



THE GLOBE PROGRAM

Crestwood High School

GLOBE and Curriculum Integration
17th GLOBE Annual Partner Meeting
August 12-16, 2013

Diana Johns

Where are we?

- Small suburban public school district just outside of Detroit
- Just one high school and middle school with three elementary schools
- Built in 1965 and serves just over 1200 students 9-12



Who does GLOBE?

- 5 classes of Advanced Placement Environmental Science (150 students - a mixture of 10th, 11, and 12th graders)
- 60% of our student body is on the free and reduced lunch program
- Student body is very ethnically diverse



How is GLOBE encouraged in our APES program?

- Incentives to encourage students to do more than just what is required
- Certificates highlighting their involvement
- Letters of recommendation
- Individual research after AP classes end



If you create the opportunities, they will ask to be involved ...

- Students often take ownership of particular measurements
- They even help raise money to purchase equipment



GLOBE at Night

- Use Sky Quality Meters and smart phones to input the data
- Students measure and map light pollution
- High school students love “citizen science” projects like this GLOBE initiative



The poster features a stylized world map composed of dots in the top left. To the right, a calendar for 2013 shows observation periods: January (03 to 12), Jan-Feb (31 to 09), March (03 to 12), Mar-Apr (31 to 09), and Apr-May (29 to 08). The text 'GLOBE AT NIGHT' is prominently displayed. Below it, the website 'WWW.GLOBEATNIGHT.ORG' is listed. The main slogan is 'Get Out and Observe the Night Sky!'. Three bullet points describe the initiative: engaging students worldwide, encouraging citizen and family science, and gathering light pollution data. At the bottom, logos for NSF, CASI, IAA, and NOAO are shown. The background is a dark blue image of Earth from space.

2013

03 to 12 January
31 to 09 Jan-Feb
03 to 12 March
31 to 09 Mar-Apr
29 to 08 Apr-May

GLOBE AT NIGHT

WWW.GLOBEATNIGHT.ORG

Get Out and Observe the Night Sky!

- Engage students worldwide in observing the nighttime sky.
- Encourage citizen and family science with a hands-on learning activity outside of the classroom.
- Gather light pollution data from an international perspective.

Can you see the stars?

NSF CASI IAA NOAO



GLOBE is easy to integrate into the curriculum because it fits and is fun!

- Data analysis is huge in NGSS
- GLOBE leads to students asking their own questions and creating research projects that are relevant to them



What are some cool things that have happened as a result of our involvement in GLOBE?



Students were asked to join our city's watershed commission

What have been some natural extensions because of GLOBE?



What are other extensions of the GLOBE Program?



A quick summary of outcomes because of GLOBE

- Students see that the world is a bigger place than just their own backyards
- Students are recognized for their involvement
- A culture of inquiry is developed
- Are challenged to make a difference through research projects and environmental service



What do I want to more of with my classes?

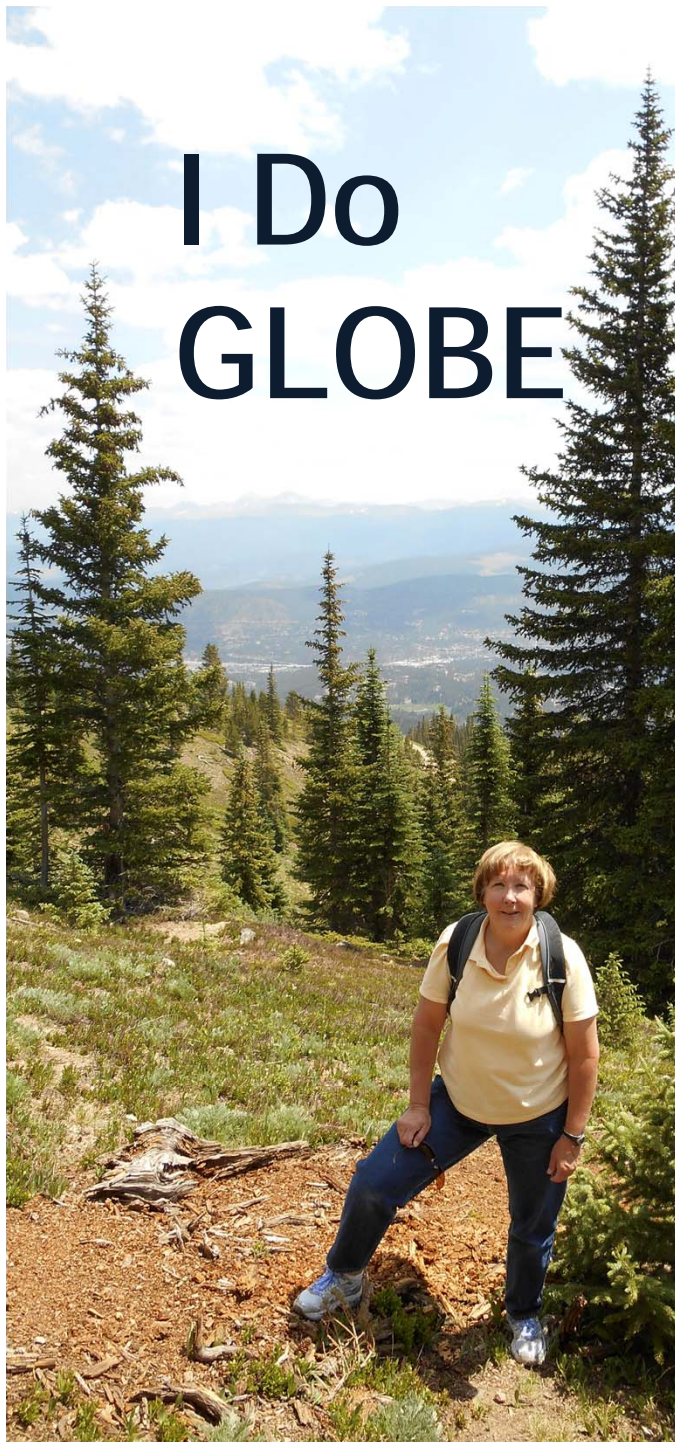
- We want to include more monitoring of our “airshed”
- New NASA/GLOBE iPhotometer and Aeronet



