





## For Midwestern Teachers

# Highlights from Summer 2000

#### General Overview

One of the primary requirements of the ENVISION program is the attendance of a four- week Summer Insitutute at Purdue University. Summer 2000 was the first in a series of four institutes, and this newsletter provides a brief description of some of the activities, experiences, and requirements completed by the first teacher cohort.

Overall, the institute focuses on geoenvironmental science concepts and research. The first two weeks expose participants to environmental science content and field studies, while the second two weeks are devoted to the completion of group environmental research projects.

In addition to science content and research, the institute also provides information and experiences in curricular integration, alternative assessment, and professional development. As a result, ENVISION aims to help strengthen middle school science instruction through new content, activities, pedagogical techniques, and peer training.



Summer 2000 participants conducting a stream survey at Burnett's Creek

#### From the Master Teacher



Ted Leuenberger, Master Teacher 2000-2001

"The ENVISION program provides a great opportunity for professional growth. Teachers are exposed to a vareity of hands on activities and are shown how to involve students in environmental issues as research scientists. ENVISION is not just a four week workshop. Teachers are supported throughout the following year by keeping in contact with the university staff, the master teacher, and the new set of colleagues formed during the workshop. As this year's master teacher, I look forward to visiting and working with the ENVISION teachers."

### From the Project Directors

"The most exciting part of the project for me is seeing the enthusiasm of teachers as they conduct their own research projects, that model inquiry-based teaching and learning. It is also great to see and hear about the successes teachers have had implementing ENVISION activities and ideas in their classrooms."

Dan Shepardson

#### **Field Experiences**

With each of the three content modules: urban environments. rural environments, and watersheds- the participants conducted activities and experiments in the field. The ENVISION staff designed the field experiences for classroom and school yard use by relying on inexpensive, durable equipment and adaptable research questions.

One of the first field trips explored the wetland at a local park. The participants conducted an entire suite of environmental analysis at the wetland as they studied water chemistry, macroinvertebrates, plant diversity, and soil types. Later in the program, a trip to a local forest exposed participants to various methods of maintaining and using forests and a forest inventory.

In addition to the study of natural environments, the participants also asked questions about the environmental impacts of built environments. Specifically, they researched and analyzed the impacts of noise pollution, temperature changes, and other environmental variables in the local city and surrounding campus buildings.



Summer 2000 participants conducting macroinvertebrate surveys