



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 49,000 teachers in more than 22,000
- schools in over 100 countries have been
- trained to implement GLOBE.





GLOBE Program Summary

GLOBE (Global Learning and Observations to Benefit the Environment) is a worldwide hands-on, primary and secondary school-based science and education program. Announced in 1994, GLOBE began operations on Earth Day 1995. Today, the international GLOBE network has grown to include representatives from 110 participating countries and over 100 U.S. Partners coordinating GLOBE activities that are integrated into their local and regional communities. Due to their efforts, there are more than 49,000 GLOBE-trained teachers representing over 22,000 schools around the world. GLOBE students have contributed more than 18 million measurements to the GLOBE database for use in their inquiry-based science projects. The goals of the GLOBE Program are to:

- 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; and
- Inspire the next generation of global scientists.

Scientists and educators have developed environmental science educational materials as a resource for GLOBE teachers, including 54 scientific protocols, 60 Learning Activities, and many additional supplemental resources and activities.

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.

The current step in the evolution of the GLOBE Program, referred to as the “Next Generation GLOBE” (NGG), is aimed at increasing the number of student inquiry-based research projects focused on international large-scale science initiatives.

The National Aeronautics and Space Administration (NASA) and the National Science Foundation (NSF) have identified 4 new Earth System Science Projects (ESSPs) to add to the suite of educational activities and resources GLOBE has offered to students and teachers since 1995:

- Watershed Dynamics
- From Local to Extreme Environments (FLEXE)
- Seasons and Biomes
- Carbon Cycle

The GLOBE Program provides opportunities for students, teachers, scientists, and community members to work together through the GLOBE Schools Network, the international GLOBE Alumni organization, and the GLOBE Parent Council in support of student learning and research.

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 how to better understand, sustain and improve Earth’s environment at local, regional, and global scales.



NGG highlights GLOBE’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

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.

Elementary GLOBE

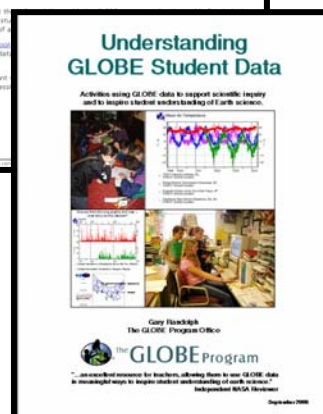
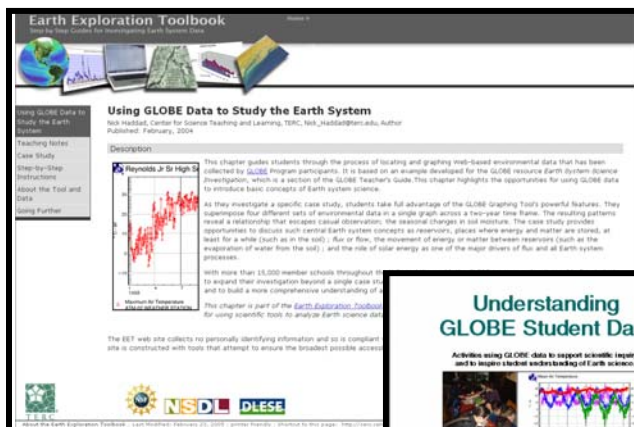
GLOBE has developed a suite of storybooks and learning activities specifically designed for grades K–4 that form the Elementary GLOBE Unit. This unit engages the youngest GLOBE students in an age-appropriate fashion. These standards-based and classroom-tested resources include five modules that each address parts of the Earth system while also building literacy skills.





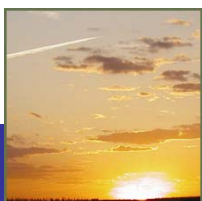
Online Teaching Modules

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 for online learning. The Cloud Protocols module (shown here) promotes scientific understanding of cloud formation, content on identification of cloud types, and interactive features to help online learners accurately collect data related to the GLOBE 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.





