

Draft GLOBE Program Development Strategy 2012 – 2017

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1. What is the GLOBE Program?

The GLOBE Program is an international hands-on environmental science and education program, now active in **111 countries** around the world. Established in 1995 and organized by a network of U.S. Partners and international Country Coordinators, there are more than **56,000 GLOBE-trained teachers** representing over **24,000 schools** around the world. Over **1.5 million students** have participated in GLOBE since its launch in 1995, contributing more than **22 million measurements** to the GLOBE database for use in inquiry-based science projects.

GLOBE's Vision is for a worldwide community of students, teachers, scientists, and citizens working together to better understand, sustain, and improve the Earth's environment at local, regional, and global scales.

GLOBE's Mission is to promote the teaching and learning of science, enhance environmental literacy and stewardship, and promote scientific discovery.

Through its vision, GLOBE encourages and supports students, teachers and scientists to collaborate on inquiry-based investigations of their local environment, sharing results over the internet. Using the students' data, GLOBE provides on-line images, maps and graphs on the state of the planet. All raw data can also be downloaded to compare and contrast local and global environments.

The GLOBE Program Office supports the world-wide GLOBE network from offices at the University Corporation for Atmospheric Research (UCAR) in Boulder Colorado and the University of Tyler in Texas, with regional offices in Argentina, India, Lebanon, The Netherlands and South Africa. GLOBE activities are steered by the GLOBE International Advisory Committee, which brings together representatives from GLOBE countries around the world.

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2. The GLOBE Program Organizational Structure

The GLOBE Program is structured into three key areas: **GLOBE Partners**, **GLOBE Regional Offices** and the **GLOBE Program Office (GPO)**.

GLOBE Partners

GLOBE Partners are located in each of the 111 GLOBE countries and all of the States across the USA – with many States having multiple Partners. Internationally, Partner Country Governments have signed bilateral agreements with the U.S. Government indicating their commitment to the Program. Each country has a Government Point of Contact and a Country Coordinator appointed by the Government. In the USA, Partners are appointed on an annual basis, and remain with the program as long as they remain active.

It is the role of all GLOBE Partners to recruit GLOBE Schools and both train and support teachers in using GLOBE Protocols. Once trained, GLOBE Teachers and Students are able to submit their schools’ data to the GLOBE database and become part of the wider GLOBE Community. GLOBE Partners also have the opportunity to seek funding, to develop new projects, to participate in regional initiatives, and to communicate globally about their work.

GLOBE Regional Offices

Funded by the GPO and additional regional funding, GLOBE Regional Offices act as a focus for region-wide activities and projects. It is the role of the Regional Office to coordinate the work of the region, communicating with both individual countries and with the GPO. Each region also elects one of its members onto the GLOBE International Advisory Committee (GIAC).

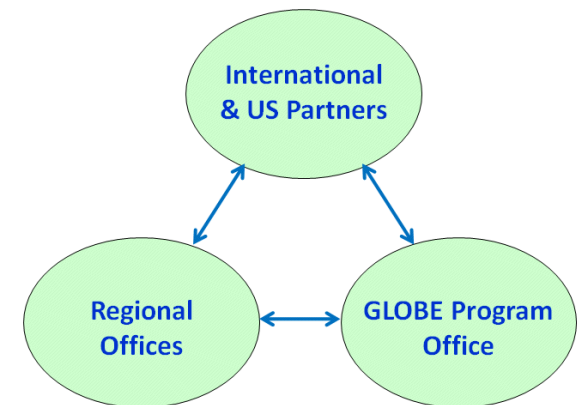
GLOBE Program Office (GPO)

The GLOBE Program Office facilitates the work of GLOBE Partners and the wider GLOBE Community by providing a range of services. Amongst these are:

- Designing educational materials to support the teaching of GLOBE and student inquiry.
- Developing scientifically valid protocols to measure aspects of the environment.
- Maintaining the GLOBE website and database, which now contains over 22 million measurements.
- Communicating partner achievements and activities.
- Generating ideas for fundraising, ranging from the school level to the country level.

