agencies (AEAs) and IMSEP are partnering again this fall to kick off the next series of ConFABS (Conversations to Forge Alliances of Businesses and Schools). Designed to bring together education and business leaders in communities around the state, these meetings allow all parties to exchange ideas on how we can better prepare students for the challenges and opportunities of the real world. To see a list of partnership currently available in communities around the state and to learn more about these ConFABS, go to <http://www.iowamathscience.org/symposium/partners/index.php>.

IMSEP Partners with Grand View University on Math and Science Summit

Math and science educators from Iowa's teacher education colleges and universities will convene on Friday, August 14, at Grand View University to weigh in on a common vision for Iowa's teaching standards for math and science. Iowa Department of Education Director Judy Jeffery will kick off the day of thought provoking speakers and workshops. Keynoters include Dr. Bettina Casad, Assistant Professor of Psychology, California State Polytechnic University; Dr. Barbara Dougherty, Iowa State University's incoming Director of the Center for Excellence in Science, Mathematics & Engineering Education; and Dr. Julie Gess-Newsome, Director of the Center for Science Teaching and Learning, Northern Arizona University. We'd like to thank Dr. Paul Rider, professor of physics and head of the division of science, Grand View University, for taking time out of his busy schedule to be a planning partner for this event. Watch for more details in next month's newsletter. Find more details about this Summit at <http://www.iowamathscience.org/summit/>.

Iowa Mathematics and Science Education Partnership

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