

Education

Teachers attend GLOBE professional development workshops where they receive hands-on instruction on how to develop researchable questions on the environment, take scientific measurements, submit environmental data to a global database and facilitate use of data in student research.

GLOBE educational activities and materials include:

- More than 50 scientific measurement protocols
- Lesson plans and over 60 learning activities aligned with state and national standards
- On-line presentations and training modules
- Classroom implementation and evaluation strategies
- A Web site with data visualization, analysis, collaboration and reporting tools

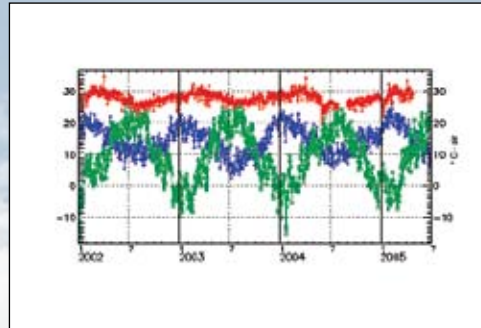


GLOBE Goals

- Improve student achievement across the curriculum with a focus on student research in environmental and Earth system science
- Enhance awareness and support activities of individuals throughout the world to benefit the environment
- Contribute to scientific understanding of Earth as a system
- Inspire the next generation of global scientists

Student Inquiry

In our complex and interconnected world, understanding how to ask good questions and design scientific investigations has never been more important. By conducting environmental research at local, regional and global scales, students learn to apply their studies to real-world issues.



The GLOBE database contains over 17 million observations for use in student research.

GLOBE supports a multicultural approach to the study of science, mathematics and technology in conjunction with geography, social studies, language and the arts. GLOBE promotes environmental awareness, understanding of other cultures and a sense of global community.



Earth System Science

GLOBE students learn about the Earth system through investigations that span five major areas:

- Atmosphere (chemistry, weather and climate)
- Hydrology (water quality, physical processes and water ecosystems)
- Soil (moisture, temperature, composition and health)
- Land Cover/ Biology (mapping, biometry and land use change over time)
- Phenology (plant and animal responses to seasons and climate change)



NSF and NASA have funded the latest GLOBE research efforts, collectively called Earth System Science Projects. These projects support student research on the cutting edge of Earth system science.

To date, over 1 million students and 40,000 teachers from more than 100 countries have participated in GLOBE.