The **GLOBE Community** includes all of the above, together with GLOBE Schools, Teachers, Students, Scientists and supporters world-wide. This document is intended for the GLOBE Program, not the wider GLOBE Community.

Fig. 1: The GLOBE Program Organizational Structure



3. The GLOBE Program Operational Structure

The GLOBE Program operational structure has three distinct levels: its Primary Purpose, its Support Activities, and Underpinning Operations.

Level 1: Primary Purpose of the GLOBE Program

- **Education** - Developing and supporting activities for teachers, based on environmental science value and need. Communicating with teachers, sharing best practices and providing tools to facilitate student learning and collaboration with broader GLOBE community.
- **Science** - Recruiting scientists engaged in research relevant to GLOBE areas, coordinating scientific activities and links with education. Communicating with scientists, sharing best practices and providing feedback to schools. Engaging in scientific research that draws on GLOBE student data.
- **International Partnerships** - Recruiting and supporting U.S. Partners and international Partners, including Country Coordinators. Sharing best practices with U.S. Partners and international Country Coordinators. Providing the framework for training and supporting teachers in countries with GLOBE schools.

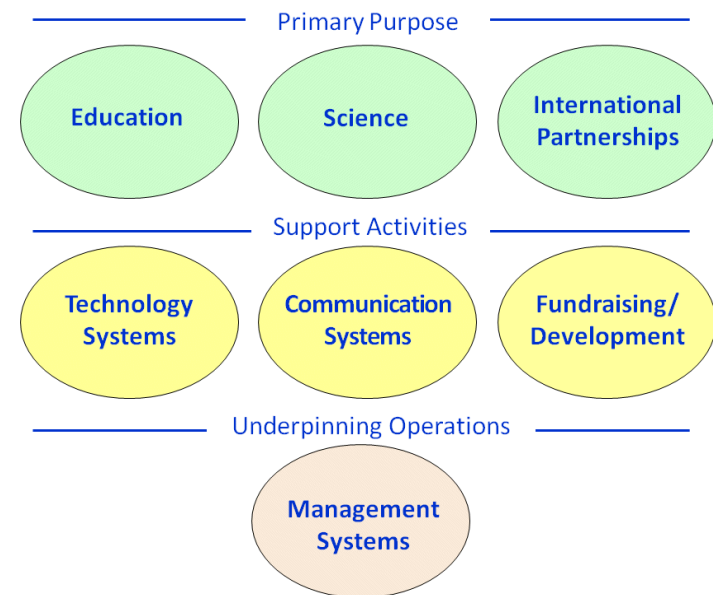
Level 2: Support Activities

- **Technology Systems** - Developing and delivering a state of the art website to inspire and engage. Providing support for e-communication tools, input and visualizations of GLOBE student data.
- **Communication Systems** - Providing regular internal communications to all GLOBE schools, scientists and partners. Producing regular external communications to U.S. & global media.
- **Fundraising / Development** - Identifying funding sources for relevant projects within the GLOBE Strategic Plan. Soliciting private sector and foundation funding and support as appropriate.

Level 3: Underpinning Operations

- **Management Systems** – Maximizing the efficiency and effectiveness of all GLOBE activities, ensuring adequate review and evaluation, enabling continuous improvement in services.

Fig. 2: The GLOBE Program Operational Structure



4. Opportunities over the next five years

In 2011, GLOBE's original vision remains just as important and relevant as it was in 1995 - a worldwide community of students, teachers, scientists, and citizens working together to better understand, sustain, and improve Earth's environment at local, regional, and global scales. The issues facing the planet need this vision to become a reality.

