



## GLOBE and The Peace Corps



### GLOBE and Peace Corps Initiatives

The GLOBE Program can help to achieve the Peace Corps vision of “building host communities capacity and availability of social resources to help maintain healthy livelihoods.”

#### Peace Corps

#### Education / English Language Learning

**GLOBE is an international internet-based science and education program** that provides the ability to view and interact with data measured around the world and communicate scientific findings. The GLOBE Teacher’s Guide provides grade-level appropriate, interdisciplinary activities and investigations that allow students to conduct real, hands-on science about their local environment and put them in a global perspective. GLOBE trainings provide K-12 teachers, pre-service teachers, and scientists access to science and educational resources and pedagogy.

GLOBE provides English Language Learners (ELLs) with access to quality curriculum in the six United Nations languages (Arabic, English, French, Chinese, Russian, Spanish), plus a number of other languages. Elementary GLOBE science-based storybooks can be used as curriculum for English language learning (from teacher training to English clubs) to introduce students to key concepts in water, soil, clouds, seasons, aerosols, and Earth System studies; these books have been translated from English to Arabic, French, German, and Spanish.

#### Peace Corps

#### Health

**Peace Corps Volunteers (PCVs) can incorporate GLOBE** to support communities to understand how environmental factors impact health. For example, the use of GLOBE Aerosols and Air Quality material is being used by some Latin American countries to support government efforts to pursue stronger air quality regulation and education; GLOBE students are working to improve water quality in Rijeka, Croatia, and other countries; and GLOBE students are collecting data on mosquitoes and connecting with their community public health officials to disseminate educational materials. They are learning how climate impacts mosquito breeding sites in Thailand and how temperature changes affect mosquito outbreaks protocol.

- ▶ **Through GLOBE, PCVs can support host-communities initiatives** to understand and communicate local and regional environmental changes with their communities.
- ▶ **PC Response personnel** would be a good fit for Peace Corps countries with environment, education, and/or youth development programs that could provide a worksite and counterpart for a volunteer.
- ▶ **PCVs can guide communities to monitor and track environmental changes** (through conducting scientific investigations with science protocols) and communicating environmental changes in the GLOBE visualization system; on a national level (such as at a national conference in Costa Rica); and through a regional campaign (such as phenology campaigns in Latin America and Europe).

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## Peace Corps

## Environment

GLOBE field measurement campaigns/Intensive Observation Periods foster collaboration among students, teachers, scientists and the public on inquiry-based research on the environment. In 2023-2024, “The Year of Climate and Carbon” is engaging students in considering what environmental changes are emerging in their local ecosystems and how they can pursue further understanding by collecting phenological and biomass data.

- ▶ **Surface Temperature Field Campaign and atmosphere activities** allow students to gather temperature data. **Science protocols:** Air Temperature and Surface Temperature
- ▶ **Campaigns such as Global Precipitation Measurement** connected students and schools through specific environmental monitoring indicators, such as precipitation. **Science protocol:** Precipitation
- ▶ **GLOBE science protocols can be used to analyze impacts of sea level rise.** Student access to satellite data and visualizations through GLOBE allow for an understanding of global processes such as sea level rise. **Science protocols:** Salinity, Soil Characterization, Soil pH, Soil Moisture.
- ▶ **Collaboration with satellite missions** such as GOES-R connects student-collected data to satellite observations during extreme climate events. **Science protocols:** Precipitation, Air Temperature and Clouds.

## Peace Corps

## Agriculture

- ▶ **PCVs can support host-country national partners**, ranging from Ministries of Agriculture to local agriculture cooperatives, to monitor the environment. **For example:** Collaboration with the SMAP satellite mission provides context for Soil protocols and learning activities to document local environmental changes and learn about the impacts of climate on agriculture.
- ▶ **PCVs can connect to in-country Subject Matter Experts (SMEs)** through the GLOBE International STEM Network (GISN).

## Peace Corps

## Economic Development

- ▶ **PCVs can be a conduit** to connecting GLOBE students with in-country GLOBE scientists, providing students access to STEM careers and in-country pathways to professional and economic development and culturally-relevant hands-on activities.
- ▶ **Access** to observation instruments can be a challenge, but volunteers have access to certain funding streams to request grants for these types of purchases. GLOBE Country Coordinators or Peace Corps staff/volunteers could develop country-specific information that would help volunteers and their counterparts find the instruments they need to participate. **For example**, a few Peru volunteers have used USAID Small Project Assistance (“SPA Grant”) funds to acquire instruments for their community schools’ GLOBE activities, usually incorporating them into larger environmental and climate education projects. This was made much easier by providing pricing and vendor information for them to prepare their budgets. GLOBE Country Coordinators can share pricing and purveyor information for getting instruments with their countries’ Peace Corps staff so that volunteers can know how much to budget for in their projects.

## Peace Corps

## Youth

- ▶ **There are specific actions that GLOBE Country Coordinators could take** on to help facilitate volunteers implementing GLOBE in their project sites. GLOBE would be a useful tool for volunteers working with youth in structured school or youth center settings. In countries that place education volunteers, training volunteers via webinars or in-country workshops would be particularly useful. **For example**, it aligned with Peace Corps’ “Let Girls Learn” STEM initiative, CAMP GLOW, or environmental youth camps.
- ▶ **GLOBE training workshops:** GLOBE Country Coordinators could offer to organize GLOBE training workshops for volunteers and their educator counterparts or invite volunteers to their planned workshops. **For example**, in Costa Rica and Thailand, where there are active Youth Development and ESL/teacher programs, the Country Coordinators could work with Peace Corps country staff and volunteers for training. Past examples include teacher training workshops in Kenya and in Uruguay.
- ▶ **World Wise Schools:** Some volunteers pair with U.S. school classrooms to share their experience. This may include dialogues or virtual exchanges with the volunteer’s host community school. There’s a potential for volunteers engaged in GLOBE activities to be paired with U.S. classrooms that also participate in GLOBE, creating a platform for data and research collaboration.