

The GLOBE Program in Latin America and the Caribbean

An international hands-on, school-based education and environmental science program uniting students, teachers, and scientists in study and research about the dynamics of Earth's environment.

Over 31,000 teachers in more than 17,000 schools in over 100 countries have been trained to implement GLOBE.



GLOBE Program Summary

The GLOBE Program brings together students, teachers and scientists to:

- Increase scientific understanding of the Earth;
- Support improved student achievement in science and math; and
- Enhance environmental awareness of individuals worldwide.

GLOBE supports education by providing hands-on experience in authentic science. GLOBE students are doing science, not just learning about the work of others. Students begin with measurements of individual environmental parameters and build toward an understanding of how the Earth functions as a system.

GLOBE students measure and report physical, chemical and biological properties of Atmosphere and Climate, Hydrology, Soil, Land Cover/Biology and Phenology. The resulting global data sets are made freely available via the Internet at www.globe.gov to users including the worldwide environmental science community. GLOBE students also access these data for classroom studies, research, student-scientist partnerships, and worldwide school-to-school collaborations. GLOBE students have collected and entered more than 14 million data for their use as well as by scientists studying the Earth system.

The next step in the evolution of the GLOBE Program is called the "Next Generation GLOBE (NGG)." The features of NGG are based on an intensive self-study of the past 10 years of GLOBE conducted by GLOBE Program Office staff, with extensive input and recommendations from the worldwide community of GLOBE participants, and guidance from GLOBE's U.S. Government funding agencies.

The vision of NGG is of a Program supporting students, teachers, and scientists to collaborate on inquiry-based investigations of the environment and the Earth system, working in close partnership with two U.S. agencies, the National Aeronautic and Space Administration (NASA) and the National Science Foundation (NSF), and their Integrated Earth System Science Programs (IESSPs) to give the entire GLOBE community access to top scientists around the world and expose students to programs that are on the cutting edge of Earth system science research. To achieve this vision, GLOBE will promote focused activities around the NSF IESSPs, develop GLOBE Project School Networks (PSNs) and strengthen GLOBE Learning Communities through the development of Regional Consortia of GLOBE countries around the world.

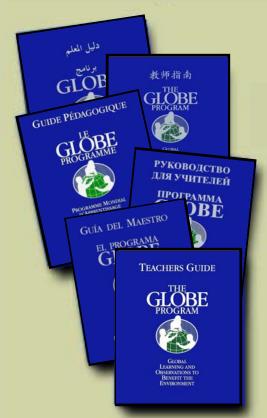
This transformation will be accomplished while retaining the Program's essential elements of being both education and Earth system science, a bridge between these two international communities, a worldwide collaborative community of practice, and a program

that employs inquiry-based educational activities that involve students in "authentic" hands-on science, the analysis of data and the use of scientifically-tested protocols.



Educational Materials

GLOBE provides a variety of K-12 educational materials, from hands-on inquiry activities for classroom use to online interactive learning experiences and investigations using student-collected data.



GLOBE Teacher's Guide

Do You Know That Clouds Have Names?

¿Sabías Que las N Tienen Nomb

The GLOBE Teacher's Guide provides the scientific and educational foundation for the first generation of GLOBE investigations: Atmosphere, Hydrology, Land Cover, Phenology, and Soil. It includes information necessary for accurate data collection such as measurement procedures, student lab and field guides, instrument specifications, and scientific background information. The Teacher's Guide also includes a variety of Learning Activities that complement data collection and extend student understanding of the Earth as a system through a hands-on and inquiry-based approach.

Scoop

Elementary GLOBE

GLOBE has developed a suite of storybooks and learning activities specifically designed for grades K-2 that form the Elementary GLOBE Unit. This unit engages the youngest GLOBE students in an age-appropriate fashion. These standards-based and classroom-tested resources include five modules that each address parts of the Earth system while also building literacy skills.





Online Teaching Modules

The GLOBE Program has developed Interactive online resources to promote understanding of GLOBE **Program** content and scientific protocols. Resources combine graphics and interactivity to promote understanding through a hands-on approach that has been established as a successful model online learning. The Cloud for **Protocols** module (shown here) promotes scientific understanding of formation, cloud content identification of cloud types, and

interactive features to help online learners to accurately collect data related to the GLOBE Cloud protocols.





Data Use Activities

Educational materials have been designed to encourage student analysis and interpretation of data. The data use activities foster student investigation of environmental data using the GLOBE Web site and its online graphing tools.

GLOBE educational technologists are exploring additional learning models to encourage student interpretation of data in an online and inquiry-based format.



