THE GLOBE PROGRAM

GLOBE International Virtual Science Symposium

2018

https://www.globe.gov/science-symposium

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THE GLOBE PROGRAM

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Education, Outreach, and Technology Specialist

GLOBE Implementation Office

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GLOBE INTERNATIONAL VIRTUAL SCIENCE SYMPOSIUM

- Online space for students to share and discuss GLOBE research with other students, STEM professionals, GLOBE community
- Open to **all** GLOBE students K-16
  - Rubrics by grade level

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2017 GLOBE International Virtual Science Symposium

Volunteer Mentors and Judges

Region	# of Mentors
Africa	4
Asia and Pacific	7
Europe and Eurasia	8
Latin America and Caribbean	9
Near East and North Africa	5
North America	17
Total	**50**

Region	# of Judges
Africa	4
Asia and Pacific	4
Europe and Eurasia	14
Latin America and Caribbean	6
Near East and North Africa	5
North America	28
Total	**61**

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Student Projects:

Region	# of Projects
Africa	3
Asia and Pacific	20
Europe and Eurasia	26
Latin America and Caribbean	2
Near East and North Africa	62
North America	34
Total	**147**

Region	Country	# of Projects
Africa	Kenya	2
	Madagascar	1
Asia and Pacific	India	1
	New Zealand	1
	Taiwan Partnership	9
	Thailand	9
Europe and Eurasia	Croatia	8
	France	3
	Israel	7
	Italy	1
	Netherlands	4
	Poland	3
Latin America and Caribbean	Argentina	1
	Colombia	1
Near East and North Africa	Oman	14
	Saudi Arabia	48
North America	USA	34
	Total	**147**

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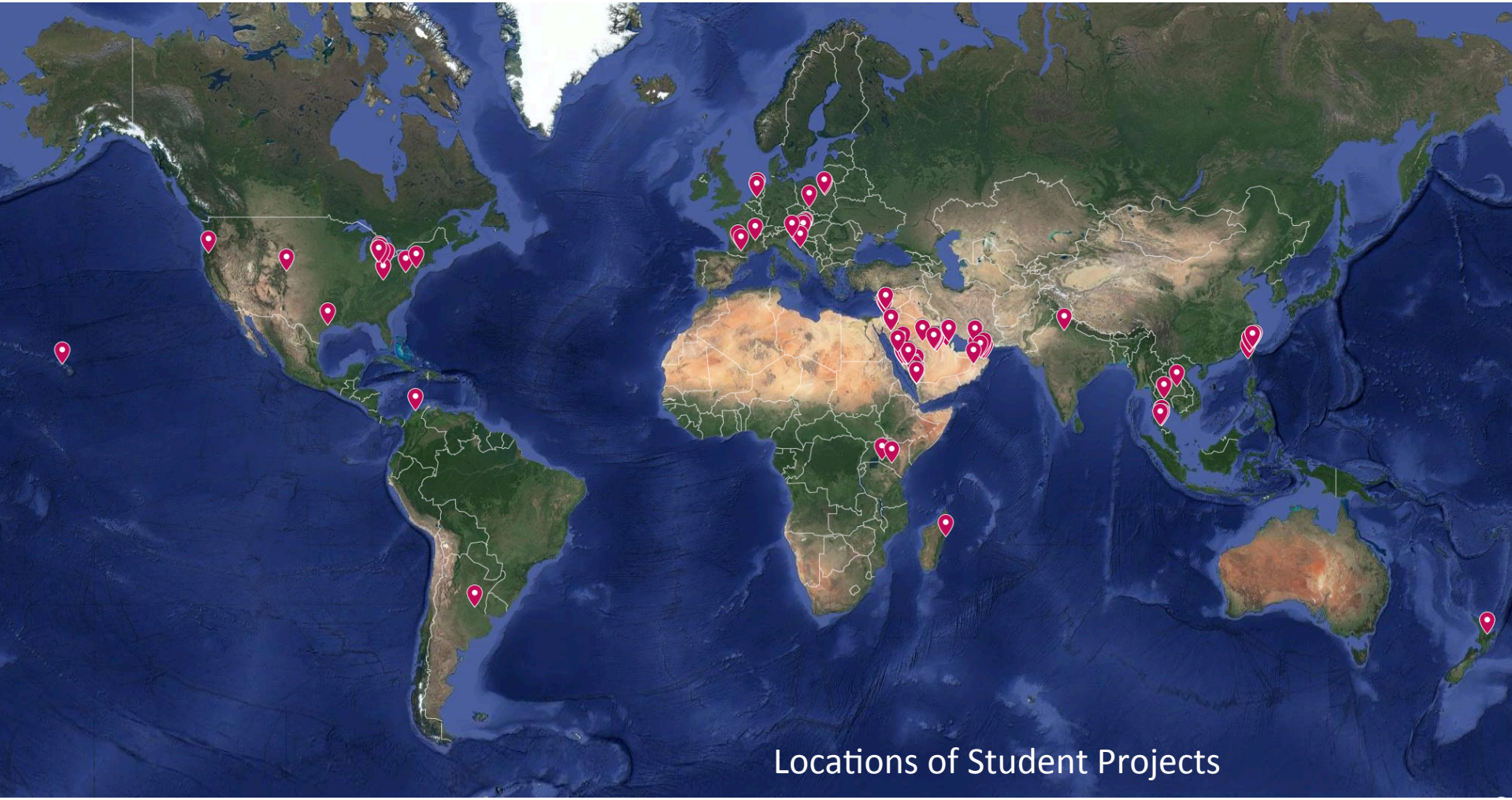

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Drawing Winners

Student Project: **"Why Doesn't Grass Grow on our Playground?"**

Teacher: Marcy Burns
School: Main Street Intermediate School
Location: Norwalk, Ohio

