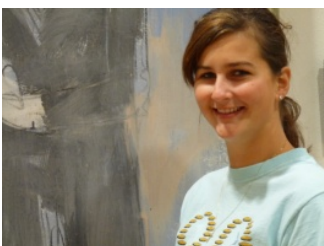

Iowa Math and Science Teacher Educators to Carry on Mission of Summit



Carrying on the cooperative spirit to produce uniformly excellent teachers of math and science, a "next steps" committee that grew from the August 14 Iowa Mathematics and Science Teacher Educator Summit has met and made plans. Whether it be through a listserv or social network, via stand-alone meetings or in affiliation with a pre-existing body, or in some combination, everyone agrees that there is much to be gained through sharing of syllabi and instructional materials, models and methods, policies, programs and maybe even personnel. A "point person" in both math education and science education has volunteered to lead discipline-specific subsets of summit attendees to create Organizing Committees. The two Organizing Committees will

soon: (1) Establish a mode of communication; (2) Create interest groups such as elementary and secondary, and/or content or pedagogy, etc.; and (3) Plan for a 2010 Summit, which will be focused on matters of the committee's design. Everyone on the roster of the August 14 summit can expect to hear from volunteers shortly. The role of IMSEP will continue to be that of support and administration of the details so that creative, busy people can focus on the important task at hand: top quality math and science teachers for Iowa schools.

I-Teach Leads the Way for Michaela Sieren



Sophomore science major Michaela Sieren knows what she wants to do when she retires – open a school where every child wanting to attend can, no matter what their financial situation. But what to do between now and retirement? After hearing a pitch in her freshman biology lecture about the I-Teach program, she signed up. "It's getting me into the classroom long before my peers – and I had an absolutely fabulous bio/chem teacher in high school that drew me into math and science," said Michaela. (That teacher is UNI alumni Mike Williams.) Now doing an I-Teach Internship at the Phelps Youth Pavilion at the Center for the Arts in Waterloo, she knows this is exactly what she wants to do to get her to her retirement dream. But in between, Michaela would love to teach science in a rural community in Northwest Iowa. "It's beautiful and

the scenery is so different from where I grew up." More importantly, Michaela said, "You know when you hear any story about teachers affecting students — where they can just see it in their eyes when it clicks — I want that teacher to be ME!"

IMSEP's Inaugural Annual Report Now Available

After one year of operation focusing on improving math and science skills in students, and providing more opportunities for teachers in the classroom and drawing new teachers into the fold, IMSEP has published the 2009 Annual Report. A few highlights include:

- Forty-seven more STEM majors drawn into teaching at the University of Northern Iowa and Iowa State University;
- Four hundred forty-one (441) Iowa high school students earned university credit by participating in Project Lead the Way (PLTW);
- Nineteen schools and 1,575 students partnered with businesses through IMSEP-supported activities;
- Over 2,000 students, 500 pre-service teachers and 400 teachers of math and science participated in outreach programming of public university faculty supported by IMSEP.

To access our annual report, please visit www.iowamathscience.org/reports.

Funding Reduction Leads to Surgical Paring of IMSEP Programs

Determined to maintain the integrity of programs central to the promise of improved math and science education for Iowans, the IMSEP Executive Board tentatively approved a combination of strategies for meeting a 10 percent reduction in state funding. Spared from cuts are signature programs involving math and science teacher production and development. Shared roll backs of 10 percent are to be endured by the core programs Project Lead The Way and Community College STEM Instructor Preparation, as well as support directed to the Corridor STEM Initiative and to the Iowa Mathematics and Science Coalition. Heavier reductions ranging from 27 percent to 100 percent will be incurred by activities of the Iowa Mathematics and Science Institute, including almost 40 percent reductions to operations and the zeroing out of two Institute functions. The IMSEP leadership team is striving to maintain the integrity of its goals and objectives through these economic times.

FIRST Tech Challenge Gears up for Regional Competition



Construction is under way for the 2009 FIRST Tech Challenge Program (FTC), an after-school activity in which high school students gain experience in STEM-related fields via hands-on experiences with robots. FTC teams build and program a robot, which competes in a sports-like game against other FTC robots. Nationally sponsored by Rockwell-Collins with a local in-kind sponsorship by IMSEP, the program's coordinator Rebecca Whitaker has made it a "goal to get FIRST Tech Challenge into all high schools in Iowa." A preliminary scrimmage between participating schools will take place on November 21 at the Science Center of Iowa (SCI) in Des Moines. (*Space is still available for teams wanting to participate. The deadline sign up is November 8.*) Teams will then move on to compete at the Iowa FTC Championship (January 9, 2010, at The University of Iowa's Memorial Union). Depending on how teams perform, they may be invited to participate at the FIRST Tech Challenge World Championship in Atlanta, GA, in April 2010. Over \$11 million in scholarship money is available to students who participate in FTC. To learn more about FTC, how to start a team or volunteer opportunities, please contact Rebecca Whitaker, University of Iowa at ftc.iowa@gmail.com, or visit the website at

<http://k-12.engineering.uiowa.edu>.

Real World Externships for Teachers of Mathematics and Science to Expand for 2010



In the summer of 2009 IMSEP matched ten teachers with community businesses and industries throughout Iowa for *Real World Externships* that are now translating into meaningful lessons back at school. A thorough evaluation plus feedback from company managers and teachers is reshaping the program for an even more successful and expanded summer of 2010. Recruitment of teachers and companies for next summer is underway. For more information about the *Real World Externship* program, contact Diane Yoder at diane.yoder@uni.edu.

Day in the Life of the Iowa Mathematics and Science Institute

For those we serve who may not get the chance to visit the Institute, here is a window into the converted classroom space on UNI's south side where IMSEP is administered. The days are hectic and priorities can change on a dime, but here's a typical day in the life of IMSEP:

7:20 am — Program Manager Kari Jastorff opens up shop and turns on the lights, dispatching accumulated phone messages and e-mails of the previous night.

8:30 am — A teleconference between Grant Specialist Diane Yoder, Director Jeff Weld, and an official from the UNI Foundation along with a charitable trust agent, probes leveraging possibilities.

10:40 am — Teacher feedback from the Real World Externships program is packaged by communications specialist Tonja Richards into a brochure and fact sheet for the upcoming science teachers annual conference.

11:09 am — Building a web-based tracking program from scratch, graduate assistant Paul Barloon and undergraduate staffer Laura Tucker monitor I-Teach recruits.

12:30 pm — Amanda Throckmorton, graduate assistant in communications, prepares a press release announcing an upcoming IMSEP-hosted school-business partnerships meeting in Sioux City.

1:50pm — Jeff is hosting a teleconference of math and science education faculty strategizing actions to follow an August summit of teacher-preparers across Iowa.

3:45 pm — Cedar Valley organizations suitable to host I-Teach interns are contacted by Diane and Kari for a briefing and enlistment.

5:20 pm — Draft guidelines for awarding new NSF-funded scholarships for teaching math and science are finalized by Jeff and Diane, then sent on to partners at each university.

5:35 pm — Kari tallies recent invoices from university partners to complete an update of the balance sheet.

5:40 pm — Lights out. (Did anyone turn off the coffee pot?)



Iowa Mathematics and Science Education Partnership

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