Agenda for GLOBE Workshop

Heronwood Field Station - Kalamazoo Nature Center

August 10-12, 2016

Registration

<http://www.globe.gov/get-trained/workshops/workshop/jT1U/53301>

Wednesday, August 10

8:30-9:00 Registration and Breakfast

9:00-9:20 Introductions and Workshop Overview

9:20-9:30 Icebreaker and Outdoor Class Management overview (10 mins instruction time)

9:30-10:30 What is the GLOBE Program (60 mins instruction time)

* Overview of the Program
* Investigations, Learning Activities, and Protocols
* Define local solar noon
* What are the possibilities for classroom use

10:30-10:45 Break

10:45-10:55 Classroom Management (10 mins instruction time)

10:55-12:00 Choosing and Defining a Site for Atmosphere Protocols (65 minutes instruction time)

* Learning Activity - Using your senses to sketch your site
* Setup of Atmosphere Station based on protocol
* Site Definition Protocols

12:00-12:45 Lunch

12:45-1:30 Local Solar Noon - Atmosphere Observation Day 1 (45 minutes instruction time)

* Demonstrate GLOBE phone app
* Demonstrate cloud ID and equipment

1:30-1:45 Break

1:45-1:55 Classroom Management (10 minutes instruction time)

1:55-2:30 Entering Data for GLOBE (35 minutes instruction time)

* Show online data entry
* Discuss why you’d want to do it

2:30-2:40 Break

2:40-3:45 Elements of the Framework for K-12 Science Education - NGSS (65 minutes instruction time)

* Activity - break into groups to label different parts of what we did today as NGSS Practices
* Discussion - what’s missing and how do we get there
	+ Should agree that we’re missing asking questions and analyzing data at least
	+ What other tools are needed?

3:45-4:00 Wrap up and Day 1 Waypoint Evaluation

Thursday, August 11

8:30-9:00 Breakfast

9:00-9:30 Day 1 Recap and Day 2 Introduction

9:30-10:30 Introduce Hydrology Protocols (60 minutes instruction time)

* Show off equipment
* Discuss the different goals of the protocols
* Discuss the different site types

10:30-10:45 Break

10:45-11:00 Outdoor Classroom Management (15 minutes instruction time)

11:00-12:00 Hydrology Site Definition - Pond work (60 minutes instruction time)

* Sketch activity B - what impacts our site
* Site Definition Protocol
* Activity - Plan our investigation with a question
	+ What might we expect to see based on the data we can collect?
	+ How can we plan to test that

12:00-12:45 Lunch

12:45-1:00 Atmosphere Observation Day 2 (15 minutes instruction time)

1:00-3:00 Conduct Hydrology Investigation (110 minutes instruction time - 10 minute rolling break)

* Execute Investigation Plan from morning
* Roving Q&A from Facilitators

3:00-3:30 Data Entry and Discussion (30 minutes instruction time)

3:30-4:00 Day 2 Waypoint and Wrap Up

4:00-5:30 Social Hour - Heronwood Deck

Friday, August 12

8:30-9:00 Breakfast

9:00-9:30 Day 2 Recap and Day 3 Introduction

9:30-10:30 NGSS/MSS Discussion (60 minutes instruction time)

* Deconstruction of a Michigan Science Standard/NGSS Performance Expectation
* Activity - Pick a PE and sketch out how environmental observation and study can address it
* Share out ideas, and further discussion

10:30-10:45 Break

10:45-11:30 Next Steps (45 minutes instruction time)

* Brainstorming activity - what is your dream implementation and what are the obstacles
* What is required to further implement ideas for usage of GLOBE in the classroom?
* Individual work: Drafting an Implementation Plan

11:30-12:00 Reporting out and Evaluation (30 minutes instruction time)

* Report out on Implementation Plans and Discussion
* Completion of Evaluation and Assessments

12:00-12:45 Lunch

12:45 Depart for KNC Main Campus

1:15-1:30 Classroom Management (15 minutes instruction time)

1:30-4:00 (with breaks as needed) Tour of KNC Main Campus (135 minutes instruction time - 15 minutes for rolling breaks)

* Site Definition for Stream Hydrology Discussion
* Forest Progression and Watershed Tour
* Discussions on Implementation Ideas and Classroom Visits to KNC

4:00 Departure from KNC Main Campus / End of Workshop

Total instructional time (3 days): 875 minutes/ 14.6 hours

Topics to be added

* Tips for behavior management in the field (managing a classroom outside)
	+ Extend transition times to talk about outdoor class management (Jenny)
	+ Let’s model it for them (debriefing techniques, checking in, gauging comfort)
* Third day - can talk about the whole watershed, plus talk about the differences in site definition for streams (need to meet Jenny and I to make sure about the agenda for the third day at KNC main campus)
* How many CE hours will they get - need this for marketing

Ideas

* GLOBE Elementary plus an high school option purchased for each
* Use money to pay for clock hours
* Swag - books/magnifying glass/field guides
* Social hour - beer and wine

Things Needed:

* Clipboards and pens
* Atmosphere 1-day Data Sheets
* Thumb drives for files
	+ Cloud learning activities
* Projection Screens
* Swag - specimen cubes, magnifying glasses, clinometers kits,
* Elementary GLOBE kits