



THE GLOBE PROGRAM

The GLOBE Implementation Office Summary of the 2016 GLOBE Community Annual Survey

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Prepared by Valerie L. Williams, Ph.D.,
Senior Program Evaluator, UCAR Community Programs

I. BACKGROUND

The GLOBE Annual Partner Survey is one of the primary data-collection tools of the GLOBE Implementation Office (GIO). Initially administered in 2005, this survey gathers information from GLOBE Partners (U.S. Partners and Country Coordinators) on activities related to The GLOBE Program. (For U.S. Partners, the survey also includes questions that confirm their GLOBE Program status as either “Active” or “Inactive” on an annual basis.)

Information from the survey is cited in critical program documents, including annual reports provided to GLOBE sponsors and in the GLOBE Annual Review, as well as during presentations at the annual meetings. In 2012, the GLOBE Annual Partner Survey was revised to align with the community-approved 2012-2017 GLOBE Strategic Plan. This five-year plan includes 2017 GLOBE Program goals for the GLOBE Community (U.S. Partners, Country Coordinators, teachers, and scientists) and actions for the GLOBE Program Office (GPO)¹ to undertake in order to support the community’s efforts in achieving these goals. The organization of the survey was in large part based on this strategic plan, with the goal of reporting on progress toward the performance measures in the plan.

In 2015, the GLOBE Annual Partner Survey was expanded to include questions from the Technology, Education, Science, and Evaluation Working Groups (WGs). Consequently, the name was changed to the “GLOBE Community Annual Survey.” It now includes questions targeted to teachers and scientists, in addition to U.S. Partners and Country Coordinators. Over the years, the purpose of the survey has evolved. It is now a community-oriented tool designed to gather descriptive information on activities of teachers, partners, and scientists; information that can then be used by the GIO, as well as the WGs, in order to improve the support ultimately provided to members of the GLOBE community.

II. SURVEY DESIGN AND REPORT STRUCTURE

As a result of the expanded target population for the 2016 GLOBE Annual Survey, this annual report contains responses from U.S. Partners and Country Coordinators, as well as survey responses from teachers and scientists. As shown in Table 1, the 2016 survey gathered information related to a variety of areas from the strategic plan and from additional new areas.

¹ The name was changed to the GLOBE Implementation Office in 2013; the office is located at the University Corporation for Atmospheric Research in Boulder, Colorado, USA.

Table 1. Strategic Plan Measures and Corresponding Survey Questions (Q)

Performance Area	Performance Measure	Corresponding Survey Questions (Q)
Education: <i>Awareness and use of GLOBE Materials</i>	Use of GLOBE teaching materials and resources	<ul style="list-style-type: none"> Which of the following best describes how frequently you used the following GLOBE materials and resources?
	Alignment of GLOBE materials with curriculum	<ul style="list-style-type: none"> Have you aligned GLOBE materials to meet state, regional, and/or national curricular needs?
Education: <i>Educational Impact of GLOBE</i>	Provision of effective evaluation capabilities	<ul style="list-style-type: none"> Do you assess the quality of the training you conduct? If so, how? Please select the option that best describes how you assessed the quality of your training.
Communication: <i>Internal Communication</i>	Level of partner awareness of GLOBE activities and events	<ul style="list-style-type: none"> Which of the following GLOBE events did you participate in last year?
Communication: <i>Awareness of GLOBE</i>	Frequency of international input received by GPO	<ul style="list-style-type: none"> Do you provide information to GPO communications on events and achievements within your country/partnership service area?
	Number of social media activities and updates	<ul style="list-style-type: none"> Please select the option that best describes how often you use the following social media platforms.
Science: <i>Use of GLOBE Data in Scientific Inquiry</i>	Number of student collaborative projects	<ul style="list-style-type: none"> Please list and describe any student-related GLOBE projects within your local service area. Please describe how GLOBE data were used.
	Relevance and currency of protocols	<ul style="list-style-type: none"> Please select the three most relevant protocols to teachers in your service area.
International: <i>Strength of Partner Networks</i>	Frequency of communication among partners	<ul style="list-style-type: none"> How frequently do you communicate with other GLOBE partners?

Performance Area	Performance Measure	Corresponding Survey Questions (Q)
	Number of collaborative partnerships, events, and projects	<ul style="list-style-type: none"> Are you currently involved in any collaborative GLOBE-related projects with other GLOBE partners? If yes, list and describe any collaboration you have or had with any GLOBE partners.
Technology: <i>Relevance and Overall Satisfaction with GLOBE Website</i>	Amount of information from partners received and uploaded	<ul style="list-style-type: none"> What is the primary way you receive news about GLOBE?
Funding: <i>Income</i>	Amount of funding	<ul style="list-style-type: none"> Please estimate your annual funding/budget for GLOBE.

III. METHOD

The online survey was created using SurveyMonkey. The survey was disseminated to the GLOBE community via a weblink within the December 2016 Director's Letter. Survey recipients were instructed to complete the survey in one session (because the survey was not configured to save results upon exit). Follow-up announcements regarding the survey were made in the 2017 January and 2017 February director's letters. The survey officially closed at the end of March 2017. Figure 1, Overall Survey Results, shows the number of responses from each of the different GLOBE community groups.

Number of Survey Respondents: 339

- **177 Country Coordinators/U.S. Partners,**
- **138 Teachers,**
- **24 Scientists**

Total Number of Completed Surveys: 222

Figure 1. Overall Survey Results

Given the limited response rates, it is important to note that these survey results cannot be generalized to the total U.S. Partner/Country Coordinator population; it is only a reflection of those who completed the survey.

IV. KEY SURVEY RESULTS

A. Partnership Background

As shown in Table 2, approximately one-third (35.4 percent) of the US partner/ country coordinator respondents (n=147) described their partnership as “Higher Education” (university or college). Approximately 15% of those same respondents described their partnership as a “Ministry” (and all of these respondents were Country Coordinators). Some responses provided for “Other” included private company/start-up, research and education institution, after-school program, and a secondary school.

Table 2. Percent of Survey Responses by Partnership Type

Partnership Type	% Responses
Higher Education (university or college)	35.37%
Ministry	14.97%
Non-profit or Non-Governmental Organization	14.97%
Government Funded Organization (e..g state or local)	10.20%
Other (please specify)	8.84%
Educational Consortium	4.08%
School District	3.40%
Science or Learning Center	3.40%
Federal Agency (NASA Center or Affiliate)	2.72%
Foundation	2.04%
Museum	0.00%

Responses to the question regarding the type of school that partnerships work with reveal that many partnerships work with multiple types of schools (see Figure 2). Respondents most frequently reported, however, working with public schools (92 percent). Private schools were the second highest (60 percent) type of school with which respondents reported working. Among the “Other” responses, there was a diverse mix of different organizational types, including neighborhood groups, youth sports organizations, environmental education centers, and citizen scientists.

