

Expanding the GLOBE International STEM Network (GISN) to Include “Early Career STEM Professionals”

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Abstract

The Global Learning and Observations to Benefit the Environment (GLOBE) Program is an international science and education program that connects a network of communities around the world and gives them the opportunity to participate in data collection and the scientific process, and contribute meaningfully to our understanding of the Earth system and global environment. GLOBE hosts the GLOBE International STEM Network (GISN), which is an international network of STEM professionals that work with GLOBE students, teachers, and other STEM professionals around the world. Members of the GISN may mentor students and teachers, collaborate on scientific research, use GLOBE data in their research, judge student research projects, and write blogs for the GLOBE website, among other things. In January 2018, the GISN, which was previously only open to graduate students and seasoned STEM professionals, was expanded to include “Early Career STEM Professionals” which includes upper-level undergraduates or master’s students pursuing a degree in a STEM field or recent graduates working in STEM fields but have less than five years’ experience. Goals for expanding the the GISN include granting early career professionals a chance to establish ties with the next generation of STEM professionals, connecting early career professionals and students with potential mentors and collaborators, and allowing early career professionals and students to explore what a career in a STEM field can look like. All GISN members will benefit from an increase in the number of members as well as an increase in the numbers of members who have more flexibility in terms of time and finances. As well, it is another opportunity for GLOBE to engage with alumni of the program who have continued a career in STEM. Unlike other ECS networks, the GISN does not separate the ECS’ out from the other members so all members have equal access to resources and each other. Since opening up the GISN in January, 17 Early Career STEM Professionals representing 5 of our 6 regions (Africa, Asia and the Pacific, Europe and Eurasia, Latin America and the Caribbean, and North America, but not Near East and North Africa) have joined the network bringing total membership to 421 members.



Expanding the GLOBE International STEM Network (GISN) to Include “Early Career STEM Professionals”

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What is GLOBE?

Global Learning and Observations to Benefit the Environment (GLOBE) is an international science and education program that provides students and the public worldwide with the opportunity to participate in data collection and the scientific process, and contribute meaningfully to our understanding of the Earth system and global environment.

Vision: 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.

Mission: To promote the teaching and learning of science, enhance environmental literacy and stewardship, and promote scientific discovery.



What is the GLOBE International STEM Network?

The GLOBE International STEM Network (GISN) is an international network of STEM (science, technology, engineering, and mathematics) professionals who contribute meaningfully to GLOBE students around the world involved in scientific field investigations and research projects.

Member requirements:

Members must actively participate in the network (see Figure 2), be a STEM professional, reside and/or be employed in a GLOBE country, and meet one of the following criteria:

- Hold a Master's or Ph.D. in a STEM field
- Be working toward a Ph.D. in a STEM field
- Hold a B.S. in a STEM field, plus have at least five years' experience working in a STEM field
- **Early Career STEM Professionals are a subgroup of the GISN, and must be upper-level undergraduate or master's students pursuing a degree in a STEM field or be a recent graduate working in a STEM field but have fewer than five years' of professional experience.**

Members can:

- Access a database of over 157 million measurements from across the globe
- Employ students and teachers to collect additional data
- Mentor and inspire young minds
- Collaborate with other scientists, teachers, schools, and students
- Blog, judge student research projects, and more!



Figure 2: Some of the ways to participate in the GISN. Members must do one GISN-related activity per year.

Figure 1: The GISN has 413 members and 19 of the members are Early Career STEM Professionals. Here are some examples of what the members are doing as a part of the network.



Early Career STEM Professionals

In January 2018, the GISN was expanded to include Early Career Members.

Opening up the GISN to Early Career STEM Professionals will:

- Empower the next generation of STEM leaders to participate in the scientific process
- Collaborate with successful peers
- Find mentors among a group of established professionals
- Participate in data collection and the scientific process with international schools
- Allow GLOBE to stay connected with alumni of the program who have pursued a STEM career.

The GISN does not separate ECS members from other members, so everyone has equal access to resources and to other members.