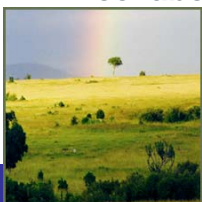
GLOBE Learning Expeditions

GLOBE Learning Expeditions (GLEs) are organized every few years in order to provide students from around the world the opportunity to present their research projects to their peers, to GLOBE scientists, and the greater GLOBE community. These conferences also provide students with opportunities to establish friendships and to develop collaborative partnerships that will enhance their future GLOBE experiences. GLEs provide teachers with opportunities to share innovative ideas and challenges, to attend protocol and related professional development sessions, and to build connections for research efforts between schools. GLEs have occurred in 1998 (Helsinki, Finland), 2000 (Arkansas, U.S.A.), 2003 (Šibenik, Croatia), and 2008 (Cape Town, South Africa). For more information visit: www.globe.gov/gle2008.



GLOBE Annual Conferences

GLOBE Annual Conferences bring together GLOBE Country Coordinators, U.S. Partnership Coordinators, Science and Education Principal Investigators, and Partnering Organizations from around the world to address key science and education issues. These events offer a unique opportunity for participants to learn about the latest scientific research, interact with the GLOBE community, and develop collaborative student research partnerships with scientists and schools from around the world. The next GLOBE Annual Conference will occur in August 2009 in Calgary, Canada. For more information visit: www.globe.gov/annualconferences.





GLOBE Country Coordinators in Latin America and the Caribbean (18 Countries)


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103 Schools


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El Salvador
6 Schools


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25 Schools

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Latin America and the Caribbean

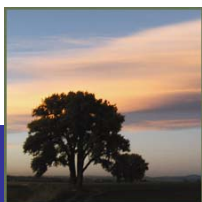
Teachers: 826 Schools: 551
Data Reported: 465,355

U.S. Territories collaborating with the Latin America and Caribbean Consortium:



Puerto Rico
335 Schools

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GLOBE PARTNER Newsletter

Latin America / Caribbean Newsletters

- [GLOBE Newsletter 2008 \(Aug 2008\)](#)
- [GLOBE Newsletter 2007 \(21 Nov 2007\)](#)
- [Caribbean and Latin America GLOBE Herald \(05 Apr 2007\)](#)
- [Caribbean and Latin America GLOBE Herald](#)
- [GLOBE Newsletter 2006, Vol. 1](#)
- [GLOBE Regional News in Latin America / Caribbean Region](#)
- [Latin America / Caribbean Region](#)
- [Caribbean and Latin America GLOBE Herald](#)
- [Latin America / Caribbean Region](#)
- [Caribbean and Latin America GLOBE Herald](#)



The GLOBE Program Newsletter August 2008

Announcements Regional News Science Education

- [Greetings!](#)
- [GLOBE International Advisory Committee](#)
- [The Fourth GLOBE Learning Expedition and 12th Annual GLOBE Conference](#)
- [2009 Annual Conference](#)
- [The GLOBE Online Annual Partner Survey](#)
- [GLOBE Impact](#)
- [Earth Day 2008](#)



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CLAG HERALD

CARIBBEAN AND LATIN AMERICA GLOBE NEWS August 30, 2005 Volume 1, Issue 2

Pictures from left to right:
GLOBE Coordinators, teachers and trainers of the International Workshop in Costa Rica.
Magnificent view of the Irazú volcano, Costa Rica.



INTERNATIONAL WORKSHOP IN COSTA RICA

Contents

- International GLOBE Workshop in Costa Rica 1
- Master Trainers Program Goes Local 2
- WW2BW Virtual Seminar 2
- Latin Country Coordinators Forum 2
- Students Reported Forest Fire Consequences Using GLOBE Measurements 3
- Latin American and Caribbean Coordinators Meet in Costa Rica 3
- "GLOBE En Español" at the 9th Annual GLOBE 3

All the basic protocols of the GLOBE Program were trained in Costa Rica with the help of the Omar Denzongua Foundation and an enthusiastic group of coordinators. The spirit was high from the beginning; many participants to travel 16 hours by bus to attend the workshop. The beautiful environment of Costa Rica and the professional presentations inspired the teachers to bring all this knowledge to their schools and cooperate in our goal of protecting the planet and study its diversities with scientific methods, and the same metrics giving to our generation, and the ones that follows, a better understanding and environmental awareness of our home planet Earth.