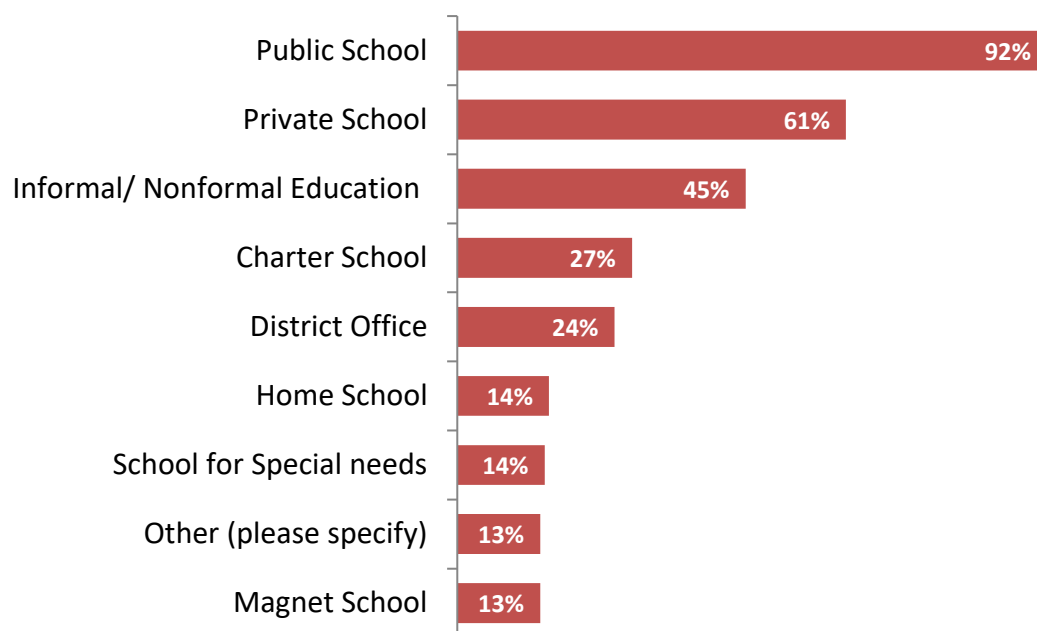


Figure 2. Which of the following does your organization work with in your local service area?
(Note: percentages do not total 100 percent because respondents could check all that apply.)

Among the K-12 grade levels, approximately one-third of the respondents US partners/Country coordinators reported working with secondary grade levels (Grades 7-9) the most. Conversely, primary grades K-3 and informal education were the grade levels that respondents reported working with the least (see Table 3).

Table 3. Ranking of GLOBE schools' educational/grade levels

(1 = work with this grade the most; 5 = work with this grade the least)	% Ranked 1	% Ranked 2	% Ranked 3	% Ranked 4	% Ranked 5
Informal Education	8.45%	4.23%	6.34%	14.08%	16.90%
Post Secondary /Higher Education (Grades 12+ or ages 18+)	11.68%	8.03%	10.22%	21.17%	10.22%
Primary (Grades 4-6 or ages 9-11)	17.27%	22.30%	23.74%	10.07%	8.63%
Primary (Grades K-3 or ages 5-8)	8.03%	7.30%	15.33%	14.60%	13.14%
Secondary (Grades 10-13 or ages 15-19)	20.71%	26.43%	14.29%	10.71%	10.71%
Secondary (Grades 7-9 or ages 12-14)	30.56%	28.47%	20.83%	6.94%	2.08%

B. Partnership Training Activities

GLOBE Partners engage in many different activities to support the teachers and schools in their local service areas. Many GLOBE Partners do not receive formal support (for more information, see Section C. Partnership Funding); therefore, prioritizing their time is critical to efficiently and effectively supporting GLOBE teachers.

Similar to previous years, the majority of the respondents who completed the 2016 survey indicated that the highest priority for them is providing training or training new. At the other end of the spectrum, “Actively engaging in GLOBE communications via social media” was ranked as a lower priority (see Figure 3).

