Resources (Webinar 1) – Inquiry Based Teaching and Lessons

Here are a few references regarding inquiry based teaching and lessons:

- <u>Teaching Physical Concepts in Oceanography</u> has a good discussion about inquiry in the introduction, plus lots of activities:<u>http://tos.org/hands-on/teaching_phys.html</u>
- <u>Inquiring into Inquiry Learning and Teaching in Science</u> is a three part booklet that focuses on three questions: Why inquiry?, What does inquiry look like?, and What are some issues associated with shifting toward inquiry-based practices? The second one (Part II: What Does Inquiry Look Like?) has some interesting case studies recounted the lessons are described, with accounts of things the students said and did to build their explanations. <u>http://www.aaas.org/programs/education/about_ehr/pubs/inquiry.shtml</u>
- There are lots of videos of inquiry in the classroom here: http://www.thirteen.org/edonline/concept2class/inquiry/demonstration.html
- <u>Inquiry and the National Science Education Standards</u> (National Academies Press) has some example stories of inquiry in the classroom. The stories start in Chapter 3, "Images of Inquiry in K-12 classrooms." <u>http://www.nap.edu/openbook.php?isbn=0309064767</u>
- <u>AfterSchool KidzScience</u> videos on You Tube they are specific to the after school curriculum being discussed, sort of a How To teach their curriculum, but I like the examples of educators interacting with learners. They have some great footage of good follow up questions, and how to guide kids to think scientifically about the experiment or activity they are doing.

Resources (Webinar 2) – Literature on Learning Conversations

Here are a few references to go with the conversation about learning conversations:

- <u>Dialogic Inquiry in Life Science Conversations of Family Groups in a Museum</u>, D. Ash, Journal of Research in Science Teaching (2003).
- <u>The Tension Between Authoritative and Dialogic Discourse: A Fundamental</u> <u>Characteristic of Meaning Making Interactions in High School Science Lessons</u>, Scott et al., Science Education (2006).
- We also had a quote from the book <u>Ready, Set, SCIENCE!</u>: <u>Putting Research to Work in K-8 Science Classrooms</u>. You can download a free pdf of the book here: <u>http://www.nap.edu/catalog.php?record_id=11882</u>

Resources (Webinar 3) - Accommodations Model and Universal Instructional Design

Here are some recommended resources from Michele Daley at the Hackensack Meadowlands:

• Here's the link to the 4-step Accommodation Model by the University of Washington: <u>http://www.washington.edu/doit/CareerN/fourstep.html</u> If you click through the pages at the bottom on the right, you'll be given some student examples and some really good strategies to follow.

- Universal Instructional Design can go by a few different names, but the principals are the same. Two really good websites are the following: <u>http://www.cast.org/udl/index.html</u> and <u>http://www.washington.edu/doit/Stem/ud.html</u>
- Finally, if you go to our MarshAccess website, you'll see all the work we've done through our NSF grant and we have some resources for educators listed as well. That link is: <u>http://www.rst2.edu/meadowlands/marshaccess/index.html</u>