During the period 2012 – 2017, there will be many opportunities for the GLOBE Program to transform this vision into reality. However, in order for this to happen, it is important that the GLOBE Program collectively agrees upon and establishes our strategic priorities. The following questions highlight some of the key issues that we need to address:

Area	Opportunities and questions
Education	How can we engage more teachers in GLOBE and get their students more actively involved? Should we develop the concept of a 'GLOBE e-Teacher', with on-line training so that teachers can join quickly and easily?
Science	How can scientific research best utilize the information from GLOBE's extensive database? What are some strategies for disseminating published scientific papers involving GLOBE Students?
Partners	How many countries should we recruit on an annual basis? How can we re-engage those who are no longer active? Can Regional Offices help in this?
Technology	How do we ensure that GLOBE's website remains up to date? What are some strategies for increasing the number of people actively using the website? Can we use modern technology, such as mobile devices, to make data entry and visualizations easier?
Communication	How do we ensure that more people are aware of GLOBE and its importance? What literature, graphics and images do Partners need to produce their own print and on-line content?
Fundraising	How can we bring more funding to the GLOBE Program? How do we identify new and more diverse funding sources, such as corporate sponsors and charitable foundations?

A start has been made on setting performance measures for each of these six areas, with suggestions of goals for the GLOBE Program as a whole and actions for the GLOBE Program Office. These are outlined in the Tables that follow. Your input and feedback is critical to ensure that we have the right words and numbers in the right places.

Please pass all your feedback to strategy@globe.gov before the end of August 2011.

With thanks! The GPO Team, July 2011.

5. Draft Performance Measures and Goals: Education

Area	Performance Measure	GLOBE Program Goal	GPO Performance Indicators & Actions
Awareness and use of GLOBE materials	Use of GLOBE teaching materials and resources.	Increase the use of GLOBE materials and resources by X% from 2011 baseline. Develop and share new materials from GPO & Partners.	Provide website tools to allow data on school use to be tracked, and monitor usage monthly . Develop infrastructure to enable sharing of high standard materials.
	Alignment of GLOBE materials with curriculum.	Improved links between GLOBE materials and local curricula.	Provide potential links to curricula in all GLOBE learning materials.
GLOBE training	GLOBE Teachers	Increase number of training workshops / teachers trained by X% from 2011 baseline. Training rated as good by X% of workshop / on-line attendees.	Advertise planned workshops, track workshop participation and report data quarterly. Develop 'e-Teachers' training on-line in relevant protocols by 2012 , and roll out onwards.
	GLOBE Trainers	Increase number of GLOBE Trainers X% from 2011 baseline.	Review and develop new standards and processes for accrediting GLOBE Trainers by 2012 .
	GLOBE Master Trainers	Increase number of GLOBE Master Trainers by X% from 2011 baseline.	Review and develop new standards and processes for accrediting GLOBE Master Trainers by 2012 .
Teacher engagement	Number of Teachers using GLOBE activities in classroom teaching	Increase number of teachers using GLOBE activities by X% from 2011 baseline.	Provide website tools to allow data on GLOBE activity to be tracked, and monitor usage monthly .
Educational impact of GLOBE	Changes to teaching practice	Increased use of inquiry based GLOBE activities in teaching, and number of teachers who use assessments of GLOBE activities.	Generate funding for the development of performance-based assessments for GLOBE.
	Student participation and quality of learning	Increased number of collaborative projects from by X% from 2011 baseline. 90% of student GLOBE reports rated as 'good' or better.	Provide tools and incentives for collaborative projects. Celebrate examples of good practice.

How you can help...

As a GLOBE Partner	Provide GLOBE training and support GLOBE teachers to develop new projects and activities
As a GLOBE Teacher	Continue to use GLOBE in the classroom, and report success stories to your partners
As a GLOBE Scientist	Engage with GLOBE partners and school in developing projects in your area
As a GLOBE Student	Develop new projects with other students in your area, country or around the world