Student Project: **"How Do the Species of Macroinvertebrates in the Boulder Creek Compare with the Water Chemistry of the Stream?"**

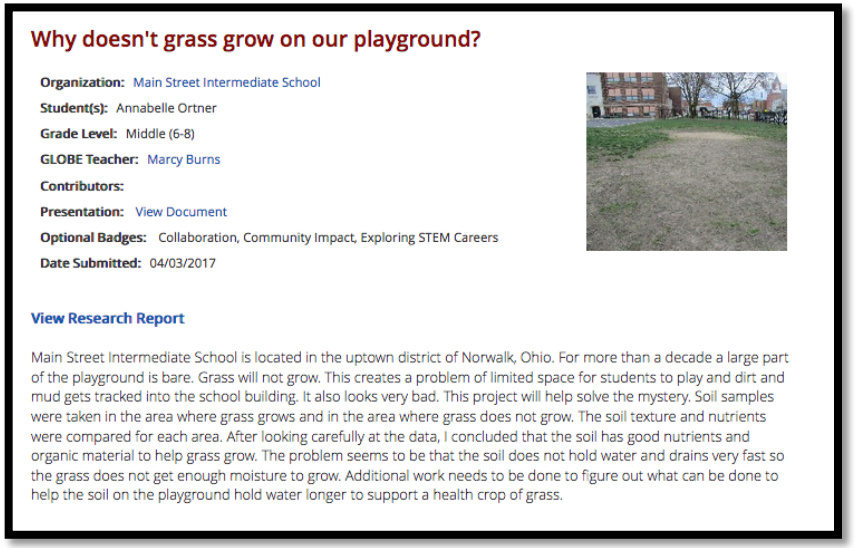
Teacher: Bill Meyers
School: Alexander Dawson School
Location: Lafayette, Colorado

Student Project: **"Global Warming and His Actions in Maximal and Minimal Temperature Variations on the Continent"**

Teacher: Michel Pedurand
School: Lycée Bernard PALISSY
Location: AGEN Aquitaine, France

Student Project: **"Checking the Validity and the Quality of Wells' Water in Jabel Al-Mukkaber Area"**

Teacher: Nour Bakri
School: Al Faruk Elementary School
Location: Jerusalem, Israel



Why doesn't grass grow on our playground?

Organization: Main Street Intermediate School
Student(s): Annabelle Ortner
Grade Level: Middle (6-8)
GLOBE Teacher: Marcy Burns
Contributors:
Presentation: View Document
Optional Badges: Collaboration, Community Impact, Exploring STEM Careers
Date Submitted: 04/03/2017

View Research Report

Main Street Intermediate School is located in the uptown district of Norwalk, Ohio. For more than a decade a large part of the playground is bare. Grass will not grow. This creates a problem of limited space for students to play and dirt and mud gets tracked into the school building. It also looks very bad. This project will help solve the mystery. Soil samples were taken in the area where grass grows and in the area where grass does not grow. The soil texture and nutrients were compared for each area. After looking carefully at the data, I concluded that the soil has good nutrients and organic material to help grass grow. The problem seems to be that the soil does not hold water and drains very fast so the grass does not get enough moisture to grow. Additional work needs to be done to figure out what can be done to help the soil on the playground hold water longer to support a health crop of grass.

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2018 GLOBE International Virtual Science Symposium

Timeline:

- 25 Oct 2017: Informational Webinar
- January – 01 March 2018: Reports Accepted
- To Be Scheduled: Judging Webinar
- 18 – 24 March 2018: Judging Period
- 06 April 2018: Feedback and badges
- 06 April 2018: Live Drawing for stipends

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Merit Based Student Research Badge

- Students **earn** points
- No limit to projects that earn top ranking

Optional Badges

- Possible for students to earn up to 3 out of 6 additional badges
- Students describe how each badge was earned in their report document
- Students need to select badges when uploading project
- Minimum of **two** required to be part of the drawing

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- **Collaboration:** Team members and their roles, student contributions, advantages of collaboration
- **Community Impact:** Describes how a local issue led to the research question and what impact the students have on their community
- **Connection to a STEM Professional:** Collaboration with a STEM professional and how it enhanced the student research
- **Engineering Solution:** An engineering solution to a real world problem based on student research
- **Exploring STEM Careers:** Understanding how student research relates to STEM careers
- **Interscholastic Connection:** Describes interscholastic or international collaboration and how it benefits the research

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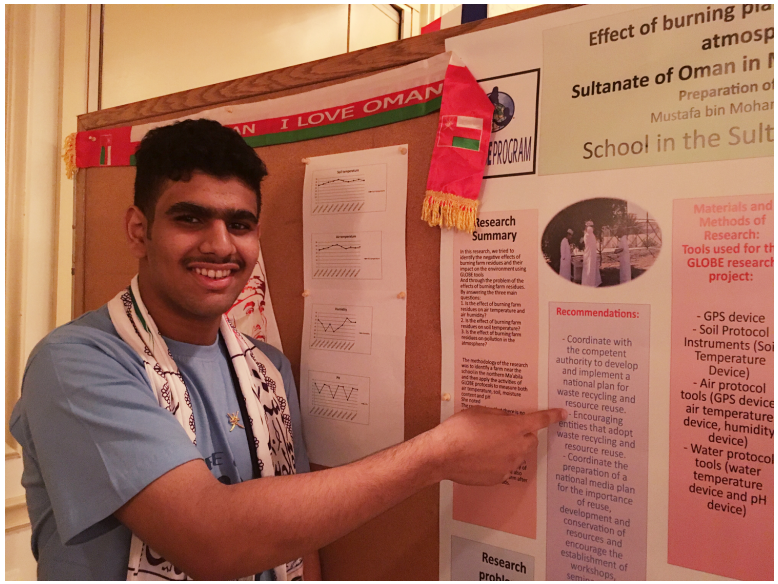
Drawing

