

CESA 6 Science Center: 2010-2012

Focus: Creating Increased Capacity for Inquiry-based Science Instruction in the Middle Years

The CESA 6 Science Center has been designed through a partnership between CESA 6 and the University of Wisconsin-Madison *Wisconsin Leads in Math and Science* initiative. The participation of *Wisconsin Leads* in this partnership effort with CESA 6 and its school districts is supported by several UW-Madison units, including but not limited to the School of Education and its Education Outreach and Partnerships office and the Institute for Cross-college Biology Education and its Center for Biology Education.

Project Goal:

- To increase the content expertise and instructional capacity of teachers of science in the middle years (Grades 5-9)

Target Audience:

- Science Teachers (Grades 5-9)

Project Outcomes:

1. Increase the content knowledge of science educators
2. Expand the ability of science educators to implement an inquiry-based instructional model
3. Increase the capacity of science educators to engage in reflective practice as a vehicle to improve instruction (through the deployment of instructional coaching)
4. Increase the capacity of science educators to differentiate science instruction to meet the needs of diverse learners
5. Increase the capacity of science educators to integrate cutting-edge technology into the inquiry-based learning experience
6. Develop an on-line resource portal to support teachers and students in inquiry-based science

* All work will be linked to national teaching in science reform efforts. As the common core standards in science evolve, they will be included in Science Center experiences.

* All participants will receive periodic instructional coaching as part of the Science Center experience. Coaches will be provided by CESA 6 and UW-Madison.

Project Coordinators:

- Phillip Caldwell, II, Assistant Director, Education Outreach and Partnerships (EOP) office, UW-Madison School of Education
- Beth Hutchinson, *Wisconsin Leads in Math and Science* Outreach Specialist, Education Outreach and Partnerships (EOP) office, UW-Madison School of Education
- Jack Jorgensen, Assistant Dean for Partnerships and Outreach Services, Education Outreach and Partnerships (EOP) office, UW-Madison School of Education
- Deb Kneser, Teaching and Learning Coordinator, CESA 6
- Cheryl Malaha, Executive Director of Instructional Services, CESA 6
- Kevin Niemi, Science Outreach Director, Institute for Cross-college Biology Education, UW-Madison
- Joan Wade, Agency Administrator, CESA 6

UW-Madison Scientists Interested in Contributing to the Partnership:

(All experienced with working with Middle School educators)

- Rick Amasino – Professor, Biochemistry, Howard Hughes Medical Institute Professor
- David Baum – Professor, Botany
- Colin Dewey – Professor, Medical Biostatistics
- Sara Krauskopf and John Greenler – Great Lakes Bioenergy Research Center (GLBRC)
- Scott Lindstrom – Space, Science & Engineering Center (SSEC)
- John Moore – Professor, Chemistry
- Greta Zenner Petersen – Materials Research Science Education Center (MRSEC)
- Basil Tikoff – Professor, Geology
- Amy Wendt – Professor, Electrical & computer Engineering, Co-director of Women in Science & Engineering Leadership Institute
- Paul Williams – Emeritus Professor, Plant Pathology
- Others to be determined

Science Center Overview: 2010-2012

Topics / Dates: (Locations TBD – Experiences in the field will be included when appropriate)

- 2010-11
 - Science Inquiry as a Teaching and Learning Process: October 13 & 14, 2010
 - Energy: December 8 & 9, 2010
 - Weather and Climate: February 2 & 3, 2011
 - Ecosystems: April 13 & 14, 2011
- 2011-12 (Actual dates yet to be determined)
 - Heredity & Diversity: Late September, 2011 (2 days)
 - Force & Motion: Early November, 2011 (2 days)
 - Focus on Leadership in Science Education
 - March 8-10, 2012 - Wisconsin Society of Science Teachers Annual Conference (Madison)
 - Physical and Chemical Change: Late Spring, 2012 (2 days)

Participation Fees:

- Registration: \$700/participant/year (\$87.50 per day and includes breakfast and lunch). This is a two-year project. These fees are being subsidized with an initial commitment of \$20,000 to CESA 6 from the *Wisconsin Leads in Math and Science* initiative. These funds are targeted to reduce the districts' costs for participating. The goal of *Wisconsin Leads* is to develop an effective, sustainable, and long-lasting program. On-going fiscal evaluations are essential to success and therefore future modifications to these figures may be needed for sustainability.
- Materials Fee: \$100/year.
- Payments are to be made to CESA 6 annually.

Middle School Science Specialist Certificate:

- Participants that complete the 2-year Science Center experience for credit will receive a Middle School Science Specialist Certificate from the Education Outreach and Partnerships (EOP) office, School of Education, UW-Madison.
- The Middle School Science Specialist Certificate will not appear on official UW transcripts, however it could be used by school districts as deemed appropriate to acknowledge teacher participation.
- Attainment of the Middle School Science Specialist Certificate could also be written as a goal into Professional Development Plans.
- While conversations are currently ongoing with DPI, the Science Specialist Certificate is not connected to any licensing or credentialing procedure at this time.

Wisconsin Leads Middle School Science Specialist Professional Educators' Credits and Scholarships:

- A *Wisconsin Leads in Math and Science* scholarship fund has been established for teachers interested in the Middle School Science Specialist program.
- The special student credit cost at UW-Madison is \$348.24 per credit hour. This scholarship fund will reduce participating practitioner costs to \$200 per credit. Additional text/media fees may apply.
- Credits will be special student graduate level credits and are not directly transferrable into UW-Madison graduate programs, however, transfer into UW-Madison graduate programs is possible so please consult with UW-Madison *Wisconsin Leads* personnel for details.
- A total of 12 credits are available as part of this program (3 credits per semester, 2 semesters per year for 2 years).

If you have any questions or suggestions, please feel free to contact Cheryl Malaha at 262-573-7025