Hi Folks-

We’re excited to see Cohort 2 wrapping up data collection, as the last student posttests come in (as well as your feedback and questionnaires). And, of course Cohort 3—our final field test—is getting started! The spring workshop is complete, and the first summer workshop is underway. Thanks for your student baseline tests and teacher questionnaires; we are planning to share and discuss those initial results with you as part of the second summer workshop in August. We are also all set up to start filling your orders for materials as they come in.

We are also working hard to have everything ready to go for the second summer workshop, when the online versions of the units will be available. This week Fablevision is doing the live-action shooting for the videos that go with the investigations. We’re looking forward to sharing them with you and hearing how your students respond! --Andy
Inquiry Learning Progression
A new piece of the Carbon TIME research project

If you are a teacher, you have probably heard about 999 definitions for the word “inquiry” in the context of science teaching and learning. Here are Carbon TIME, we define inquiry as “collecting observations and describing patterns in order to create models that explain natural phenomena.” Jenny Dauer has been leading a group of Carbon TIME researchers to try to learn more about how students use inquiry to understand complex information, like the data represented in the three graphs above. How do we do this? First, we design a set of interview questions that ask students to explain what they think they can know about the world from reading graphs like these. When we conduct the interviews, we listen for things like this: What patterns do students identify in these graphs? How do students use evidence in their explanations? How do students deal with uncertainty in the models? Next, we transcribe the interviews and read them over and over again to look for patterns and meaning in what the students say. One interesting finding so far is that advanced students are able to use the data in the graphs to form explanations, whereas beginning students often focus on what they know about the cause of the phenomena instead of examining the data in the graphs. If you have any observations about how your students learn to use inquiry to interpret data, we would love to hear from you!

Special Thanks to Cohort 2

As we come to the close of our second year of piloting the Carbon TIME materials with teachers across the country, we’d like to give a special thank you to the teachers who participated in our second year. We appreciate your participation, insight, feedback, and most of all, patience! As you probably know, it is hard work developing instructional materials that we feel confident will lead to student learning. At Carbon TIME we feel that environmental literacy is important, and we are lucky to have such a dedicated group of teachers working with us who agree, and are willing to dedicate their time and wisdom to helping us in these efforts. Thank you! We couldn’t do this without you.
Announcements

Congratulations to Liz and Kathryn!
Kathryn Oleszkowicz and Liz Tompkins, two of our undergraduate researchers (and both elementary education majors), recently graduated from MSU! The picture on the right shows Kathryn on the big screen getting an award for Outstanding Service to the College of Education. Good luck during your internship year, Kathryn & Liz!

Fertilizer Donation
We would like to say thank you to a Carbon TIME friend who donated a large amount of Ionic Grow to use in our units. This was a huge help—the Ionic Grow is the fertilizer we use to grow plants in the Plants Unit, so we go through this very quickly. Thanks!

Group Spaces
There are a few new things to notice in the Group Space website. Look for the new FAQ section, and also have a look at the new materials logistics folder. If you have any questions about Group Spaces, feel free to contact Jenny at dauerjen@msu.edu.

What is the Dashboard, again?
The Dashboard is an important website you will use for the Carbon TIME project. This is where students take online tests, and where teachers order materials, give feedback on the units, and get shipping information. The Dashboard is hosted through the MSP website (so this is what you will see when you go to login). There is always a link to the Dashboard on the last page of the newsletter in case you forget!
Spotlight on Cohort 3!

We’re happy to welcome Sarah Warren, a 7th grade Life Science teacher at Windsor Middle School in Windsor, Colorado to the Carbon TIME project. Sarah heard about Carbon TIME through her work with the MSP project for the past two years. Sarah says: “I love teaching life science and introducing middle schoolers to biology and the living world in a scientific way. At the same time, I have really struggled with how our general population seems to react to and make decisions about important environmental and science issues. I want my teaching to be more than just ‘Oh yeah, that’s a cell, ok.’ I want kids to have a sense of understanding of the living world around them and their interrelationship with it. It’s really my goal to teach kids how to think scientifically and I think that can only benefit us all in the long run.” Sarah has also been working to develop her inquiry teaching skills, so we are excited to hear if the Carbon TIME Units are helpful with that. In Sarah’s spare time she likes reading, watching movies, camping, and hiking. She is pictured (left) with her daughter, Zoe.

Welcome, Sarah!

Links You Need

Testing Website and Dashboard:
http://ibis-live.nrel.colostate.edu/MSP/home.php

• Give feedback
• Order Materials
• Shipping information

Group Spaces Workshops:
www.groupspaces.com/CarbonTIME

Find us on Facebook: Email Staci (sharpst5@msu.edu) to request to join our group.

Follow us on Twitter: @CarbonTIME