- Earn 4 star Student Research Badge AND at least two optional badges → entered into a drawing on 06 April 2018
- Projects drawn will receive funds to help offset the cost of attendance at the **GLOBE Learning Expedition in Killarney, Ireland**
- Four projects will be drawn:
  - Two international ($2,000 USD each)
  - Two US ($2,000 USD each)



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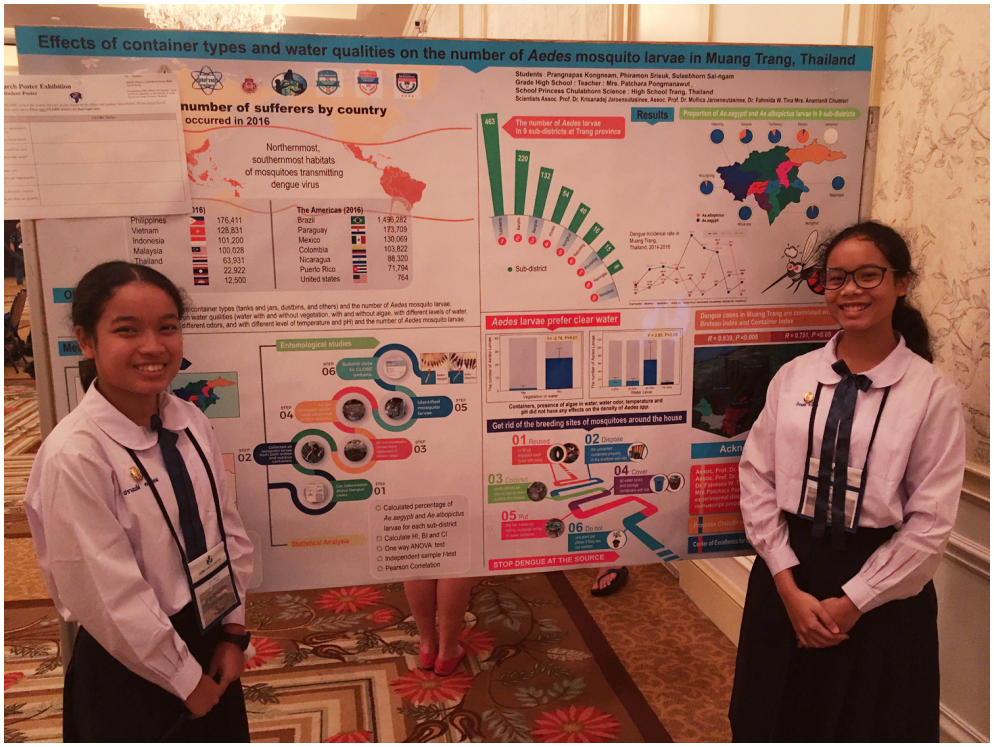
How to Enter

- Entries include:
  - Abstract
  - Research Report
  - Narrative on each badge completed
  - Presentation
    - Narrated Power Point
    - Video link
    - Scientific Poster
  - Photo Releases
  - GLE Connection (optional)



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GLOBE Learning Expedition (GLE) Connection

Optional: GLE Theme: For students planning on attending the GLE in Killarney, Ireland, select which theme is the closest fit for your research project.

- Environmental Problems and Solutions
- Developing a Sense of Place: Connections between Observations and Measurements across Spheres
- New Technologies and GLOBE

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Presentations

Important to communicate science!

- Poster
- Narrated PowerPoint (or similar)
- Video link

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Nitrate Concentration of the Cove River Biome During a Six Month Period

Abstract

The Cove River biome consists of a seven-kilometer river and a 15.25 acre open space park for public use, though it is mostly used for research and educational purposes, such as the GLOBE Program and archaeological digs. The Cove River biome is home to several animals, including foxes, large trees that produce high amounts of canopy cover and plant life found in the river and in the soil. This experiment is being performed to discover the nitrate concentration of the Cove River as a way to investigate the river's level of pollution and to determine if the nitrates have a negative effect on the biome. From October of 2011 to March of 2012, data was collected from water samples of the Cove River to determine the temperature of the river the pH of the river, the nitrate levels of the river and the dissolved oxygen levels of the river. Though the focus of this experiment is on the impact of nitrates on the Cove River, other variables were accounted for because the lab group wanted to check if other factors correlated with the levels of nitrate. Such correlation was seen in some form as shown by the graph and data, especially between the dissolved oxygen and nitrate levels on some testing dates. Overall, the data showed that the Cove River has nitrate levels that do not exceed or come close to the Maximum Contaminant Level set by the Environmental Protection Agency (EPA), which is 10 ppm or 10 mg/L. The Cove River biome is, currently, safe against pollution, but if runoff of nitrogen caused by heavy precipitation (which was a factor correlated with nitrate levels in the results) and by the waste of the surrounding civilization continues, then pollution of the biome is still a threat.

Problem Statement

This project is being conducted to test the effect of nitrates on the water of the Cove River over a period of six months from October of 2011 to March of 2012.

