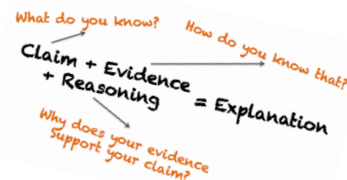




## Making Thinking Visible & CERC by Carolyn Mammen & Monica Harvey



### Key Concept

- Scientific writing- CERC
- Focusing on making good observations that lead to evidence and reasoning that can be used to support a claim using Making Thinking Visible routines.

### Evidence of Student Understanding

- Students will be able to make detailed observations and distinguish between observations and inferences.
- Students will be able to state a claim
- Student will be able to support a claim with evidence and support with reasoning.

### Time

- 50 minutes (1 class period)

### Materials

- Tuesday by David Wiesner
- Laminated pictures from pages , ,
- ISN
- Large Chart Paper
- Different Colored Markers

### Key Question

- Can you make scientific observations? Can you select appropriate evidence? Can you respond...?

### Anticipatory

#### 1. Key Question: How observant are you?

You were at a restaurant with your family having a nice dinner. At the end of your meal, the owner came out with a police officer. There has been a crime; someone had taken three ladies purses while they were dining. The three ladies did not see who took their purses. The ladies were sitting next to you and another table. The officer is questioning everyone at your table, could you give detail description of the people at the table sitting next you?  
How aware are you of your surroundings?

### Lesson

#### Part 1 - Looking: 10 X 2 MTV Routine

1. Each table will have 1 picture (work in groups of 2 or 3 depending on your table size)
2. On **page** of INB, Title Observations: Looking 10 x 2 (date of course should be added to the page)
3. On the top part of the page write 10 X 2: picture # (this is on the back of the picture. (can draw an magnifying glass as a symbol and write 10 x 2)
  - a. This first part is in **silence**, Quiet, uninterrupted thinking and looking time!!! You will have 30 seconds to look at the picture and write down 10 things that you see (observations). They can be descriptive words or phrases.
4. Now draw a line under these 10 observations.
5. Repeat the first part, but now think like a scientist and write down 10 more words or phrases from the picture and add to your list!! You can add any scientific vocabulary or terms that you already know. Do this independently!! Don't show your partner!

6. Now draw another line under those new 10 observations.
7. Next, in your notebook, discuss with your partner the each others list of 20 observations, then combine the best 20; 10 from each list to create a final list of 20 observations.

### **Part 2 – Headline MTV Routine**

1. Create a Headline on the top of the large chart paper.
  - a. “If you were to write a headline for this picture based on some of your observations, what would that headline be?”

### **Part 3 – Making a Claim and supporting it with Evidence**

1. **First, based on your headline, make a claim about the picture**
  - a. Brainstorm a claim based on your headline. Claims are inferences—a conclusion to a question or problem.
  - b. Write the claim in the middle of the chart paper—circle the claim.  
*(Note: have students use one color marker for all claims)*
2. **Second, support for your claim with evidence**
  - a. Use the observations from your list, created in the Looking 10 X 2 activities as evidence to support your Claim.
  - b. Look for evidence that supports specific parts of your Claim.
  - c. Draw a line/arrow to the part of the claim that it supports. *(Walk around to the groups and ask them why or how the evidence supports a certain piece. “How do you know? What makes you think that? How can you tell?”)*  
  
*(Have all students use one color marker for all evidence)*
3. **Lastly, link each piece of evidence with a reason, “Reasoning”. Ask a question, “How and why does this piece of evidence support the Claim?”**
  - a. Add the reasoning to each piece of evidence on your chart paper.  
*(Have students use one color maker for all their reasoning.)*

### **Part 4 – Sharing and Responding with Chalk Talk**

1. Students will evaluate other’s Claim’s, Evidence, and Reasoning. Students should focus on agreeing with or challenging the evidence selected and the reasons given and write comments accordingly. *\*May need guidance on commenting protocol.*
2. Have groups display their pictures and chart paper at their tables.
3. Groups will circulate and evaluate Claims, Evidence, and Reasoning. Give groups time to view pictures and write comments. Continue the rotation until all groups have been to all charts.
4. This part is done in silence—giving students time to read, think, and respond.
5. Have groups return to their original chart and review what was written.

### **Part 5 – Closing, Putting it all together**

1. Read the Story to the Class

### **Part 6 – Reflection**

1. What did the activity help you with when making observations?
2. What new thoughts did you have about the picture after the activity?
3. Will this activity make you more aware of your surroundings?

<p><b>CHALK TALK</b></p> <p>Looking at the topic or question written on the chart paper:</p> <ul style="list-style-type: none"> <li>• What <b>ideas</b> come to mind when you consider this idea, question, or problem?</li> <li>• What <b>connections</b> can you make to others' responses?</li> <li>• What <b>questions</b> arise as you think about the ideas and consider the responses and comments of others?</li> </ul>	<p><b>Purpose</b></p> <ul style="list-style-type: none"> <li>• This routine asks students to think about ideas, questions, or problems by silently responding in writing both to the prompt and to the thoughts of others.</li> <li>• All students can participate in the open-ended and exploratory nature of the routine.</li> </ul>
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Appropriate Content	Uses and Variations	Assessment and Tips
<ul style="list-style-type: none"> <li>• Appropriate content includes single words or phrases related to a topic of study.</li> <li>• Questions generate a richer level of discussion.</li> <li>• Content should invite multiple perspectives.</li> </ul>	<ul style="list-style-type: none"> <li>• Makes room for all learners to have a voice</li> <li>• Makes learning visible by focusing on reactions, connections, and questions</li> <li>• <b>CHALK TALK</b> can be used to encourage reflective thinking.</li> </ul>	<ul style="list-style-type: none"> <li>• Look for relevance.</li> <li>• Check to see if contributions relate to big ideas and if students can put forth their own ideas.</li> <li>• If responses seem limited it may be that the prompt was too narrow.</li> </ul>

**The Steps**

1. **Set up:** Write the prompts on large sheets of chart paper. Place the charts on tables around the room. Put markers on each table. Determine the groups and assign them to one of the charts.
2. **Present the CHALK TALK prompt:** Ask students to think about their reactions to the prompt. Have them record their ideas and questions. Have learners read and add to each other's responses with additional comments and questions.
3. **Circulate:** Provide time for students to circulate and read the responses of another group. Have them add to the prompts and responses. Continue the rotation until all groups have been to all charts.
4. **Facilitate:** The teacher acts as a facilitator, prompting the groups about the types of responses they can make as they read. They can connect ideas, elaborate on others ideas, or comment on what others have written, or write a question asking for more detail.
5. **Share the thinking:** Have groups return to their original chart. Have the groups review what was written on their chart. Ask groups the following questions: What themes emerged? Where did they see common issues and reactions? What question or comment surprised them? Debrief. Have groups respond to how their thinking developed through this process.