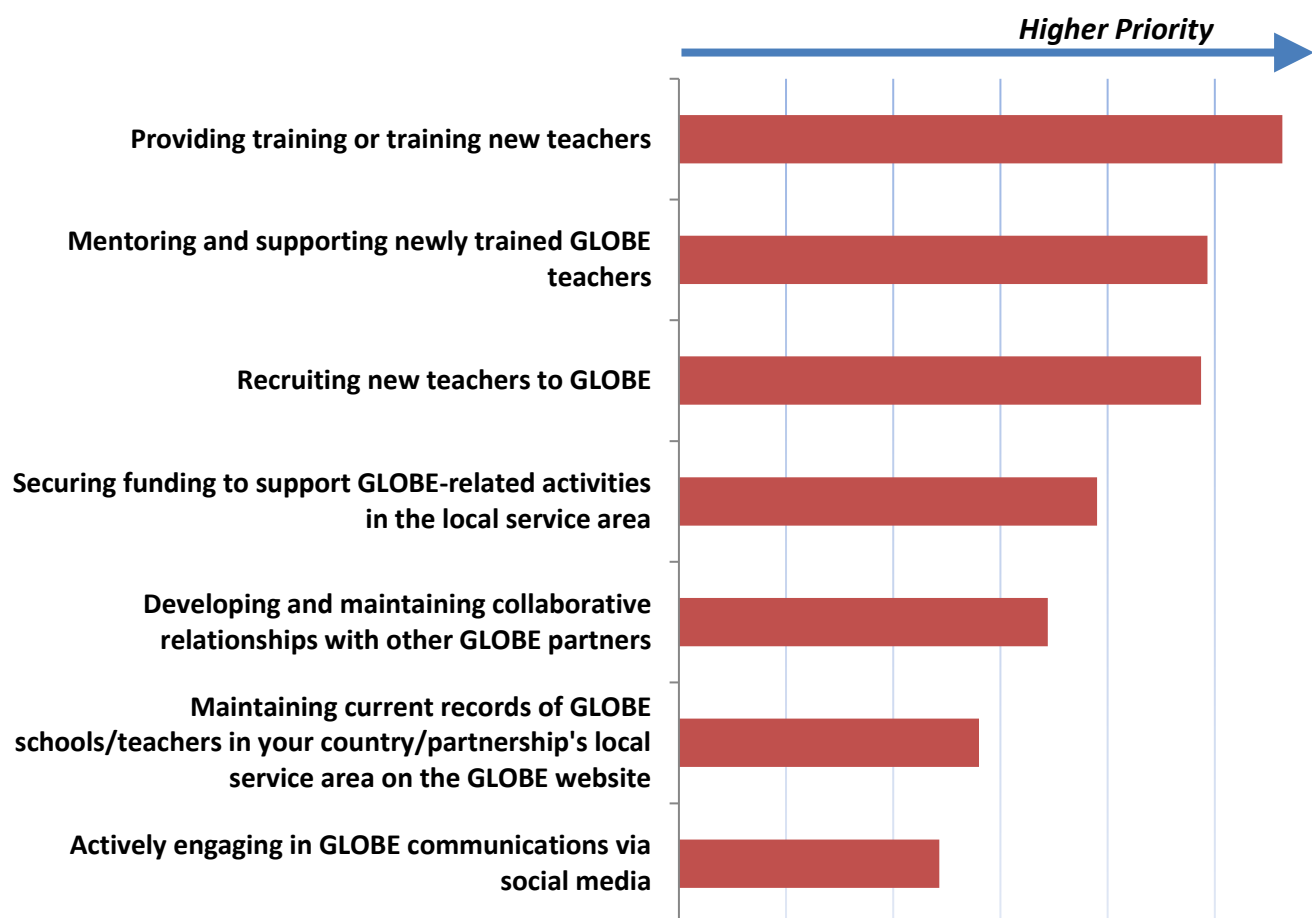


Figure 3. Please rank the following according to how you prioritize your time for the following Partner activities

For over half of the respondents (52 percent), the frequency of in-service teacher trainings ranged from once to twice a year. The remaining respondents reported more frequent trainings, such as on a quarterly, monthly and, for a very small minority (3 percent), a weekly basis. With regard to pre-service teacher trainings, approximately one-third of respondents indicated that they conducted trainings once a year; while 28 percent of respondents indicated that they never train pre-service teachers.

The majority of survey respondents indicated that they assessed the quality of their trainings using different methods and tools to gather data (see Figure 4). Relying on teacher feedback after a workshop was the most popular option among survey respondents, with over 60 percent of the responses. Similar to last year, using a survey or questionnaire that they developed or customized was the second highest popular method for gathering assessment data. A few respondents reported not assessing the quality of the training workshops, citing a variety of reasons including such responses as: no time, too few teachers, and not yet having conducted a training workshop.

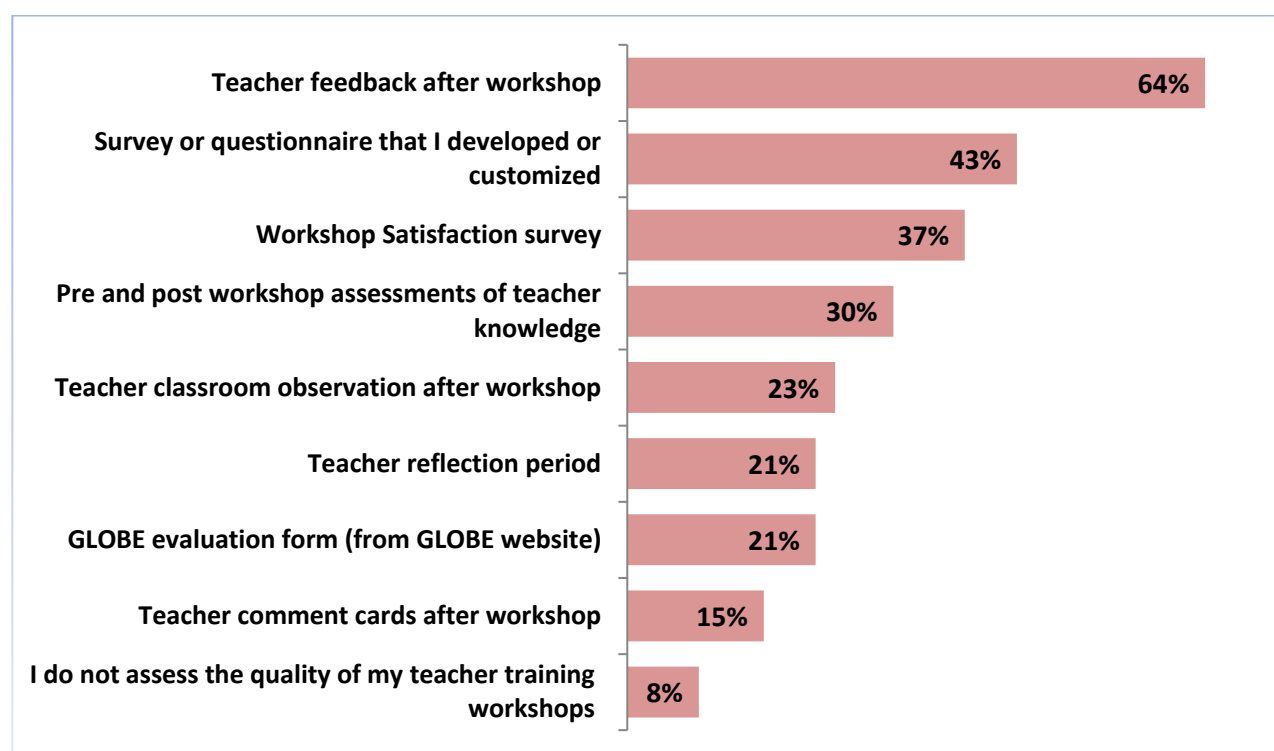


Figure 4. Please select the options that best describe how you assess the quality of your training. (Choose all that apply)

In addition to teacher trainings, it was reported that partners support teachers in their local service area in a variety of ways (see Figure 5). The most common activities for supporting GLOBE-trained teachers included: 1) providing supplemental materials; 2) assisting in instrumentation set-up and use; and 3) arranging or participating in site visits to schools to provide mentorship to teachers.

