



Center for Leadership & Educational Equity

## ATLAS Looking at Data - An inquiry approach

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The tool, developed by Eric Buchovecky, is based in part on the work of the Leadership for Urban Mathematics Project and the Assessment Communities of Teachers Project. The tool also draws on the work of Steve Seidel and Evangeline Harris-Stefanakis of Project Zero at Harvard University. Revised November 2000 by Gene Thompson-Grove. Revised August 2004 for Looking at Data by Dianne Leahy.

### **Purpose**

This protocol is a tool to help students make sense and meaning out of quantitative information such as statistics, graphs and tables. Can be used in math, social studies, science.

### **Set Up for Success**

Students will be asked to look at data in a few different ways beginning with description and then moving into interpretation and implications.

It is helpful to model the description phase, as many people like to jump right into interpretation. When describing the process, explain each of the different phases and give an example of the description, reminding students that in the descriptive round they must be able to point to the page.

### **Time**

45-60 Minutes

### **Materials**

Copies of the data for each student, highlighters/pens for students to mark up the data.

### **Roles**

Facilitator to guide the process.



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Participant Handout

Developed in the field by educators.

**Steps**

1. Getting Started
  - The facilitator reminds the group of the purpose of the protocol.
  - Facilitator provides context and any other information that would help students understand what they are looking at and a focus of inquiry or question
  - The facilitator should give the participants 5-10 minutes to analyze the data and make notes, with the instruction that in the first round they will be describing what they see and will need to be able to share where they find their observation within the data.
2. Describe the Data (10 minutes)

Gather as much information as possible from the data. The facilitator asks: “What do you see?”

  - Group members: describe what you see in data. It is helpful to identify where the observation is being made — e.g., “On page one in the second column, third row, the numbers increase by 10 on each line...” Avoid judgments about quality or interpretations.
  - Facilitator: If judgments or interpretations do arise, ask the person to describe the evidence on which they are based, and to focus first on the evidence and hold their interpretation for the next round.
  - Option: It may be useful to list the group’s observations on chart paper. If interpretations come up, they can be listed in another column for later discussion during Step 3.
3. Interpret the Data (10 minutes)
  - The facilitator asks: “What does the data suggest in response to the inquiry?” Followed by — “What are the assumptions we might make about what this data suggests?”
  - Group: Infer from evidence gathered in preceding step: Brainstorm as many different interpretations of what you see as possible. Think creatively.
  - As you listen to each other’s interpretations, ask questions that help you better understand each other’s perspectives.

**Time**

45-60 Minutes

**Materials**

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**Roles**

Facilitator to guide the process.

4. Implications for \_\_\_\_\_(10 minutes)
  - The facilitator asks: “What are the implications of this work for this question?”
  - Based on the group’s observations and interpretations, discuss any implications this work might suggest. . In particular, consider the following questions:
    - What steps or action would address the situation?
    - What strategies might be most effective?
    - What else would you like to see happen?
    - What other information would be helpful?
    - What does this conversation make you think about in terms of your own context?
5. Reflecting on the ATLAS-Looking at Data (10 minutes)
  - What did you learn from listening to your classmates that was interesting or surprising?
  - What new perspectives did your classmates provide?
  - How can you make use of your classmates’ perspectives?
  - What questions did looking at the data raise for you?
  - Did questions of equity arise?
  - How can you pursue these questions further?
6. