

Science Instruction Observation Form

Educator Name: Ms. Murphy-Garcia	Title: Grade 4 Science Teacher
Evaluator Name: Dr. Mann	Title: Principal
Observation Date: 11/24/2015	Observation #: 2
Observation Time/Duration: 10am / 10 min.	Observation Location: classroom

Intended Observation Focus: Analyzing data, constructing explanations about magnetic properties

NGSS Practices Which practices are observed?		
<i>Investigation Practices</i>	<i>Sensemaking Practices</i>	<i>Critiquing Practices</i>
<input type="checkbox"/> 1. Asking Questions	<input type="checkbox"/> 2. Developing and Using Models	<input type="checkbox"/> 7. Engaging in Argument from Evidence
<input checked="" type="checkbox"/> 3. Planning and Carrying Out Investigations	<input checked="" type="checkbox"/> 4. Analyzing and Interpreting Data	<input type="checkbox"/> 8. Obtaining, Evaluating, and Communicating Information
<input type="checkbox"/> 5. Using Mathematics and Computational Thinking	<input checked="" type="checkbox"/> 6. Constructing Explanations	

Observation Evidence What are the educator and students saying and doing?
<ul style="list-style-type: none"> Lesson begins with a reminder of the guiding question about the properties of magnets Teacher meets with small groups <ul style="list-style-type: none"> Students talk about their findings and demonstrate their ideas with the boats and magnets. Teacher asks, "How did you make that boat go from one side to the other?" Teacher encourages students to explain how the properties of magnets enable objects to move. Teacher asks, "What is causing it to push away?" Another small group is figuring out how to identify the poles of a magnet using a labeled bar magnet. <ul style="list-style-type: none"> Teacher focuses on why this can be done, how the properties of magnets enable this. At end of observation, teacher calls whole class back together <ul style="list-style-type: none"> Reviews class list of magnet properties Asks students to share ideas Explains that students will use properties they are discovering in their design of a maglev train.

NGSS Practices Progression Where do the observed practices fall along the progression?
Practice #: 1 2 3 4 5 6 7 8 1-----2----- 3 -----4
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Practice #3: Planning and Carrying Out Investigations

Students used various materials to conduct the investigation. While they had opportunities to make decisions about how to use the materials, Ms. Garcia-Murphy initially provided a set of materials and directions for their use.

Practice #6: Constructing Explanations

Ms. Garcia-Murphy encourages students to use the data they have gathered to explain how the magnets move the boat. She continually focuses students back on how the properties of magnets enable the boat movement and asks students to use their observations to support their claims.