

What is the GlobalWatershed GK12 program? In this program, Michigan Tech PhD students will be awarded two-year fellowships to work with middle and high school teachers to create lesson plans and activities that transfer their research on watershed science topics to K12 teacher and students. The program is a joint effort between Michigan Tech and schools in the Western Upper Peninsula of Michigan and Sonora, Mexico. The program is funded by the National Science Foundation (NSF) for a five-year period.

GK12 Fellows will be paired with middle school science, social studies, and other teachers, although we expect some participation from high school teachers, too. GK12 Fellows will teach, under the supervision of their partner teacher, water topics from existing lesson plans and lesson plans they develop. GK12 Fellows will be prepared to teach in the middle school classroom through a specially designed education course at Michigan Tech.

Each GK12 Fellow-teacher pairing will extend over two years. The first cohort of fellows will begin the program in summer 2010. Three more cohorts will enter the program in the succeeding three years, for a total of 18 Fellows. GK12 fellows will be expected to work at their assigned school at least 10 hours a week. PhD students will be selected for the program based on their academic qualifications, their enthusiasm for teaching, and their ability to communicate scientific issues.

The benefits of the program to teachers, students and school districts include the following.

- Teachers and students will be engaged in research on the scientific aspects of water issues, covering a broad range of content standards and school improvement goals.
- GK12 fellows will develop lesson plans and activities that can become a permanent part of the school curriculum.
- Participating teachers will be paid a \$4,500 stipend per year.
- Fellows will act as a resource to teachers throughout their two-year school assignment.
- Teachers will earn professional development credits.
- No additional expenses will be borne by the schools. Up to \$1,000 will be available to Fellows and teachers to cover supplies, field trips, etc.

Expectations of teachers involved in the program include the following.

- Candidate teachers will attend an evening informational workshop in March.
- Interested teachers will complete a short application for the program and teachers will be selected to participate in the program by a committee composed of school administrators and Michigan Tech faculty.
- Selected teachers will attend a one-week summer workshop designed to prepare teachers and GK12 Fellows and to pair teachers and GK12 Fellows with similar interests.
- Each teacher will commit to develop a relationship with and mentor a GK12 Fellow for two academic years.

For more information, please contact

Alex Mayer, Project Director
Department of Civil & Environmental Engineering
Michigan Technological University
1400 Townsend Drive
Houghton MI 49931
Tel: (906) 487-3372 asmayer@mtu.edu

Shawn Oppliger, Project Co-Investigator
Western Upper Peninsula Center for Science,
Mathematics and Environmental Education
P.O. Box 270 / 809 Hecla St.
Hancock, MI 49930
Tel: (906) 482-0331 shawn@copperisd.org