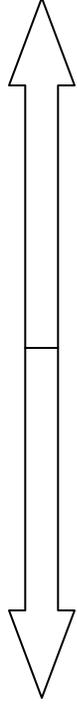


## Science Teacher Inquiry Rubric (STIR)

Directions: Reflect on the science or geography lesson that you taught today. In your reflection, consider each of the following categories and the six statements on the left, written in bold. After looking at each bold statement, assess today's science or geography instruction based on the categories delineated for statement. Place one "X" in the corresponding cell for each bold-faced statement. If there is no evidence of one of the statements in today's lesson, place a slash through the bold-faced statement. When you are finished, you should have 6 total responses.

**Learner Centered**



**Teacher Centered**

<b>Learners are engaged by scientifically or geographically oriented questions.</b>					
<b>Teacher provides an opportunity for learners to engage with a scientifically oriented question.</b>	Learner is prompted to formulate own questions or hypothesis to be tested. <input style="float: right;" type="checkbox"/>	Teacher suggests topic areas or provides samples to help learners formulate own questions or hypothesis. <input style="float: right;" type="checkbox"/>	Teacher offers learners lists of questions or hypotheses form which to select. <input style="float: right;" type="checkbox"/>	Teacher provides learners with specific stated (or implied) questions or hypotheses to be investigated. <input style="float: right;" type="checkbox"/>	No evidence observed. <input style="float: right;" type="checkbox"/>
<b>Learners give priority to evidence, which allows them to develop and evaluate explanations that address scientifically or geographically oriented questions.</b>					
<b>Teacher engages learners in planning investigations to gather evidence in response to questions.</b>	Learners develop procedures and protocols to independently plan and conduct a full investigation. <input style="float: right;" type="checkbox"/>	Teacher encourages learners to plan and conduct a full investigation, providing support and scaffolding with making decisions. <input style="float: right;" type="checkbox"/>	Teacher provides guidelines for learners to plan and conduct part of an investigation. Some choices are made by the learners. <input style="float: right;" type="checkbox"/>	Teacher provides the procedures and protocols for the students to conduct the investigation. <input style="float: right;" type="checkbox"/>	No evidence observed. <input style="float: right;" type="checkbox"/>
<b>Teacher helps learners give priority to evidence which allows them to draw conclusions and/or develop and evaluate explanations that address scientifically oriented questions.</b>	Learners determine what constitutes evidence and develop procedures and protocols for gathering and analyzing relevant data (as appropriate). <input style="float: right;" type="checkbox"/>	Teacher directs learners to collect certain data, or only provides portion of needed data. Often provides protocols for data collection. <input style="float: right;" type="checkbox"/>	Teacher provides data and asks learners to analyze. <input style="float: right;" type="checkbox"/>	Teacher provides data and gives specific direction on how data is to be analyzed. <input style="float: right;" type="checkbox"/>	No evidence observed. <input style="float: right;" type="checkbox"/>

<b>Learners formulate explanations and conclusions from evidence to address scientifically or geographically oriented questions.</b>				
<p>Learners formulate conclusions and/or explanations from evidence to address scientifically oriented questions.</p>	<p>Learner is prompted to analyze evidence (often in the form of data) and formulate own conclusions/explanations.</p>	<p>Teacher prompts learners to think about how analyzed evidence leads to conclusions/explanations, but does not cite specific evidence.</p>	<p>Teacher directs learners' attention (often through questions) to specific pieces of analyzed evidence (often in the form of data) to draw conclusions and/or formulate explanations</p>	<p>Teacher directs learners' attention (often through questions) to specific pieces of analyzed evidence (often in the form of data) to lead learners to predetermined correct conclusion/explanation (verification).</p>
<p>Learners evaluate their explanations in light of alternative conclusions/explanations, particularly those reflecting scientific understanding.</p>	<p>Learner is prompted to examine other resources and make connections and/or explanations independently.</p>	<p>Teacher provides resources to relevant scientific or geographic knowledge that may help identify alternative conclusions and/or explanations. Teacher may or may not direct learners to examine these resources, however.</p>	<p>Teacher does not provide resources to relevant scientific or geographic knowledge to help learners formulate alternative conclusions and/or explanations. Instead, the teacher identifies related scientific knowledge that could lead to such alternatives, or suggests possible connections to such alternatives.</p>	<p>Teacher explicitly states specific connections to alternative conclusions and/or explanations, but does not provide resources.</p>
<b>Learners evaluate their explanations in light of alternative conclusions/explanations, particularly those reflecting scientific or geographically understanding.</b>				
<p>Learners communicate and justify their proposed conclusions and/or explanations.</p>	<p>Learners specify content and layout to be used to communicate and justify their conclusions and explanations.</p>	<p>Teacher talks about how to improve communication, but does not suggest content or layout.</p>	<p>Teacher provides possible content to include and/or layout that might be used.</p>	<p>Teacher specifies content and/or layout to be used.</p>
<p>No evidence observed.</p>				