Draft Performance Measures and Goals: Science

Area	Performance Measure	GLOBE Program Goal	GPO Performance Indicators & Actions
Scientist participation in GLOBE	Scientists involved in GLOBE	Increase number of scientists involved with GLOBE projects (in the GLOBE International Science Network – GISN) by X% from 2011 baseline.	Build infrastructure to support the GISN and develop international scientist contacts.
		Increase formal collaborations with national, regional and international science organizations.	Develop contacts and support relationships, seeking endorsements for GLOBE.
Use of GLOBE data in scientific inquiry	Student GLOBE measurements	Increase number of data held within GLOBE database by X% from 2011 baseline.	Provide incentives for data entry, including 'Honor Roll' and thanks.
		Increase number of student science reports on GLOBE website by X% from 2011 baseline.	Publish results on website, celebrate successes in publications and media.
	Scientists' use of GLOBE data	Increase number of science research publications using GLOBE data by X% from 2011 baseline.	Feedback scientist requirements to GLOBE community; collate and publicize science publications.
Benefits to the environment	GLOBE student projects benefiting the environment	Increase number of GLOBE projects with environmental benefits by X% from 2011 baseline.	Monitor and report on student projects, celebrating successes in publications and media.

How you can help...

As a GLOBE Partner	Publicize science performance locally, report data to GLOBE website
As a GLOBE Teacher	Connect with local scientists and invite them to visit classrooms
As a GLOBE Scientist	Collaborate with GLOBE schools on student research projects
As a GLOBE Student	Blog with scientists about GLOBE data and implications of research findings

Draft Performance Measures and Goals: International Partnerships

Area	Performance Measure	GLOBE Program Goal	GPO Performance Indicators & Actions
Expansion of GLOBE Partnership	GLOBE Partners	Increase number of countries participating in GLOBE by X% and number of US GLOBE Partners by X% from 2011 baseline.	Develop promotional materials to attract new Partners; work with Department of State / NASA to expand awareness of GLOBE.
	Activity of GLOBE Partners	Encourage active participation by all GLOBE Partners worldwide.	Pro-actively work in targeted areas to re-engage, linking to Regional Offices and providing support.
Strength of partnership networks	Frequency of communication among partners	Increase information exchange among partners by X% from 2011 baseline.	Maintain active list of points of contacts within each region that can facilitate partnerships; use website to promote communication.
	Collaborative partnerships, events and projects	Increase international and inter-state activities and projects by X% from 2011 baseline.	Identify and promote events and campaigns; share knowledge of event organization.
Partnership value	Collaborations with benefits to education, science, environment or culture	Increase number of beneficial activities and projects by X% from 2011 baseline.	Ensure website records all active projects and celebrates successes.

How you can help...

As a GLOBE Partner	Support schools and teachers in your area, encouraging involvement in projects and activities
As a GLOBE Teacher	Develop partnership projects with other schools in your area, country or internationally
As a GLOBE Scientist	Encourage national and international colleagues to join in projects
As a GLOBE Student	Develop new projects with other students in your area, country or internationally

Draft Performance Measures and Goals: Technology

Area	Performance Measure	GLOBE Program Goal	GPO Performance Indicators & Actions
Use of GLOBE website	Website statistics	Increased use of GLOBE website and local websites by X% from 2011 baseline.	Increased use of GLOBE website by X% from 2011 baseline.
	Communication of statistics	Quarterly reports collated by regional offices.	Produce monthly reports summarizing website activity (number of visits, downloads and materials used, pages accessed, data entry, data visualizations, global coverage, time on site, downtime, etc).
Quality of GLOBE website	Stakeholder perception of website	Increase percentage of GLOBE Partners and Schools responding to online feedback about quality and relevance of GLOBE website by X% from 2011 baseline.	Create regular online assessments for website quality and relevance.
	Stakeholder engagement	Increase use of website for interaction at all levels.	Promote website discussion tools, moderate discussions, report on usage monthly .
	Website & technology development	Increase number of GLOBE Partners and Schools using new technology and piloting new web feature by X% from 2011 baseline.	Ensure website technology is continually updated; develop mobile device data input capability by 2012 ; review and update new technology as required.
	Customer satisfaction	Increase GLOBE community satisfaction with website and interactions with Help Desk by X% from 2011 baseline.	Regular customer satisfaction feedback on-line; Help Desk responses reduced by X% from 2011 baseline.
Relevance of GLOBE website	Information received and/or uploaded	Provide GPO with information relevant to the community (e.g. events, student work, new partnerships, useful classroom resources)	Ensure community information is regularly included on website; maintain high quality content on website and discussion groups.