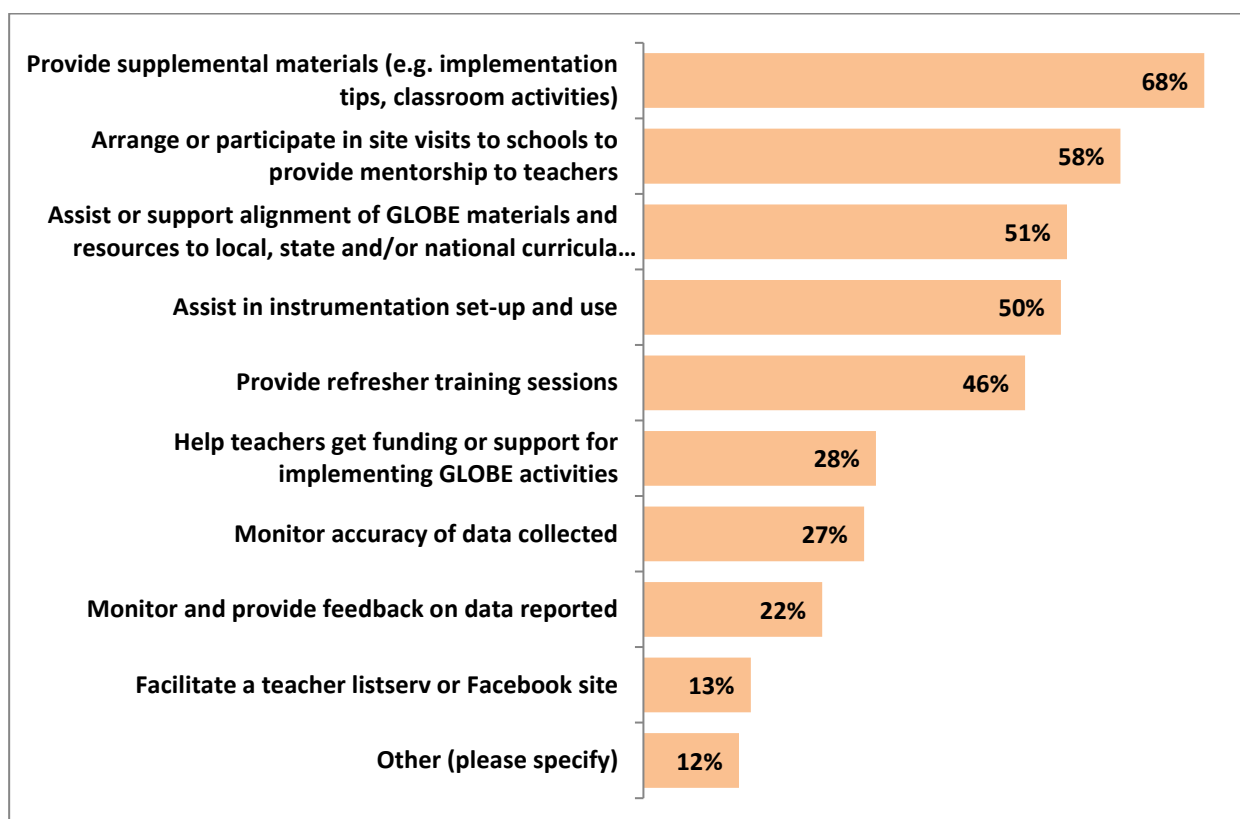


Figure 5. Which of the following activities do you engage in to support GLOBE trained teachers? (Choose all that apply.)

To better understand the importance of GLOBE materials and resources used during training workshops, the survey asked partners and teachers to identify how frequently they used specific GLOBE resources, including learning activities and protocols, the GLOBE website, and the Teacher's Guide. Among the protocols and learning activities, atmosphere protocols were most frequently by US partners, country coordinators and teachers, with 47 percent of the respondents indicating that they use these protocols often (see Figure 6).

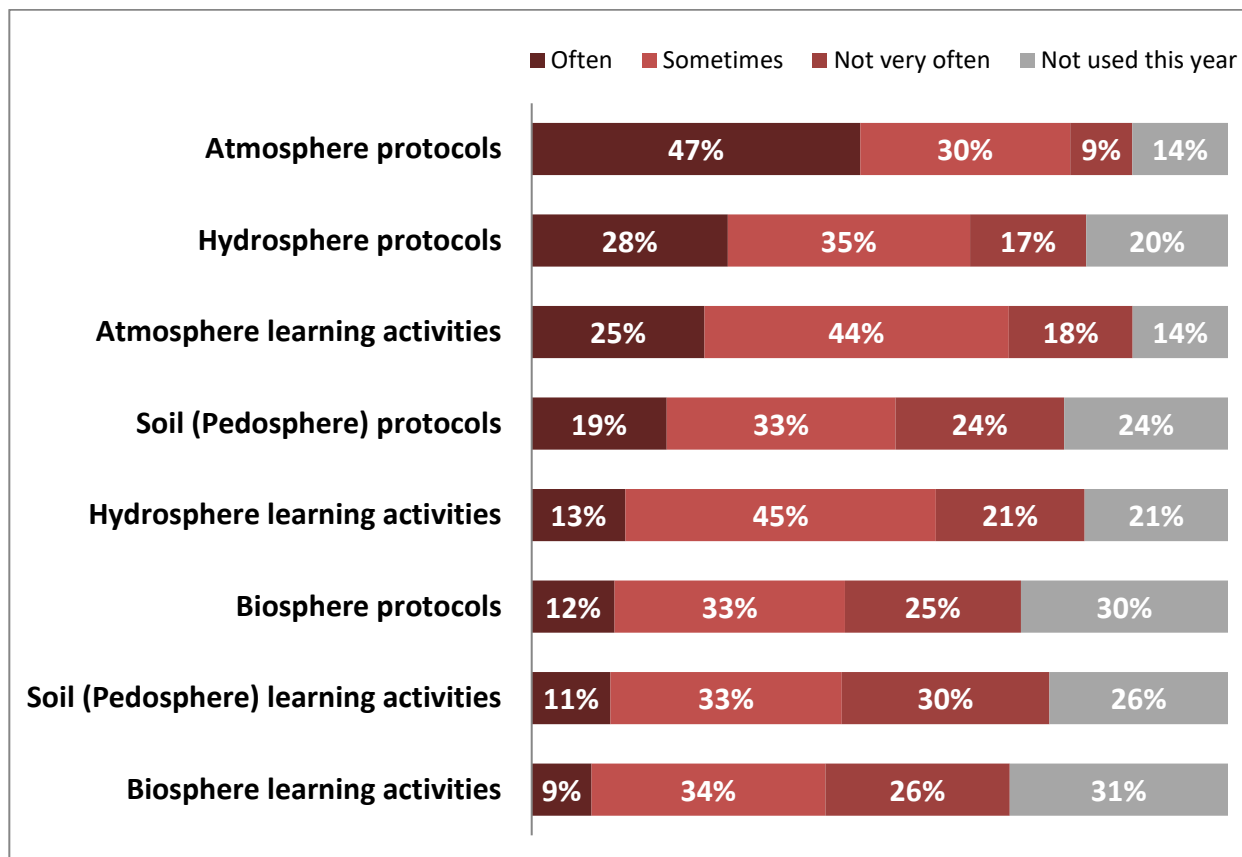


Figure 6. Please select the option that best describes how frequently you used the following protocols and learning activities in the past year.

