**Teaching Science as Inquiry (TSI) Lesson Plan**

**Module 1: Physical Aquatic Science**

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Activity: Practices of Scientists

Why did you choose to do this activity?

Mandatory lesson and

I was interested to discover what my 5th grade students had as preconceptions of Science and Scientists. Would they be willing to give up those misconceptions?

What are your classroom learning goals?

Engaging students in classroom discourse about what a Scientist is and/or can be.

Guiding students to new concepts of Science.

How does this activity tie into your classroom learning goals?

In this activity we discussed the Scientific Process which is one of our HSA Science strands.

What date do you plan to start this activity?

Completed on 11/1/12

*If applicable:* HIDOE standards this lesson will address

Somewhat covered Science Strand Std 1 for 5th grade (not really specific enough)

**Ocean**

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

Connected to the ocean during a discussion about marine science: Oceanography, Marine Biologists, Biologists, Chemists, Whale Watchers

1. 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.

X 6. The ocean and humans are inextricably interconnected

X 7. The ocean is largely unexplored

**Preparation**

1. How will you prepare your students for this activity? (For example, review of prior knowledge.)

I asked the students to “Draw a picture of a Scientist ‘doing’ Science”. We did not have any prior discussion. I just wanted some immediate, unadulterated feedback.

1. 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.)

I did not expect any struggles and did not encounter any. I knew my students would have misconceptions, but they had no problem in recognizing them and grasping the new concepts.

1. Select the TSI Mode(s) of Inquiry that you will focus on for this activity. (check all that apply)

x Curiosity

x Description

x 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?

What they initially thought a scientist is through drawings followed by a written description of what they drew in their pictures.

What were the most frequently used words and descriptions they used.

After observing another student’s drawing, what words come to mind to describe that student’s drawing.

1. What *assessment strategies* will you use to help your students meet your learning goals and monitor their progress?

Class discussion and listing of initial ideas and words to describe Scientists followed by a new list of ideas once real pictures of Scientists were displayed and we discussed new words and descriptions.

Creation of a class list that covers characteristics and practices of Scientists.

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 am filling this lesson plan out after the actual teaching took place. I followed the lesson plan in the binder. This lesson was not one that I felt needed a great deal of preplanning (just a slide show). It was easy to find pictures of various Scientists and set up a slide show for class. The lesson just seemed to work naturally as provided in my binder. Little preparation time needed. Just decided to run with it.