IV: Time (six months) of collection

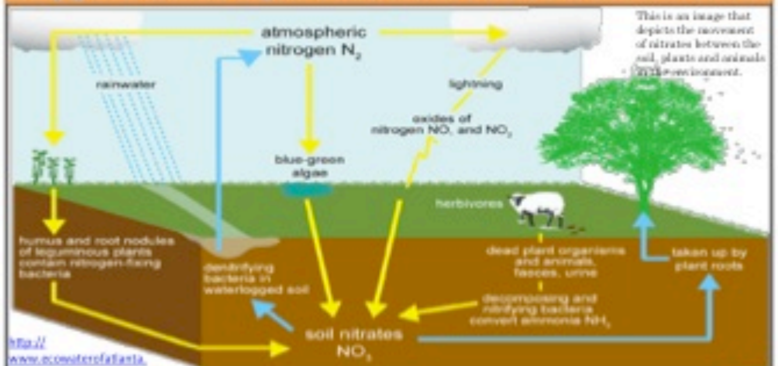
DV: Nitrate levels

Hypothesis: If the nitrate levels in the water exceed the standards permitted by the EPA, then Cove River is polluted and steps must be taken to prevent long-term consequences.

Method/Procedure

1. Collect a water sample in the bucket from the predetermined location at Cove River.
2. Use the Vernier Probe Ware to measure the dissolved oxygen level and temperature of the water sample immediately after collecting the water so that the results are not invalidated by exposure to the atmosphere.
3. Record dissolved oxygen levels and water temperature.
4. Bring sample back to the lab to test water pH and nitrate levels using the SAPI™ Aquarium Pharmaceuticals Testing Kit. Follow the instructions attached to the testing kit.
5. Record water pH and nitrate levels.
6. Dispose of chemical wastes appropriately.

The Change of Nitrate Levels, Temperature, Dissolved Oxygen levels and pH of the Cove River Over Six Months



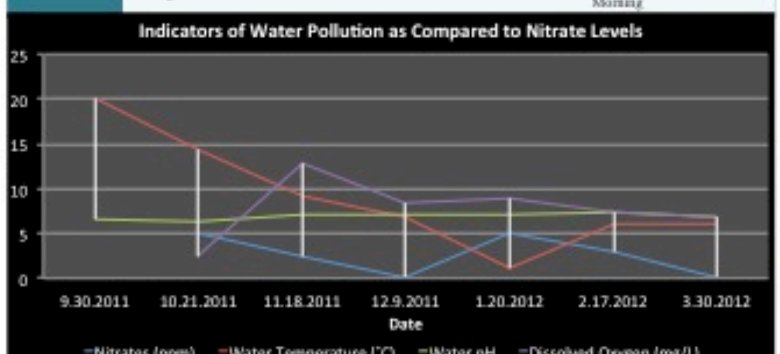
This is an image that depicts the movement of nitrates between the soil, plants and animals in the environment.

http://www.ecowaterofatlanta.

Indicators of Pollution as Compared to Nitrate Levels

Indicators of Water Pollution as Compared to Nitrate Levels

Date	9.30.11	10.21.11	11.18.11	12.9.11	1.30.12	2.17.12	3.30.12
Water Temperature (°C)	20.2	14.5	9.2	7.0	1.1	6.0	6.0
Water pH	6.5	6.3	7.1	7.2	7.1	7.4	6.8
Dissolved Oxygen (mg/L)	N/A	2.5	12.8	8.5	9.0	7.4	7.0
Nitrates (ppm)	N/A	5.0	2.5	0.0	5.0	3.0	0.0
Recent Precipitation	Yes; Heavy Rainfall on Previous Night	Yes; Constant Rainfall Throughout the Week	No	No	Yes; Snow on Previous Night	Yes; Rainfall on the Previous Night & Morning	Yes; Constant Rainfall Throughout the Week



Conclusions

The purpose of this experiment was to determine if the water quality of Cove River was affected by the amount of nitrates in the water. Analysis of nitrate levels shows that:

1. The nearby school, busy street, and gas station with a leaking septic tank make Cove River particularly susceptible to pollution.
2. The increase in nitrate levels after a period of rainfall indicates that runoff from nearby establishments reaches Cove River.
3. As the dissolved oxygen levels increase, the nitrate levels decrease.
4. The data demonstrates no correlation between nitrate levels and season, water pH, or water temperature. However, it is still important to note water pH because a high pH promote nitrate-producing bacteria growth. Moreover, because water pH and water temperature also affect dissolved oxygen levels, those factors must be taken into account before establishing a relationship between dissolved oxygen levels and nitrate levels.
5. The Cove River currently meets the FDA standards for healthy nitrate levels.

Future Directions

This experiment can be improved by testing multiples areas of Cove River and obtaining several samples from each area. Testing several spots of the river would produce a variety of results, thereby increasing the reliability of the experiment. Furthermore, more frequent testing would enhance the data by providing researchers with more information to determine what may cause a change in nitrate levels. It would also be beneficial to include a more detailed examination of each manmade establishment near the testing location. If the nitrate levels are unusually high, then it would be easier to identify the source of any pollution or runoff.

Further experimentation extending outside the hydrosphere can be undertaken to increase one's understanding of the topic. In the future, there could be an additional focus nitrogen dioxide, a major air pollutant. Nitrogen dioxide that dissolves in the water could increase the nitrate level and thus a spike in nitrate levels could indicate an excess in air pollution.

References

"Basic Information about Nitrate in Drinking Water." *Epa.gov*. United States Environmental Protection Agency, 6 Mar. 2012. Web. 5 Apr. 2012. <http://water.epa.gov/drink/contaminants/basicinformation/nitrate.cfm>.

"Measuring Nitrates and Their Effects on Water Quality." *Tamu.edu*. Web. 6 Apr. 2012. <http://geos.tamu.edu/curriculum_modules/water_quality/module_5/index.htm>.

"Nitrate and Nitrite." *Anl.gov*. Argonne National Laboratory, Aug. 2005. Web. 7 Apr. 2012. <http://www.ead.anl.gov/pub/doc/nitrate-ite.pdf>.

