



ReaL* Earth Inquiry Workshop: Information Packet & Tentative Agenda

What to bring to the workshop:

- Digital camera and download cable.
- Laptop computer (if you're unable to bring your own, please let us know)
- Comfortable shoes & clothes
- Water bottle, sunscreen and insect repellent
- A rock that's local to your school (from exposed bedrock, if convenient)
- Notebook
- Your calendar/planner

Workshop Preparation

To be completed and emailed by 5:00 pm, Tuesday, June 27, 2011

The information presented here is also available online at:

http://virtualfieldwork.org/PDPrep_CA.html

- **Powers of Ten Google Earth Tour of your school:** We first ask that you create a Google Earth Tour centered on your school based on the Eames film *Powers of Ten*. For an introduction, see: http://virtualfieldwork.org/Your_Own_Powers_of_Ten.html Or, go straight to the tutorials: http://virtualfieldwork.org/How_tos/How_tos.html If you're comfortable with Google Earth, this will probably take about two hours. If you need help, don't hesitate to contact Don at dugganhaas@museumoftheearth.org or via Skype at dugganhaas. The two key purposes of this task are to create a useful teaching resource and to provide some familiarity with a key piece of software we'll be using in our work together.
- **Read the executive summary of *How Students Learn: History, Mathematics, and Science in the Classroom*.** We'll discuss this the first morning of the workshop. Here are some things to consider as you read:
 - How does how you learn compare to what the authors claim?
 - How should research on learning inform how we teach?
 - Note that the reading is not about whether people are visual or auditory learners. It's more about how you put information together in your head. How do you figure things out?

If possible, write a response to the reading and email it to us, but give the tasks above and the reading itself first priority. If you email it to us by June 25, we will provide some feedback on what you have written (and we will know you a little better from the start of the workshop). This task is intended to both bring this research to your attention and to bring the research to bear on our own teaching. As the reading describes, we are asking you to be metacognitive. We are emailing you the chapter and it can be downloaded from the National Academy Press website: http://www.nap.edu/catalog.php?record_id=10126 Scroll down to the link for the free executive summary.

Email Google Earth and reading response files to us at: TFG.VFE@gmail.com

* ReaL = "Regional and Local"

ReaL* Earth Inquiry Tentative Workshop Agenda

June 28 – 30, 2011

Mission Trails Regional Park, San Diego, California

Introduction to the agenda: Note that throughout the agenda we will be focused on a few big ideas and essential questions. The overarching question is: **Why does this place look like the way it does?** The *place* of the question will change as we move from site to site and as we make virtual visits to other sites. We will also give due attention to the follow up question: How do we know (or, why do we think so)? And we will ask many *what if* questions along the way (e.g., What if there was no convection?).

All of the questions raised in the agenda are topics for discussions, not lectures. Give them consideration at the beginning of each day and consider how they relate to the short readings we'll be doing along the way. **The recommended hotel is Old Town Inn (800.643.3025).**

Tuesday, June 28, 2011	
7:00 - 8:45 am	Breakfast at hotel (complementary); available beginning 6:00 am.
8:45 am	Leave hotel (meet in hotel lobby)
8:55 am	Meet at Mission Trails Regional Park.
9:00 am	Welcome and introductions – you and your rock. <i>All</i>
9:45 am	The “ReaL Earth Inquiry Project” and Workshop Goals. <i>Richard</i>
10:15 am	Break
10:30 am	What does good teaching look like? What does research say about how people learn? How should research on how people learn inform how we teach? What are the most important things for students to learn in Earth science? Introducing the big ideas framework. <i>Don via Skype</i>
11:00 am	Virtual Field Experiences and modeling a virtual fieldtrip (Taughannock Falls). <i>Chris</i>
11:30 am	Past participants sharing VFEs (via Skype)
noon	Lunch
1:00 pm	Fieldwork at Mission Trails.
5:00 pm	Return to hotel.
5:30 pm	Dinner (on your own)
After dinner.	Reflect on the day. Upload photos from the day to the web. What did you capture well? Short reading, to be determined.

* ReaL = “Regional and Local”

Wednesday, June 29, 2011	
7:00 - 8:45 am	Breakfast at hotel (complementary); available beginning 6:00 am.
8:45 am	Leave hotel (meet in hotel lobby)
8:55 am	Meet at Mission Trails Regional Park.
9:00 am	Geoscience Recap & Today's Goals. <i>Richard</i>
9:30 am	Fieldwork at Mission Trails.
Noon	Lunch
1:00 pm	Arrive back to Mission Trails.
1:15 pm	Talking Technology: Working with Picasa, Google, and Skype products. <i>Chris</i>
2:00 pm	Computer time.
5:00 pm	Dinner (on your own)
After dinner	Continued VFE work on your own.

Thursday, June 30, 2011	
7:00 – 8:45 am	Breakfast at hotel (complementary); available beginning 6:00 am.
8:45 am	Leave hotel (meet in hotel lobby)
8:55 am	Meet at Mission Trails Regional Park.
9:00 am	Final face-to-face work session
10:15 am	Break
10:30 am	<p>Planning for the year ahead: Setting goals and planning for how to meet them. What we hope will happen over the coming year. What does inquiry-based teaching look like? How will you convince skeptics that you teach through inquiry? Establishing working groups and planning times to “meet.” What are the two most important things for you to work on in your classroom this year? How will you do it? What evidence will you need to know you've done it? Will that evidence convince someone else? What kind of help do you think you will need to get there? Can we build teacher networks, and how can you take best advantage of the network of peers? <i>All (including Don via Skype)</i></p>
12:15 pm	Complete evaluation.
12:30 pm	Adjourn the institute.



PALEONTOLOGICAL
RESEARCH INSTITUTE

This material is based upon work supported by the National Science Foundation under Grant No. 0733303.

Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.