On the other hand, biosphere protocols and learning activities were among the least used materials and resources, with approximately one-third of respondents reporting that they have not used these resources within the past year.

Among GLOBE materials and resources listed in Figure 7, the GLOBE website was the most frequently used resource by the survey respondents, with close to 50 percent indicating that they use the website “often.” This was followed by the GLOBE Teacher’s Guide, with close to one-third percent of survey respondents using this resource “often.”

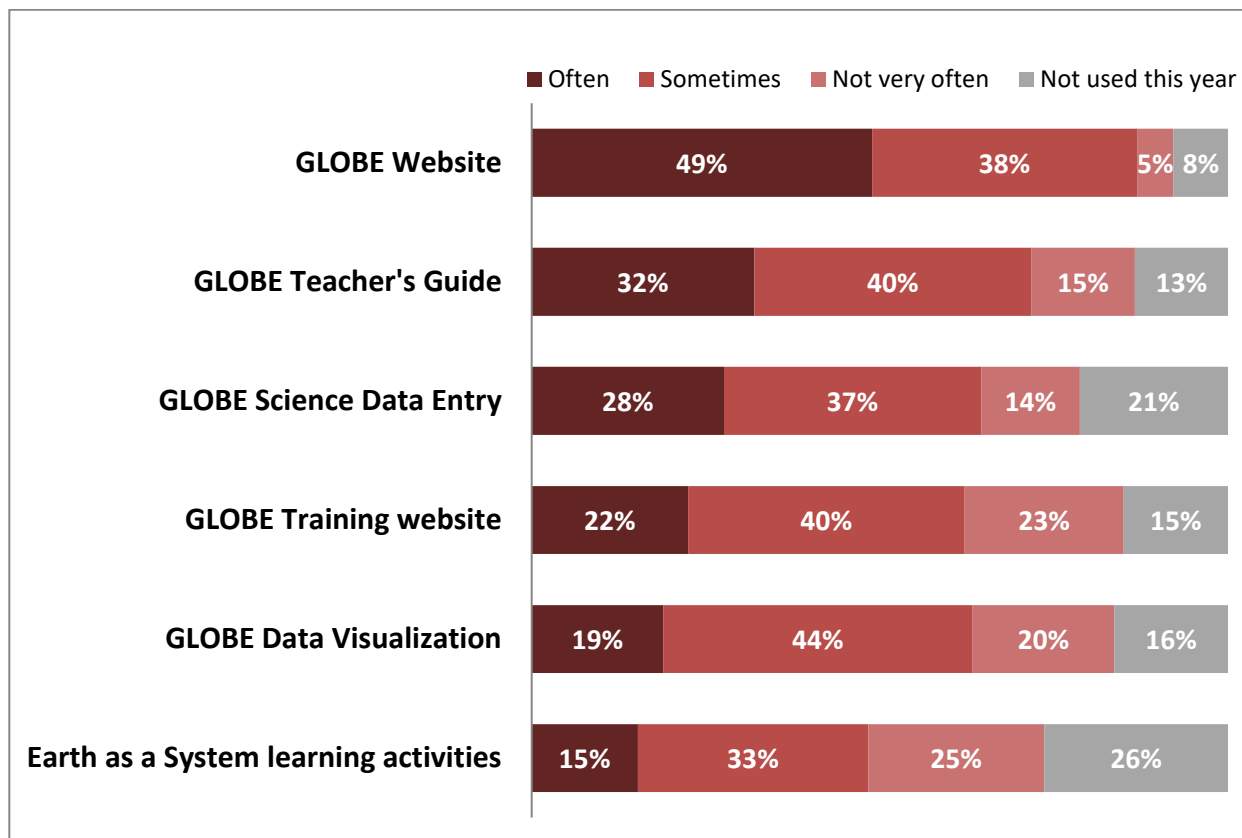


Figure 7. Please select the option that best describes how frequently you used the following materials and resources in the past year.

The use of these materials may be due in large part to how easy it is to navigate to these resources on the website. As shown in Figure 8, 65 percent of all respondents (including teachers and scientists) indicated that navigation to the Teacher's Guide was easy. Those figures were moderately less for data entry and visualizations. Over 50 percent of respondents indicated that navigating to data entry was "easy" and in the case of visualizations, this figure was 49 percent.

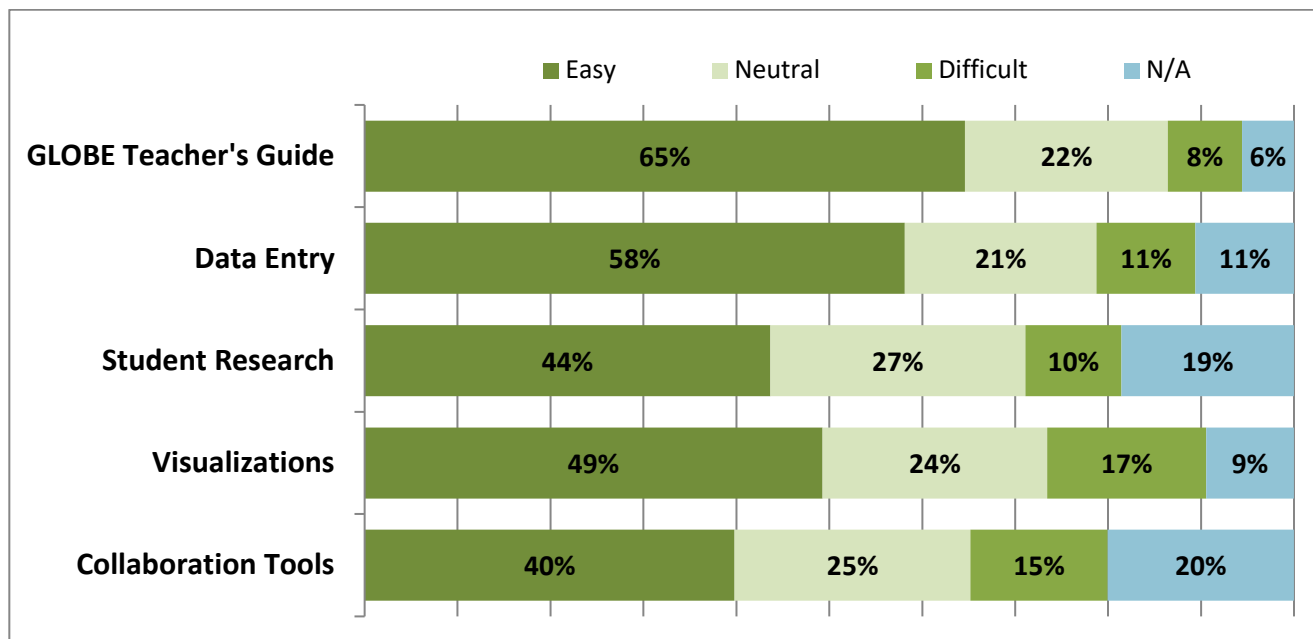


Figure 8. Please rate how easy it is to navigate to the following resources on the GLOBE website.