"Nitrate and Nitrite." *Delaware.gov*. Delaware Health and Social Services, Jan. 2003. Web. 5 Apr. 2012. <http://dhss.delaware.gov/dph/files/nitratefaq.pdf>.

Acknowledgements

We would like to thank Professor Scott Graves and Mr. Kevin Dickson for their guidance, support, and assistance.

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How to Enter

- Updated upload tool available online early 2018

Student Research Reports

PROGRAM

*Required Fields

School / Organization* Select

Add Another Organization/Teacher

GLOBE Teacher* Select

Student(s)* (Required)

Additional Contributors

Grade Level*

Lower Primary (K-2)

Report Title* (Required)

Report Description* (Required)

Report Date* (Required)

mm/dd/yyyy

Abstract or Summary* (Required)

Upload Research Report* (Required)

Choose File No file chosen

Delete

Upload Report Thumbnail Image*

Select a new file

Thumbnail Alt Tag

Type of Student Research Report*

Standard Research Report

International Virtual Science Symposium Report

Presentation*

Link to Video URL

Or

Upload Poster Presentation

Choose File No file chosen

Delete

Photo Releases

Choose File No file chosen

Delete

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Optional Badges (maximum of 3 badges)

- [ ] Collaboration
- [ ] Community Impact
- [ ] Connection to a STEM Professional
- [ ] Engineering Solution
- [ ] Exploring STEM Careers
- [ ] Interscholastic Connection

Submit Report Cancel

Note: Reports are subject to review before being posted on the website.

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http://globe.gov/science-symposium

Virtual Science Symposia

2018 International Virtual Science Symposium

- Instructions
- Rubrics
- FAQs
- Resources
- Students Needing Mentors
- Volunteer Sign-Up
- Mentors for Students
- Shareable Images

2018 GLOBE International Virtual Science Symposium

GLOBE is excited to host the 2018 GLOBE International Virtual Science Symposium (IVSS). The IVSS is a way for students from all GLOBE countries to showcase their hard work. With GLOBE, students learn the practices of science through hands-on investigations in their own communities, sparking their curiosity and interest in science. This often leads to inquiries that help solve real-world problems and further understanding of our global environment. Now it's time for your students to show the world what they've learned!

New information will be added frequently, so be sure to check back soon!

IVSS Informational Webinar:

Julie Malmberg from the GLOBE Implementation Office will host an informational webinar about the 2018 GLOBE International Virtual Science Symposium on Wednesday, 25 October 2017 at 1:00 pm MT/3:00 pm ET/19:00 UTC. If you are unable to attend, you can submit questions ahead of time to malmberg@ucar.edu and she will answer them during the webinar, which will be recorded. Plan to join via this URL on the 25th: https://zoom.us/j/217948903.

Timeline:

- Informational Webinar - 25 October 2017 at 1:00 pm MT/3:00 pm ET/19:00 UTC - (click on the URL to join at the time of the meeting)
- Reports accepted for submission - 01 January 2018 to 01 March 2018
- Reports and presentations due - 01 March 2018
- Judging webinar (TBD)
- Judging period - 18-24 March 2018
- Feedback and virtual badges released - 06 April 2018
- Live drawing for stipends - 06 April 2018

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2018 GLOBE International Virtual Science Symposium - Instructions

How and What to Submit:

Each student project should include the following components and should be submitted via the Virtual Science Symposium Report Tool. Make sure to have all the items prepared when accessing the tool.

1. Abstract or Summary: A 200 word or less description of the research project.
2. Research Report: The complete research report as .PDF or .DOCX/.DOC. If including more than one language, make sure the report is just one file. Elements of the Research Report are described in the rubrics.
3. Badge Description: For any of the optional badges (you may select up to three), include a short summary of how each badge has been completed.
4. Presentation: Either the link to an uploaded video hosted on an online video sharing site (YouTube, Vimeo, TeacherTube, etc) or the presentation poster. Please do not upload the actual video, just the video link! Whether presented as a video, a narrated PowerPoint, or as a poster, the presentation should describe the student research. Videos should be 10 minutes or less.
5. Thumbnail Image: An image to be displayed with the student report.
6. Photo Release Forms: All individuals who appear in photos or video must send in a photo release. Save all the photo releases into one file.
7. Optional: GLOBE Learning Expedition (GLE) Theme: For students planning on attending the GLE in Killarney, Ireland, select which theme is the closest fit for your research project.
   - Environmental Problems and Solutions
   - Developing a Sense of Place: Connections between Observations and Measurements across Spheres
   - New Technologies and GLOBE

Scoring:

Information about scoring is provided on the Rubrics page. All projects will be scored by a team of judges from the GLOBE International STEM Professionals Network.

Every student project will receive a virtual Student Research Badge. Scored projects will receive between one and four stars on the Student Research Badge, with a 4-star research badge representing superior projects. Additionally, students have the option to complete up to three additional badges including collaboration, community impact, connection to a STEM professional, engineering solution, exploring STEM careers, and interscholastic connection.

Please note that if students choose to submit a report in a language that is not English, it will be shared with the community via the Virtual Science Symposium webpages, but it will not be scored. Only reports in English will be scored by the team of judges. However, students are encouraged to submit their reports in English and their first language (as one document).

Virtual Science Symposia

2018 International Virtual Science Symposium

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International Virtual Science Symposium - Rubrics

To score the International Virtual Science Symposium projects, a team of scientists will use the rubrics attached on this page. Note that rubrics are listed by grade level. Students and teachers are encouraged to use these documents when creating their reports.