GLOBE Learning Expeditions

GLOBE Learning Expeditions (GLEs) are organized every 2 to 3 years in order to provide students from around the world the opportunity to meet one another, establish friendships and develop collaborative partnerships that will enhance their future GLOBE experience. These conferences also provide teachers an opportunity to share ideas and challenges from their GLOBE experiences, to attend protocol and activity enrichment sessions, and to build connections for research efforts between schools. GLEs have occurred in 1998 (Helsinki, Finland), 2000 (Arkansas, U.S.A.), and Šibenik, Croatia (2003). The next GLE is tentatively scheduled for 2008 in a location still yet to be determined.







GLOBE Annual Conference

The 9th Annual GLOBE Conference, "GLOBE 2005: Global - Regional - Local," was held on 31 - July - 5 August, 2005, in Prague, Czech Republic. The Annual Conference brought together GLOBE Country Coordinators and U.S. Partnership Coordinators, Education and Science Principal Investigators, GLOBE Program Staff, and others to address key education and science elements of GLOBE. This event was the first GLOBE Annual Conference to be held outside of the U.S. The meeting was organized by GLOBE Europe, in collaboration with the GLOBE Program Office, and was graciously hosted by Tereza Association, the organization responsible for GLOBE in the Czech Republic. More than 150 individuals from 34 countries participated actively in presentation, discussions, workshops and social events.



The 10th Annual GLOBE Conference, "The New Decade for Global Sustainable Development", will be hosted by GLOBE Thailand in 2006. Look for updates on the GLOBE Web site about this event!

The GLOBE Program www.globe.gov

GLOBE Country Coordinators in Mexico, Central America and the Caribbean (9 Countries)



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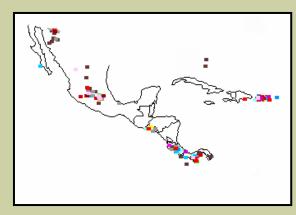


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Mexico, Central America and the Caribbean Teachers: 269 Schools: 198

Data Reported: 202,967





GLOBE Country Coordinators in South America (9 Countries)



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South America Teachers: 397 Schools: 290 Data Reported: 154,034



GLOBE Online Newsletters







Regional Events in Latin America and the Caribbean

Regional Events/Collaboration:

- October 2005, the "1st Workshop for South American GLOBE Decision Makers" met in Lima, Peru with Representatives of Ministers of Education and of the Environment and GLOBE Coordinators (except for Brazil), from Argentina, Chile, Bolivia, Brazil, Colombia, Ecuador, Paraguay, Peru and Uruguay, to discuss how to strengthen GLOBE regionally;
- April 2005, GLOBE Coordinators from 6 Latin American and Caribbean GLOBE countries met to integrate GLOBE in the region;
- A GLOBE Online Discussion Forum was created in San Jose, Costa Rica, in April 2005 for ongoing online discussions by regional Coordinators on all topics related to regionalization;
- Spring 2006: Iguazu Falls, Argentina, a GLOBE training workshop is planned with a GLOBE Coordinators Meeting;
- GLOBE in Latin America and the Caribbean has an exciting newsletter—the CLAG (Caribbean Latin America GLOBE) Herald (http://www.globe.gov/fsl/pdf/clag_herald_en-01-11-2005.pdf);
- April 2004, as part of the White Water to Blue Water initiative, GLOBE schools in Miami, Trinidad and Tobago, and Mexico engaged in a collaboration including 2 Videoconferences between schools, 1 Field campaign and a Web chat on Earth Day April 22, 2004.

Training Events of Regional Significance:

- Major regional training workshops have taken place in Argentina, Chile, Costa Rica, Mexico, Panama, Peru and Uruguay;
- Eight trainers in Master Trainer program to build capacity and support GLOBE training workshops in Latin America and the Caribbean.





Highlights of GLOBE Stars and News and Events in Latin America and the Caribbean



Highlight your special GLOBE events as well as any GLOBE activities that your teachers and students would like to share with others. These stories often provide ideas and inspiration to other schools, teachers and Country Coordinators. Acknowledge these events by creating a draft article and submitting it with a few photographs. Please remember that all pictures must have a completed release form in order to be posted on the GLOBE Web site.

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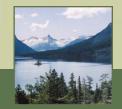


Winner of the 2004 Media and Technology Category "The awardees reflect new ways of teaching world languages and focus on the international dimension of every major subject, including math, science, language arts, history, geography and economics. They also feature creative and innovative uses of technology."



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