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

**Module 4: Ecological Aquatic Science**

Name:

Activity:

1. Why did you choose to do this activity?

2. What are your classroom learning goals?

3. How does this activity tie into your classroom learning goals?

4. What date do you plan to start this activity?

5. *If applicable:* HIDOE standards this lesson will address

6. Describe how this activity relates to at least one of the TSIA PD Themes.

Themes: Community, Metacognition, Science as a Human Endeavor, Observations and Inference, Modeling Science, Scientific Language, Connections

**Ocean**

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

8. 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**

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

10. 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.)

11. What ***TSI inquiry questioning strategies*** will you use to help your students meet your learning goals?

What types of questioning or approaches to discussion will you take to support student

engagement and learning? See questioning handout for suggestions (Mod 3 Binder under “TSI Pedagogy and online in Mod 3 PD section)

12. What ***TSI practices of inquiry teaching strategies*** will you focus on implementing to help your students meet your learning goals?

See TSI Practices of Inquiry teaching strategies handout for suggestions (Mod 4 Binder under “TSI Pedagogy” and online in Mod 4 PD section)

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| Use the following table to plan your lesson using TSI. For each phase:* **Teacher:** Describe what you will be doing
* **Student:** Describe what your students will be doing
* **Assess:** Describe how you will assess your students in this phase so you can monitor their progress through the activity
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| **INTERPRETATION** | **INITIATION** |
| Teacher |  | Teacher |  |
| Student |  | Student |  |
| Assess  |  | Assess  |  |
| **INSTRUCTION** |
| Teacher |  |
| Student |  |
| Assess  |  |
| **INVESTIGATION** | **INVENTION** |
| Teacher |  | Teacher |  |
| Student |  | Student |  |
| Assess |  | Assess |  |

11. Briefly describe how you will guide your students through the TSI Phases of Inquiry. (You are the research director of your classroom, and thus guide or facilitate the learning in your classroom, even if an activity is very student-directed).

12. What *overarching* TSI mode(s) will you focus on for this activity? Why?

Modes: Curiosity, Description, Authoritative knowledge, Experimentation, Product evaluation, Technology, Replication, Induction, Deduction, Transitive knowledge

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.