The workshop had participants from Costa Rica, Dominican Republic, Mexico, Panama, Peru, the United States of America, and Uruguay.



GLOBE Online Newsletters



Regional Events in Latin America and the Caribbean

GLOBE Latin America and Caribbean Regional Consortium:

- The GLOBE Latin America and the Caribbean (LAC) region created a constitution on 6 July 2006 which established the Latin American and Caribbean Consortium Committee (CLAC).

Recent Regional Events/Collaboration:

- **5th Reunion of LAC Country Coordinators in San Antonio, Texas USA (07/2007):**
The Fifth Meeting of the GLOBE CLAC took place in San Antonio, Texas on 28-28 July 2007 preceding the 11th Annual Conference. Country Coordinators and Representatives from 15 LAC countries presented updates and reports. The main objective of this meeting was to elaborate the Regional Plan of the GLOBE Program to the CLAC, as well as to identify at least one objective for each of the CLAC committees.
- **4th Reunion of LAC Country Coordinators, Panama (02/2007):**
Country Coordinators and Representatives from 15 LAC countries met in order to further define the goals of the Consortium, particularly those addressing the challenges of ensuring the sustainability of the GLOBE Program in this region. The main objectives of this meeting were to further define the operational structure of the CLAC of the GLOBE Program and to gather input on implementing an Action Plan that would strengthen the program in the region.
- **3rd Reunion of LAC Country Coordinators, Argentina (07/2006):**
Country Coordinators from 11 countries met on four different days during the week-long Master Training event. An impressive component of the workshop was the participation of 28 trainers from the region's Master Trainer Program. In addition, the workshop provided a natural venue to provide information to regional representatives about the upcoming activities related to the International Polar Year (IPY) and its connection with The GLOBE Program.

Training Events of Regional Significance:

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

GLOBE Master Trainer Program:

The GLOBE Latin America and Caribbean Region have 16 Master Trainers and 14 Assistant Master Trainers. To access the list of Trainers, please visit the following URL:

<<http://globe.gov/fsl/workshop/MasterList.pl>>





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



2006 January 31 14:30 UT
How To Join GLOBE

EDUCATION & SCIENCE
Teacher's Guide
Protocols
Student Investigations
School Collaboration
Scientists' Corner
Educators' Corner

GLOBE DATA
Data Entry
Maps and Graphs
Data Access

GLOBE PARTNERS
Partners' Corner
Countries
Schools
U.S. Partners

LIBRARY
Resource Room
GLOBE Stars
News and Events

INFO & HELP
Learn About GLOBE
Contact GLOBE
FAQs

SITE SEARCH



2006 February 21 18:18 UT
How To Join GLOBE

EDUCATION & SCIENCE
Teacher's Guide
Protocols
Student Investigations
School Collaboration
Scientists' Corner



Costa Rica hosts Region's First GLOBE Coordinators Meeting for Latin America and the Caribbean!



GLOBE Grows in Two of the World's Southern-most Countries

April 08, 2003



"A little help from my friends" GLOBE shines in Uruguay, Paraguay and Argentina

October 25, 2004

...ing "A little help from my friends" by the Beatles describes how important our friends are. It nicely captures GLOBE's philosophy of exploring new frontiers hand-in-hand with a group of partners.

...st 2004 workshops in Argentina, Uruguay and Paraguay, as well as GLOBE itself, are the dynamic results of teamwork and unique contributions by an impressive group of partners, so we thought we would use these examples to show just how GLOBE excels "from its friends!"