CairClip Technology



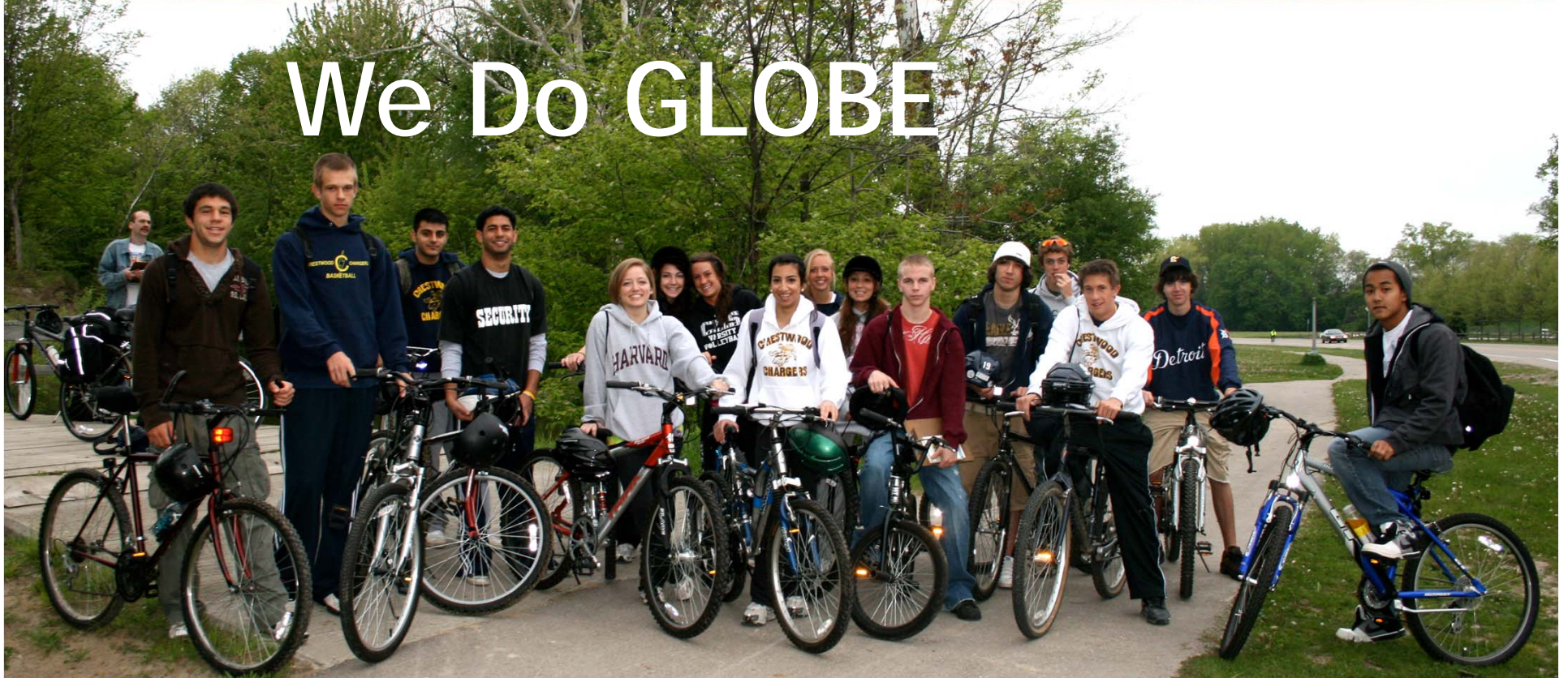
**I Do
GLOBE**



They Do GLOBE



We Do GLOBE



Thank you to all that are here and who make it possible for my students to be involved in and to succeed in the GLOBE program!