How you can help...

As a GLOBE Partner	Regularly solicit feedback from GLOBE schools in area on the GLOBE website and needed improvements
As a GLOBE Teacher	Participate and provide feedback on pilots activities involving website
As a GLOBE Scientist	Participate in student chats, blogs, discussion forums, etc.
As a GLOBE Student	Participate in student chats, blogs, discussion forums, etc.

Draft Performance Measures and Goals: Communication

Area	Performance Measure	GLOBE Program Goal	GPO Performance Indicators & Actions
Internal communication	Partner awareness of GLOBE activities and events	Ensure all Partners are aware of GLOBE events, activities and achievements.	Produce monthly News Briefs and other Mass Mails. Increase coverage by X% from 2011 baseline.
Awareness of GLOBE	International input	Partners and Regional Offices regularly provide information to GPO on events & achievements.	New website to facilitate Partner input. Streamlined data gathering at GPO.
	Media releases and coverage	Increased global awareness of GLOBE Program. Any local coverage routinely passed to GPO.	Produce monthly media releases and monitor global coverage. Increase coverage by X% from 2011 baseline.
	Social media	Increased use of social media tools to follow the GLOBE Program.	Produce Tweets, Facebook updates, YouTube videos, and monitor global coverage. Increase coverage by X% from 2011 baseline.
	Events and outreach activities	Increased promotion of GLOBE at local / national / international events; coverage passed to GPO.	Promote GLOBE at national/ international events, monitor results and evaluate benefits.
	Promotional literature	Increased local / national / regional promotional literature using GLOBE templates and graphics	Provide GLOBE templates, downloadable pdfs, images and printed leaflets.
	Annual Reviews	Distribute GLOBE Annual Reviews to stakeholders; input stories via Regional Office.	Prepare and publish Annual Reviews to celebrate success, incorporating data from Regions. Annually review communications efforts and results, learning from experience.
Endorsement of GLOBE	Presence of GLOBE-related stories on third party publications and websites	Increase number of third-party stories about GLOBE by X% from 2011 baseline.	Liaise with supporters and Partners to provide stories and articles.

How you can help...

As a GLOBE Partner	Publicize GLOBE within your area, passing records and stories to GPO
As a GLOBE Teacher	Publicize your projects to local media, passing cuttings and clips to your GLOBE partner
As a GLOBE Scientist	Promote the value of GLOBE to other scientists, ensuring publications are communicated to partners
As a GLOBE Student	Share the results of your GLOBE experiences via Facebook and YouTube

Draft Performance Measures and Goals: Funding

Area	Performance Measure	GLOBE Program Goal	GPO Performance Indicators & Actions
Income	Amount of funding	Increase funding activities for GLOBE internationally, regionally and nationally by X% from 2011 baseline.	Increase funding activities for GPO by X% from 2011 baseline.
		Partners join international projects as funding is secured.	Increase funding for GLOBE Projects internationally by X% from 2011 baseline.
	Source of funding	Partners apply for grants as resources permit	Increase grant funding for GPO and Partner activities by X% from 2011 baseline.
		Partners apply for sponsorship and donations as means allow, following CERES (spell out acronym?) principles.	Increase sponsorship and donation funding for GPO and Partner activities by X% from 2011 baseline.
		Partners develop local sales and services as resources permit.	Increase revenue from sales of GLOBE products and services by X% from 2011 baseline.

How you can help...

As a GLOBE Partner	Raise more funds from grants, donations, corporate sponsors and help in kind
As a GLOBE Teacher	Local fundraising for GLOBE activities, materials and equipment
As a GLOBE Scientist	Align grant proposals to include GLOBE projects and student research
As a GLOBE Student	Organize local fundraising activities for specific projects

Please pass all feedback to strategy@globe.gov before 31 August 2011.

All revisions will be incorporated into a final Development Strategy,
for approval by GIAC and the GPO Board in October 2011.

The GLOBE Program Office, PO Box 3000, Boulder, Colorado, 80307 USA