Argentina: Teachers from regions as distant as Patagonia and Antarctica were among the 50 participants trained at the August 2004 GLOBE Teacher Workshop in Buenos Aires. The General San Martín Military High School and the Japanese Garden in Buenos Aires contributed their grounds and facilities for the workshop, and further support was provided by the Argentine-Japanese Cultural Foundation, and the Green Spaces Foundation. Funding was also provided by the Secretary of Technology and Innovation, the General San Martín Military High School, the Japanese Embassy in Buenos Aires, and the host institution of GLOBE in Argentina, the



Home Projects For Students For Teachers For Scientists For Partners



GLOBE Students in Uruguay Apply GLOBE Data

13 December 2007

A group of 9 and 10 year old students from [Republic of India Primary School](#) in Uruguay, have established a local science club known as "Cazanub" carrying out cloud research activities from their school site, applying cloud type and cover. The students are continuing the research started by analyzing and comparing data collected over the past two years.

On 11—12 September 2007, "Cazanub" participated in the science fair of the Scientific Culture Popularization Program which was organized by the Directorate of Innovation, Science and Technology for Development, a division of the Ministry of Education and Culture of Uruguay. As a result of their participation, the [GLOBE Uruguay](#) students were granted merit awards in skills, clarity, and applicability. The work was done with support





Home Projects For Students For Teachers For Scientists For Partners



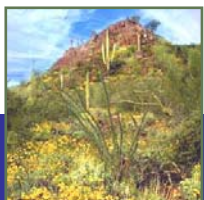
GLOBE Across the Curriculum in Chile!

11 March 2008

In order to assist in Chile's implementation of the GLOBE Program, [GLOBE Chile](#) has aligned the GLOBE Program with national education standards to help teachers incorporate GLOBE into several areas of study. The current Chilean educational policy continuously considers environmental education and management as a cross-curricular objective for Chilean education (Decreto Supremo de Educación N° 220 de Chile).

In practice, incorporating environmental issues into different subject areas is difficult to achieve due to the difficulty of blending the contents of each curriculum with fundamental national educational objectives. This happens because there are few tools or suitable procedural manuals. In response to these needs, GLOBE provides the necessary resources to carry out the basic contents of each curriculum through a set of conceptual knowledge and practical skills activities that improve the understanding of students about their environment.

The GLOBE Program office wants to hear stories of projects and people who shine. These are our 'Stars', the bright lights that spark our imagination and inspire us with news of GLOBE at work in the world. Tell us about the stars in your universe. Send us your stories about students, teachers, schools, projects or awards that you would like to bring to the attention of the worldwide GLOBE community to communications@globe.gov.





For more information

GLOBE Consortium for Latin America and the Caribbean (CLAC) Committee:

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For more information regarding activities in the Latin America and Caribbean Region contact:

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For more information on GLOBE Alumni activities in the Latin America and the Caribbean Region contact the Alumni Regional Representative <lac-alumni-regionalrep@globe.gov>.



PHI DELTA KAPPA *International*

Featured in the Phi Delta Kappa International Studies Resource Guide – November 2004 • Volume 86 • Number 3
www.pdkintl.org/kappan/k_v86/k0411ka3.htm



GLOBE was the winner of the 2004 Goldman Sachs Foundation Prize for Excellence in International Education in the Media and Technology Category.

The Goldman Sachs Foundation and the Asia Society stated that GLOBE was selected “for the unique reach of its work around the world and its ability to bring international education to life through the process of scientific inquiry. GLOBE serves as inspiration and a model of excellence to schools and programs seeking to bring the world into our classrooms.”



GLOBE is an interagency program funded by the U.S. National Aeronautics and Space Administration (NASA) and the U.S. National Science Foundation (NSF), supported by the U.S. Department of State, and implemented through a cooperative agreement between NASA and the University Corporation for Atmospheric Research (UCAR) in Boulder, Colorado.