Rubrics

Kindergarten - 2nd Grades (Lower Primary)
3rd - 5th Grades (Upper Primary)
6th - 8th Grades (Middle School)
9th - 16th Grades (High School and Undergraduates)

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Frequently Asked Questions - 2018 GLOBE International Virtual Science Symposium

Q. My students have never participated in a science fair or symposia before. Can they still enter?
A. Yes! Students with a wide variety of expertise participate in the IVSS. Whether this is your first research project or your 100th, we encourage you to participate. And, if you have any questions along the way, let us know.

Q. Why did the name change from a science fair?
A. A science symposium is a place for researchers to present and discuss their work. In order to reflect the overarching goal of students sharing their GLOBE research, we thought a science symposium better represented this event than a science fair.

Q. Can I submit my project in a language that is not English?
A. Yes, however, it will not be scored. We are only able to score projects submitted in English.

Q. Can I use Google Translate or another translating program to translate my project?
A. Yes, the judges will then be able to score your project. However, keep in mind that Google Translate often makes mistakes. If possible, have someone familiar with English read over the translation.

Q. I'm a science, technology, engineering, or math (STEM) professional. How can I be involved?
A. If you are part of the GLOBE International STEM professionals Network (GISN), we would love for you to help score the projects. If not, think about applying to be part of the network! If you are interested in scoring or mentoring projects, fill out the Volunteering form. If you are interested in being part of the GISN, send an email to help@globe.gov.

Q. What if the scientist or other STEM professional I want to work with is not part of the GLOBE International STEM professionals Network (GISN)?
A. That's fine! But, encourage the scientist or STEM professional to join the GISN.

Q. I teach 1st grade. Can my students also submit a project?
A. Yes! We have customized the scoring rubrics by grade level. Younger students will be scored differently than older students. We also have a webinar about K-4 projects and lots of K-4 resources.

Q. How do the badges work?
A. All students who submit a project will receive a virtual Student Research Badge. Scored projects will receive between 1 and 4 stars. Additionally, students can elect to be scored for five more optional badges. These badges, which are described in the rubrics, are collaboration, community impact, connection to a local or network scientist, international connection, and engineering solutions.

Q. Can I still get a badge if my project is not in English?
A. Yes! All student projects will receive a Student Research Badge, however only scored projects (those in English) will receive stars on their badges.

Q. Do I have to use GLOBE data in my project?
A. Yes, students must use GLOBE data and enter data into the GLOBE database.

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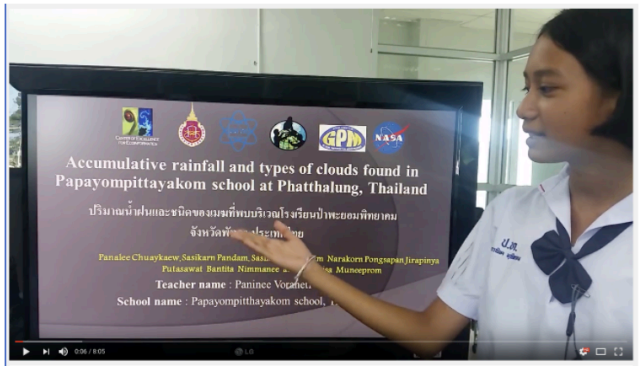
GLOBE International Virtual Science Symposium Resources - 2018

Below are resources to help in the completion of your student research report. If you need any additional resources, please contact the Community Support Team at help@globe.gov.



Accumulative rainfall and types of clouds found in Papayompittayakom school at Phatthalung, Thailand

Previous Virtual Conferences

- 2012
- 2013
- 2016
- 2017

Creating a Research Project

- Steps in the Scientific Process
- Worksheet to Evaluate Possible Research Questions
- How to Create a Student Research Report
- Sample Research Report
- Purdue Online Writing Lab Research and Citation Resources

Tips for preparing a presentation:

- Ten Secrets to Giving a Good Scientific Talk
- Poster Template PowerPoint | PDF (note: this includes the middle school and high school/undergraduate elements, modify as needed for primary school)

Data Resources:

- Setting Up Your Data Site
- Entering Measurement Data
- Retrieve and Visualize Your Data
- Advanced Data Access Tool

Webinars

Archived:

- Badges Informational Webinar (2017)
  - presentation slides
- K-4 (Lower Primary) Research Projects
  - PowerPoint slides (overview)
  - K-4 Resources
- Teacher Webinar: Conducting Field Investigations

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Student Groups Looking for Mentors

We are trying something new this year! This is the place for mentors to find students with research questions or in need of some project help.

Teachers - Are you working with a group of students that would like a mentor? Please fill out the Google form below. Note that no student email addresses should be shared! Mentors should only contact the teachers to provide support for the student researchers. Once you have been contacted by a mentor, let us know at help@globe.gov and we'll remove the request from the list.

Mentors - The student groups below are seeking mentors. Please email them if you feel qualified to assist with their request. And, send us an email at help@globe.gov to let us know if you do contact them.

Teacher Name	Teacher Contact	Age-Level of Students	Preferred Language	What students need
Tek	tek.ggm AT gmail.com	Secondary School (Ages 14-18, Grades 9-12)	English	guidance on lab activity
Galeet Cohen	gmcohen AT philasd.org	Secondary School (Ages 14-18, Grades 9-12)	English	Datasets that they have access to, discussions about their own past research, support with project focus, experimental design, data analysis and statistics. Student interest is focused on climate change as it relates to hurricanes.
Natalie Macke	nmacke AT pascack.org	Secondary School (Ages 14-18, Grades 9-12)	English	Students are trying to combine Globe data combined with other available satellite data to make some inferences/predictions about Secondary Organic Aerosols. Help understanding the instrumentation and protocol associated with the aerosol protocol to help one of my students with her independent research project.
Hajar	a-hager2012 AT hotmail.com	Secondary School (Ages 14-18, Grades 9-12)	Arabic	
Valentina	ifmdes AT gmail.com	Middle School (Ages 11-14, Grades 6-8)	Russian, Ukrainian	Advice how to register for water and soil monitoring. How to fill in the protocols of these observations

Request for a Mentor

This is the place for teachers to request mentors for their student groups. Do your students have a question about a science topic? Need guidance on developing a project? Want to talk about careers in their research area? Request help here!

