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

Name: Karyn Herrmann

Activity: Practices of Scientists

Why did you choose to do this activity?

It is a good starting point at the beginning of the year to introduce what is Sci and who are Scientists

What are your classroom learning goals?

Understand the discipline of science and Introduce new vocabulary of traits of Scientists: disciplines and demeanors

How does this activity tie into your classroom learning goals?

I will begin to make the connections and will build upon them throughout these next weeks

What date do you plan to start this activity? September 11, 2012

If applicable: HIDOE standards this lesson will address

Practices of Science Standards 1, 1.5, 1.8, 1.9

Pg 1 of 14 TSI Module 0 HCPS III Benchmarks

Ocean

1. Describe how you will connect this activity to the ocean:

   We collected old National Geographic, Sport Diver, Science World and Science Supply magazines and catalogues and started a collage of scientists focusing on Marine Biologists & Oceanographers

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

(1)

Preparation

1. How will you prepare your students for this activity? (For example, review of prior knowledge.) I will follow the TSI model the way it was done in the workshop. What is Scie What does a Scientist look like?

2. Explain any instructional struggles that you foresee and how you will address these issues. (For example, student misconceptions, classroom discussion, aspects most difficult for students to grasp, etc.) Getting the group discussion started is a challenge at first, but they like using drawings and large butcher paper. I will use graphic organizers.

3. Select the TSI Mode(s) of Inquiry that you will focus on for this activity. (check all that apply)
   - ☒ 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 follow the prompts from the workshop to encourage the students to link science & scientific interests or people to themselves
2. What *assessment strategies* will you use to help your students meet your learning goals and monitor their progress? Students will draw Scientists for display and exchange for team building. A wall chart will be created and the lab rules for safety & behavior.

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.

I use large strips of butcher paper divided into columns or sections for everyone to contribute their ideas or art. It's classroom graffiti which each class takes ownership & pride in - like "tags"!

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TSI Lesson Reflection – TSI Phase Diagram

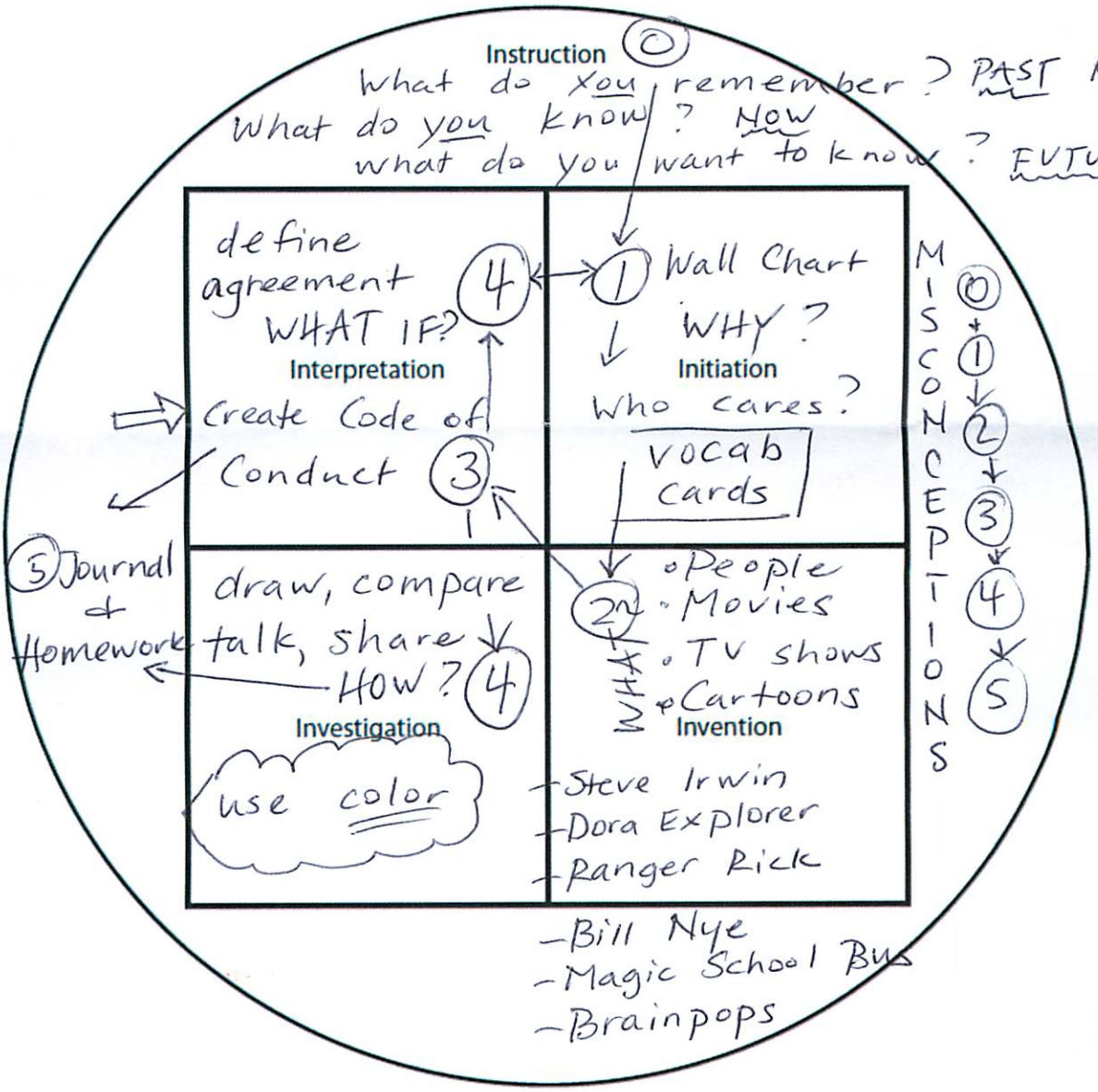
Name: Karyn Herrmann

Activity: Practices of Science

What level did you observe? ☐ Individual ☐ Pair ☒ Small group ☐ Full Class

Why did you observe this level? They were excited.

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



* No one knew who Jacque Cousteau is.