(2)

Teaching Science as Inquiry (TSI) Lesson Plan Module 1: Physical Aquatic Science

Name: Karyn Herrmann
Activity: Soda & Scientific Reasoning
Why did you choose to do this activity? I wanted to in corporate
Why did you choose to do this activity? I wanted to in corporate the techniques of the workshop so I could learn the material myself before I go on. What are your electrony parting goals?
learn The material
Students will conduct a lab with a partner Tallow the directions, collect data
volora finariose a s
How does this activity tie into your classroom learning goals? This will be an interesting way to approach our first lab activity. It approach our first lab activity density
approach our first lab active density
aligns with goals for buoyancy + density What date do you plan to start this activity? September 18, 2012
If applicable: HIDOE standards this lesson will address Standard 1 Sc. MS 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7
Ocean
1. Describe how you will connect this activity to the ocean: / try to comect
their interest level of past knowledge to the new
lesson. I begin with what they know about
their interest level of past knowledge to the new lesson. I begin with what they know about their surf board, canoe paddle, boogie board, etc.
2. Select the Ocean Literacy Principle(s) that you anticipate this activity will
address. (check all that apply) ☐ 1. The Earth has one big ocean with many features.
 2. The ocean and life in the ocean shape the features of the Earth.
☐ 3. The ocean is a major influence on weather and climate.
 4. The ocean makes earth habitable
☐ 5. The ocean supports a great diversity of life and ecosystems.
☐ 6. The ocean and humans are inextricably interconnected
7. The ocean is largely unexplored Preparation
How will you prepare your students for this activity? (For example, review of prior
We have a variety of marchais has also
knowledge.) We have a variety of makrials in the lab to fect buoyancy of density - we also Exploring Our Fluid Earth, a product of the Curriculum Research & Development Group (CRDG), College of Education @ University of Hawaii 2012. This document may be freely reproduced and distributed for
of Education. © University of Hawai'i, 2012. This document may be freely reproduced and distributed for have SCALES non-profit educational purposes. So we check it out.

3. Select the TSI Mode(s) of Inquiry that you will focus on for this activity. (check all that apply) **D**Curiosity Description □ Authoritative knowledge ∠ Experimentation ∠ Product evaluation □ Technology □ Replication ✓ Induction ☑ Deduction Transitive Knowledge Questioning and Assessment Strategies 1. What questioning strategies will you use to help your students meet your learning goals? I will use the strategy + prompts in the Exploring Our Fluid Earth and allow for their own questions too. We always have a Lab Assistant who checks

2. What assessment strategies will you use to help your students meet your under stending learning goals and monitor their progress? Use of charts and data sheets, Lab Journal, Questions from the TSI Practice of Science Module O Please provide any additional comments that will help you prepare to teach this activity or help the TSI facilitators understand how you plan to teach this activity. 1 honally do a BRAINPOP videa & review quiz before we start. The students take Cornell hotes \$ set up the procedures before the experiment begins. If someone says they already know the topic. I let them Teach it Back" to the class. It is entertaining

2. Explain any instructional struggles that you foresee and how you will address these issues. (For example, student misconceptions, classroom discussion,

Keep the kids from drinking the soda!

aspects most difficult for students to grasp, etc.)

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TSI Lesson Reflection – TSI Phase Diagram

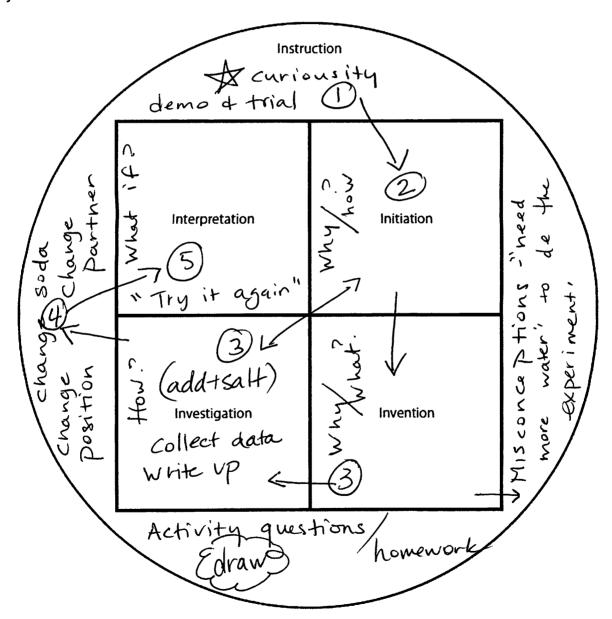
Name: Karyn Herrmann

Activity: Soda & Scientific Reasoning

What level did you observe? Individual Apair Small group Full Class

Why did you observe this level? I wanted to evaluate understanding

Draw arrows indicating your progression through the TSI Phases of Inquiry. Number your arrows.



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