Teacher Name

Your answer

Teacher Email Address

Your answer

Age-level of Students

- ◯ Lower Primary (Ages 5-8, Grades K-2)
- ◯ Middle Primary (Ages 8-11, Grades 3-5)
- ◯ Middle School (Ages 11-14, Grades 6-8)
- ◯ Secondary School (Ages 14-18, Grades 9-12)
- ◯ Undergraduate Students
- ◯ Other:

Preferred Language

Your answer

What do your students need from a mentor? Please be as specific as possible.

Your answer

SUBMIT

THE GLOBE PROGRAM

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Volunteering for the IVSS

Fill out the form below to volunteer for the 2018 GLOBE International Virtual Science Symposium (IVSS). Mentors and volunteers are invited to participate in two ways:

1. Scoring projects: In March 2018, we need assistance scoring all of the student projects after they have been submitted. Scoring takes anywhere from one hour to several hours (depending on how much time you are able to commit). We will have an informational webinar (which will be recorded) in March and then judging will need to take place sometime between 18-24 March 2018. Judging consists of filling out a Google form with your scores and feedback for the project.

> "Thank you for the opportunity to score the student research. These students give me hope for our future!"
>
> - GISN Scientist

We are hopeful that STEM (science, technology, engineering, and math) professionals, GLOBE alumni, teachers, graduate students, and other interested community members will volunteer to assist scoring the projects. (Note - you do not need a GLOBE account to score projects.) The students really appreciate getting feedback on their projects in order to improve as researchers!

2. Mentoring students: We need volunteer STEM professionals to assist student researchers as they complete their research. Students may have questions about a science topic or the research process in general. While signing up does not guarantee that you will be contacted, we like to have a list of available volunteers for our students. Also, please view the "Students Needing Mentors" page for mentoring opportunities.

If you are interested in participating, please fill out the form below. We will contact judges in late February. If you have any questions, please send an email to help@globe.gov.

2018 GLOBE IVSS Volunteering

We have two opportunities for volunteers for the 2018 GLOBE International Virtual Science Symposium (IVSS).

1) If you are a Science, Technology, Engineering, or Mathematics professional, we invite you to mentor students. Provide information here for students to contact you. You can also contact teachers listed on the "Student Groups Looking for Mentors" page: https://www.globe.gov/news-events/globe-events/virtual-conferences/2018-international-virtual-science-symposium/students-needing-mentors.

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2) We need volunteers to score projects entered into the GLOBE International Virtual Science Symposium. To take part in this, you will be provided with scoring information and assigned projects. More information will be available later in 2017 and early in 2018. But, you should plan on spending some time during the week of 18-24 March 2018 scoring projects.

We appreciate your interest in helping with the Science Symposium! If you have any questions, please contact help@globe.gov or see the Science Symposium webpage at http://www.globe.gov/science-symposium.

Name

Your answer

Your Email

Your answer

Your Location

Include city, state (if applicable), country

Your answer

What is your involvement with GLOBE?

Check all that apply.

- [ ] GISN Member
- [ ] GLOBE Alumni
- [ ] GLOBE Teacher
- [ ] Country Coordinator of Partner

THE GLOBE PROGRAM

http://globe.gov/science-symposium

Virtual Science Symposia

2018 International Virtual Science Symposium

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Students Needing Mentors

Volunteer Sign-Up

Mentors for Students

Shareable Images

Mentors

Looking for a mentoring scientist? These scientists have volunteered to help! Are you a STEM professional and want to mentor students? Fill out the form on our "Volunteer Sign-Up" page. Also, you can see student groups looking for mentors on the "Students Needing Mentors" page.

Africa | Asia & Pacific | Europe & Eurasia | Latin America & Caribbean | Near East & North Africa | North America

Africa Region

Sylivester Chaisamba; sylgster2000 AT yahoo.com; Dar Es Salaam,Tanzania; Atmosphere- Meteorology and Climate; English

Asia and Pacific Region

Dr. Sunita Bal; sunitabal2009 AT gmail.com; India; Hydrosphere, Pedosphere- Chemistry; English

Europe and Eurasia Region

Ines Borrione; ines.borrione AT gmail.com; Biella, Italy; Hydrosphere- Oceanography; English, Italian

Latin America and Caribbean Region

Javier Francario; francario AT stmary.edu.ar; Buenos Aires, Argentina; Atmosphere, Hydrosphere; Spanish and English

Erquinio Alberto Taborda Martinez; erquinio1974 AT gmail.com; Barranquilla, Colombia; Atmosphere- Cambio climático - variación de la temperatura; Español

Near East and North Africa Region

North America Region

Jeri Hallberg Harmon Griffin, M Ed; jeriibc AT gmail.com; El Paso, Texas, USA; Biosphere- Earth Science (citizen science); English

Gonzalo Gonzalez Abad; ggonzalezabad AT cfa.harvard.edu; Cambridge, MA, USA; Atmosphere- Air Quality Satellite Remote Sensing; English, Spanish, Catalan

Peder Nelson; peder.nelson AT oregonstate.edu; Portland, Oregon, United States; Biosphere- Land cover change using Landsat time-series; English

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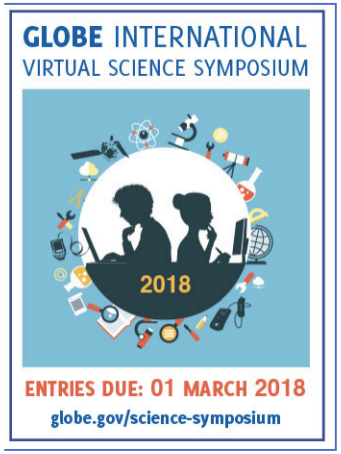
Shareable Images

2018 IVSS Shareable Images

Want to share an image about the 2018 GLOBE International Virtual Science Symposium? Download the images below and share them widely!



