



## ANALYSIS TO 'INSTRUCTIONAL ACTION' PROTOCOL

Purpose: This protocol supports a professional learning community as it forges intentional links between examining student work and implementing instructional change. It helps PLC members move from analysis of student work toward actions that change instructional practice. The changes constitute an action plan that helps improve student learning in a variety of classrooms. The protocol concludes with participants committing to specific instructional actions and to the collection of evidence to inform the impact of those actions.

<b>Time</b>	<b>Process</b>	<b>Process Support/Roles</b>
<b>STEP 1</b> 5 min	<b><u>Explaining Background and Context</u></b> <input type="checkbox"/> The presenting science teacher <i>briefly</i> describes: <ul style="list-style-type: none"> <li>o What science curriculum or unit they are using</li> <li>o Science big ideas from the unit</li> <li>o The specific science learning target for the student work samples that are going to be shared</li> <li>o The subgroup of students represented by each work sample</li> <li>o How the samples were selected</li> </ul>	<p><b>Presenting Teacher:</b> Keep the background information objective. Avoid descriptions of the students' personal context or information.</p> <p><b>Administrator:</b> Complete the "Big Ideas and Learning Targets" section of the <i>Observation Recording Sheet</i> as the presenting teacher describes the background and context.</p> <p><b>All Participants:</b> Please consider each work sample as representative of a whole subgroup of students.</p>
<b>STEP 2</b> 10 min	<b><u>Identifying Evidence of Student Thinking</u></b> <input type="checkbox"/> Participants take time to read through the student work individually <input type="checkbox"/> The presenting teacher shares evidence of understanding and evidence of misconceptions, naive or incomplete science ideas. <input type="checkbox"/> Participants offer any observations that are different from, or add to, those of the presenting teacher.	<p><b>All Participants:</b> Help the group maintain a focus on evidence and avoid inferences at this stage.</p> <p><b>Administrator:</b> Participate in the discussion and record evidence of understanding and evidence of misconceptions, naive or incomplete ideas on the <i>Observation Recording Sheet</i>.</p> <p><b>Presenting Teacher:</b> Collect student work samples and put them away; you will use the observations recorded on an <i>Observation Recording Sheet</i> for the rest of the protocol.</p>
<b>STEP 3</b> 10 min	<b><u>Inferring Causality</u></b> <input type="checkbox"/> The presenting teacher briefly describes the instructional actions that occurred prior to collecting the samples of student work. <input type="checkbox"/> Brainstorm inferences about how those instructional actions could explain or account for the science understanding revealed in each student work sample.	<p><b>All Participants:</b> Confine discussion to clarifying questions at this stage, and avoid challenging or offering solutions to the instructional actions.</p> <p><b>Administrator:</b> Record the group's inferences on the <i>Inference to Action Sheet</i>.</p>

<p><b>STEP</b> <b>4</b> 15 min</p>	<p><b><u>Brainstorming Lesson-Specific Instructional Responses</u></b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Participants select one student subgroup to target and will <b>focus their efforts on that subgroup</b> for the remainder of the protocol.             <ul style="list-style-type: none"> <li>o Participants select the most plausible inference about what aspects of instruction contributed to the level of student scientific understanding expressed.</li> <li>o Based on that inference for this science lesson, brainstorm instructional actions (not activities) and expected outcomes of those actions for the student subgroup.</li> </ul> </li> <li><input type="checkbox"/> <b>Presenting Teacher:</b> Commit to an instructional action for the students in the selected subgroup and record that on your <i>Instructional Action Plan</i>.</li> </ul> <p><b><u>OPTIONAL (as time permits)</u></b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Repeat steps III and IV for the other groups of students.</li> </ul>	<p><b>All Participants:</b> Probe for specificity on the relationship between the proposed instructional action and the inference. Focus on instructional actions that are most likely to benefit this particular student group based on the inferences made.</p> <p><b>Administrator:</b> Record proposed instructional actions on the <i>Inference to Action Sheet</i>.</p> <p><b>Note:</b> Based on the goals and purpose of our PLC, determine whether additional samples of student work will be analyzed as described in Steps III and IV.</p>
<p><b>STEP</b> <b>5</b> 15 min</p>	<p><b><u>Generalizing Instructional Responses</u></b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Review the <i>Science Classroom Observation Guide</i> and select one of the <i>elements</i> of science instruction (lettered subheadings) that best describes the instructional action decided upon in Step IV. Record the element on your <i>Instructional Action Plan</i>.</li> <li><input type="checkbox"/> Discuss instructional actions to implement across grade levels and content areas to help improve that <i>element</i> of instruction for this student group.</li> <li><input type="checkbox"/> Participants commit individually to an instructional action that they will undertake in their own teaching context and record that on their <i>Instructional Action Plan</i>.</li> <li><input type="checkbox"/> Participants discuss the type of evidence that each can collect to monitor the impact of the selected instructional action on the student group. Participants then record the evidence they will collect on the <i>Instructional Action Plan</i>.</li> </ul>	<p><b>All Participants:</b> The goal is to consider how each participant might improve the same <i>element</i> of instruction for the student subgroup.</p> <ul style="list-style-type: none"> <li>o <b>Focus on the student group</b> selected in Step IV.</li> <li>o Consider what aspect of instruction might be attended to building-wide to better support the targeted student group.</li> <li>o Review the bulleted <i>indicators</i> on the <i>Science Classroom Observation Guide</i> that relate to this <i>element</i> of instruction.</li> </ul> <p><b>Administrator:</b> Consider how future staff professional development within your building can support teacher learning with respect to improving <i>this element</i> of instruction.</p>
<p><b>STEP</b> <b>6</b> 10 min</p>	<p><b><u>Committing to Effective Instruction</u></b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Participants discuss contributions they can each make to the presenting teacher’s instructional action plan.</li> <li><input type="checkbox"/> Participants discuss contributions they can make to each others’ instructional action plans.</li> </ul>	<p><b>All Participants:</b> On your <i>Instructional Action Plan</i>, record specific actions that teacher leaders, administrators, classroom teachers, and building staff will contribute in order to ensure that the instructional actions are implemented and that evidence is collected to monitor the impact on student learning.</p>
<p><b>STEP</b> <b>7</b> Next Mtg: 20 min</p>	<p><b><u>Monitoring Impact of Actions</u></b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> When the PLC next meets, participants will evaluate the impact of their actions based upon evidence collected from their classrooms.</li> <li><input type="checkbox"/> Participants will make recommendations for building-wide instructional action based upon this research.</li> </ul>	<p><b>All Participants:</b> Determine whether the collected evidence confirms the value of the instructional actions enacted.</p> <p><b>Presenting Teachers:</b> Share the results of the discussion and recommendations made by the PLC with administrator.</p> <p><b>Administrator:</b> Share PLC recommendations with staff.</p>