C. Partnership Funding

Securing funding to support GLOBE-related activities in the local service area is a high priority for GLOBE Partners, ranking just after recruiting and mentoring new GLOBE teachers (see Section B, Figure 3). In spite of the importance of having financial support for engaging in GLOBE-related activities, however, many GLOBE Partners do not have the time or support systems (such as proposal writing) that would enable them to secure funding to support their work.

When asked to estimate their annual funding/budget for GLOBE, 47 percent of the respondents reported having less than \$1,000 as their annual budget for GLOBE, with slightly more than one-quarter of survey respondents (27 percent) indicating that they received no funding for carrying out activities such as training workshops and support activities for GLOBE-trained teachers (Figure 9).

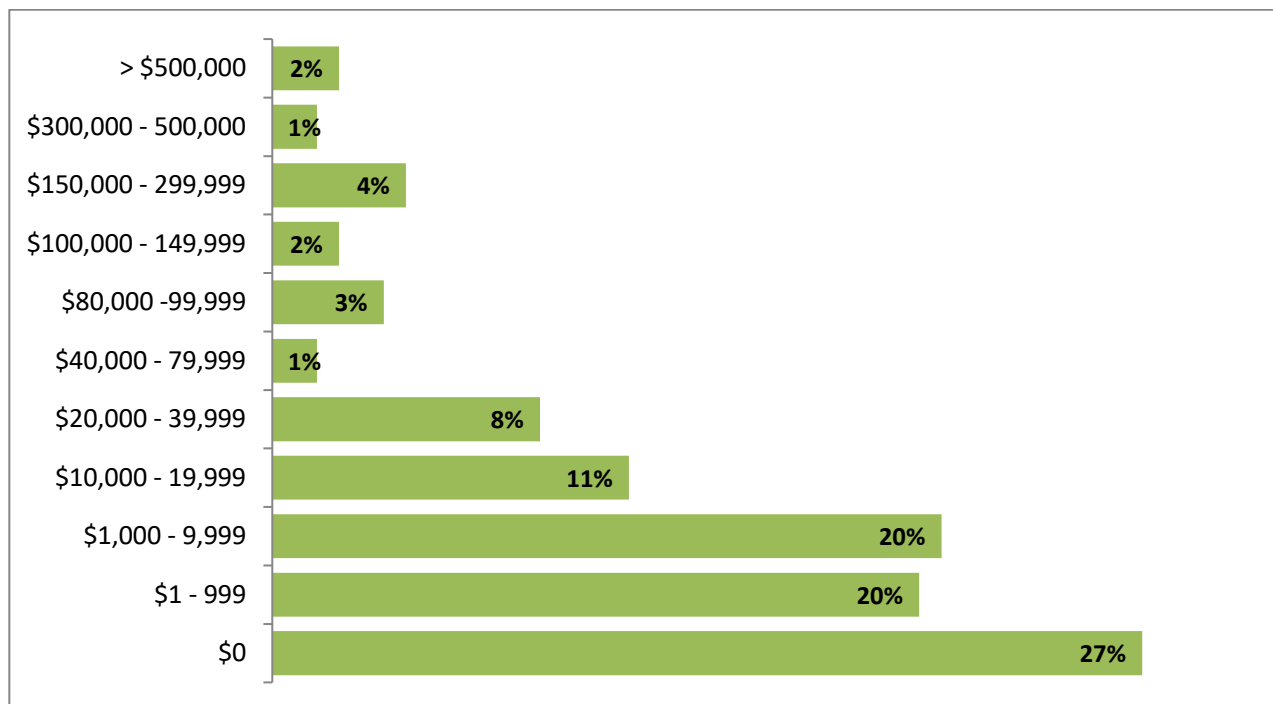


Figure 9. Please indicate your annual funding/budget for GLOBE.

Table 4 shows the primary sources for funding GLOBE management and operation. More than half of the respondents indicated government-related funding (either directly or through award/contract mechanism) as the primary source. Table 4 also shows that very little support is received through private sector or individual fundraising efforts.

Table 4. Funding for GLOBE Management and Operations

Primary Sources for funding GLOBE management and operations	% Responses
Direct government funding (in Ministry or Department)	33.33%
No funding is available for GLOBE management and operation	15.65%
Government contract/grant awarded by competition	14.29%
Other (please specify)	11.56%
Regional or local funding	6.12%
Participant fees received	5.44%
Personal or self-funding	4.08%
Government contract/grant awarded without competition	3.40%
Foundation funding	2.04%
Individual donors	2.04%
Fundraising activities	1.36%
Corporation funding	0.68%

D. Partnership Collaboration and Communication

When asked about prioritizing partnership activities that are more collaborative in nature (such as activities engaging in GLOBE communications via social media, and developing and maintaining collaborative relationships with other GLOBE Partners), survey respondents rated this as a lower priority relative to other partnership activities (see Section B, Figure 3). However, as shown in Figure 10, approximately sixty-one percent of survey respondents are currently collaborating on GLOBE-related projects, the majority of which are with GLOBE Partners.