Download the above image

Download the above image

THE GLOBE PROGRAM

GLOBE INTERNATIONAL SCIENCE SYMPOSIUM
STUDENT RESEARCH BADGE (ALL PROJECTS—OVERALL REPORT)

★★★★	★★★	★★	★	
• Report contains **all** of the criteria listed below and makes clear **connections** among them. • The report is well organized, neat and well presented. • The writing is **clear** and **concise**. • The report contains the five elements required for acceptance, clearly labeled. • Members of the project team respond to judges' comments with additional insights gained.	• Report contains **all** of the elements and **most** of the criteria listed below and makes clear **connections** among them. • The report is well organized, neat and well presented. • The writing is **clear**. • The report contains the five elements required for acceptance, clearly labeled.	• Report contains **most** of the criteria listed below. • The report is well organized. • The report contains the five elements required for acceptance, clearly labeled.	• Report contains the **five** elements required for acceptance, clearly labeled. (1, 2, 3, 5 & 8)	• Report submitted, but does not contain all five elements required for acceptance.

ADDITIONAL BADGES (UP TO 6—OPTIONAL)

B1. Collaboration	B2. Community impact	B3. Connecting to a STEM Professional	B4. Interscholastic connection	B5. Engineering solution	B6. Exploring STEM Careers
All team members are listed, along with clearly defined roles, how these roles support one another, and descriptions of each student's contribution. The descriptions clearly indicate the advantages of the collaboration.	The report clearly describes how a local issue led to the research questions and makes connections between local and global impacts.	The report clearly describes collaboration with a scientist that enhanced the research methods, contributed to improved precision, and supported more sophisticated analyses and interpretations of results.	The report describes a carefully planned interscholastic or international collaboration that describes rationales for data collection in different regions and the advantages of comparing results.	The report describes an engineering solution to a real-world problem, based on student-generated sources of evidence, and describes the potential impact of the solution on the environment.	The report describes how the project is related to a STEM career or profession, including the ways the data gathered, skills gained, and results might be used.

Project elements for HS and Undergrad (bold=required)

1. **Title**
2. **Abstract or Summary**
3. **Research Question(s)**
4. Introduction and review of the literature
5. **Research Methods**
6. Results
7. Discussion
8. **Conclusion**
9. Bibliography/Citations
10. Badges Selected

Project elements for 6–8 (bold=required)

1. **Title**
2. **Abstract or Summary**
3. **Research Question(s)**
4. Introduction
5. **Research Methods**
6. Results
7. Discussion
8. **Conclusion**
9. Bibliography/Citations
10. Badges Selected

Project elements for 3–5 (bold=required)

1. **Title**
2. **Summary**
3. **Research Question(s)**
4. Introduction
5. **Research Methods**
6. Results
7. Discussion
8. **Conclusion**
9. Bibliography/Citations
10. Badges Selected

Project elements for K–2 (bold=required)

1. **Title**
2. **Summary**
3. **Research Question(s)**
4. Introduction
5. **Research Methods**
6. Results
7. Discussion
8. **Conclusion**
9. Badges Selected

Questions

- **Do my students have to enter a project into the IVSS in order to attend the GLE?**
- *No! All GLOBE students are welcome to the GLE. Just make sure to register early*!
- **Does entering a project into the IVSS mean I am going to attend the GLE?**
- *No, all GLOBE students are welcome to enter projects into the IVSS, regardless of planned attendance at the GLE.*
- **Do my students have to write their reports in English?**
- *If the students want their project scored, then yes. We don't have enough judges to score projects in other languages. Videos can be in the students' first language and captioned in English.*

Questions

- **Who can judge projects?**
- *We put a minimum of one STEM professional on each project. Other judges can be teachers, graduate students, community members, or alumni.*
- **Do judges have to be part of the GLOBE International STEM Network (GISN)?**
- *No! If a scientist or other STEM professional doesn't have a login for globe.gov, we have a generic "STEM professional" account he or she can use.*
- **Why aren't the instructions translated?**
- *We need volunteers to translate them! If you are able to translate any of the materials, I will add them to the website.*

Questions

- **Do I have to pick optional badges to be eligible for the drawing?**
- *Yes! All students receive the "Student Research" badge. But, students must select at least TWO additional badges to be eligible for the drawing. Also, they should describe how they earned the badge(s) in their report.*
- **My students have never participated in a science fair or symposium before. Can they take part?**
- *Yes! We have a lot of resources available for new participants. Please join us!*
- **Can younger kids enter a project?**
- *Yes! We have grade-specific guidelines for students starting from Kindergarten to undergraduates. We also have a webinar all about K-4 (lower primary or ages 5-8) projects.*

Find info Online

https://www.globe.gov/science-symposium

GLOBE.gov →News & Events → Meetings & Symposia→ Virtual Science Symposia

THE GLOBE PROGRAM

2018 GLOBE International Virtual Science Symposium

Timeline:

- 25 Oct 2017: Informational Webinar
- January – 01 March 2018: Reports Accepted
- To Be Scheduled: Judging Webinar
- 18 – 24 March 2018: Judging Period
- 06 April 2018: Feedback and badges
- 06 April 2018: Live Drawing for stipends

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Questions? Comments?

malmberg@ucar.edu

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