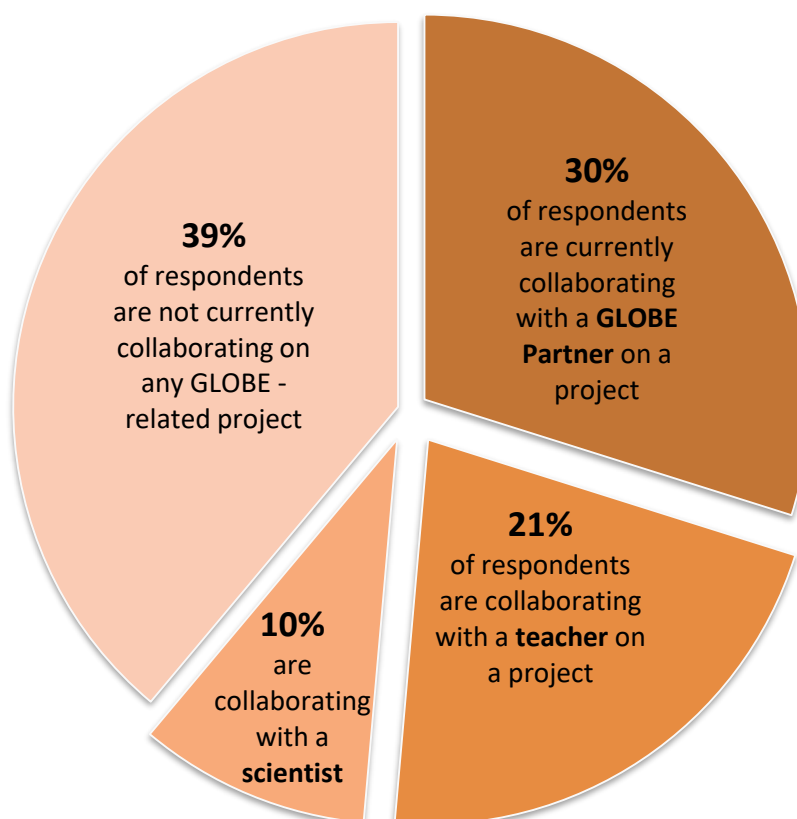


Figure 10. Are you currently collaborating on any GLOBE-related projects? If so, please indicate who you collaborate with.

When asked about collaboration with government agencies or non-governmental organizations (NGOs), forty-two percent of respondents reported being involved in some type of collaboration. Some of these agencies and NGOs are shown in the list below.

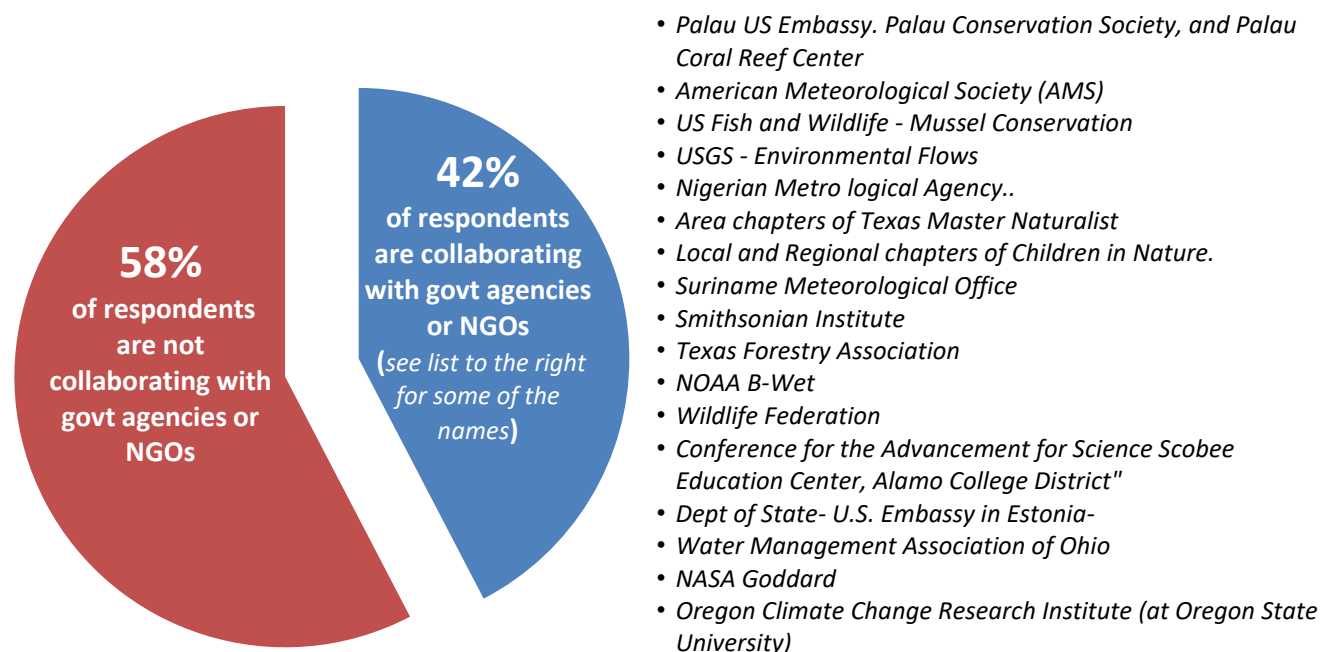


Figure 11. Do you collaborate (currently or in the past) with any government agencies and/or non-governmental organizations (NGOs) and programs. If yes, please name the organization.

GLOBE Partners form an important community of practice. As such, many efforts within the GIO have been targeted toward strengthening and building this community through effective communication practices. The GLOBE News Brief and Director's Letter are the primary ways that Partners and Country Coordinators receive information about GLOBE (see Figure 12).

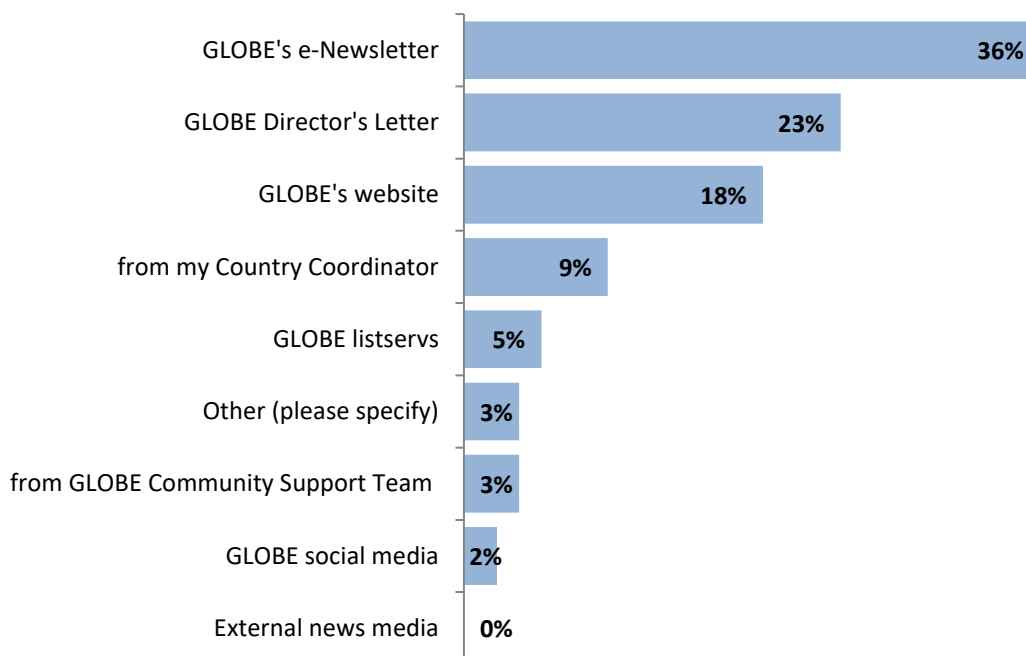


Figure 12. What is the primary way you receive news about GLOBE? (Choose only one.)

In addition to these GIO-mediated communication channels, U.S. Partners and Country Coordinators also communicate with each other frequently. As shown in the Figure 13, approximately 60 percent of the survey respondents communicate with other GLOBE Partners on a monthly or weekly basis, with e-mail as the primary venue of communication for 85 percent of the survey respondents.

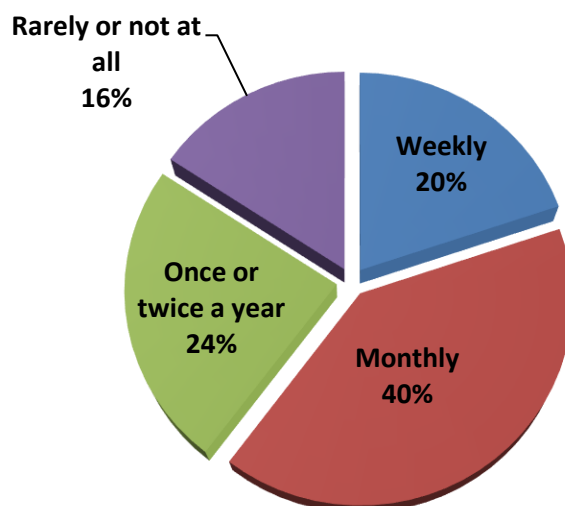


Figure 13. How frequently do you communicate with other GLOBE Partners?

Finally, GLOBE Partners reported interacting with each other as a result of participating in a number of GLOBE events last year. Over eighty percent of survey respondents reported that they participated in at least one GLOBE event last year. As shown in Figure 14, the most popular among GLOBE events were the regional meetings, receiving 55 percent of the responses. GLOBE webinars and the GLOBE Annual Meeting were also popular events, each receiving over one-third of the responses.

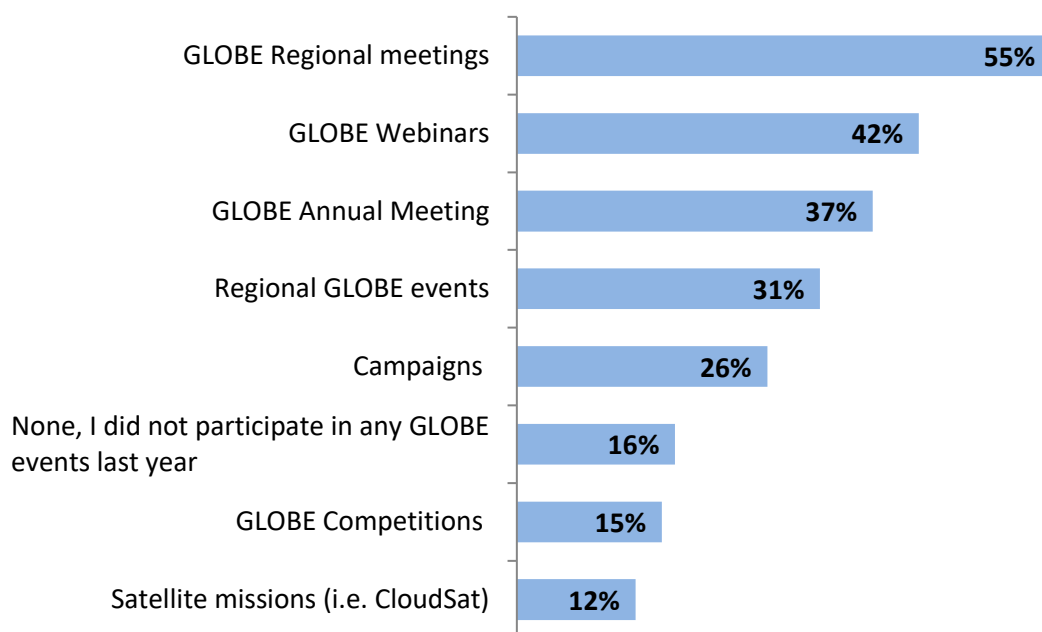


Figure 14. Which of the following GLOBE events did you participate in last year?
(Note: percentages do not total 100 percent because respondents could check all that apply.)

There were, however, some significant differences between U.S. Partner and Country Coordinator survey respondents regarding their participation in GLOBE events. Country Coordinator responses indicated higher levels of participation in:

- GLOBE Regional Meetings (75 percent for Country Coordinators vs. 25 percent for U.S. Partners);
- GLOBE competitions (25 percent for Country Coordinators vs. 1 percent for U.S. Partners);
- Regional GLOBE events (32 percent for Country Coordinators vs. 17 percent for U.S. Partners); and
- Campaigns (24 percent for Country Coordinators vs. 10 percent for U.S. Partners).

U.S. Partners showed higher levels of participation in GLOBE webinars, with 58 percent of the responses from U.S. Partners and only 19 percent from Country Coordinators.

V. Next Steps for Survey

The GLOBE Annual Partner Survey is one of the GIO's primary data-collection tools. Initially administered in 2005, this survey gathers information from GLOBE Partners (U.S. Partners and Country Coordinators) on activities related to The GLOBE Program. In 2012, the GLOBE Annual Partner Survey was revised to align with the community-approved 2012-2017 GLOBE Strategic Plan. As The GLOBE Program and its organizational structure have continued to evolve, the need to collect data that reports on – and that are relevant to – the GLOBE community has become more important. To that end, this year's Annual Partner Survey has been expanded to include a number of questions from the Working Groups (WGs). The data collected from this survey have been shared with the WGs in order to help them determine the best ways to support the community of teachers and schools. During the 2016 Annual Meeting, WGs discussed and presented their analysis of the survey data, which has truly empowered the GLOBE community to use, and expand their use of, data in order to support their decision-making efforts.

The GIO would like to thank all of the community members who took the time to respond to the GLOBE Annual Survey. The primary purpose of the survey is, and will continue to be, a means for gathering descriptive information on the GLOBE community. The expectation is that, over time, the results can provide the basis for further in-depth exploration and investigation. This goal could not be achieved without the support and assistance of the GLOBE community.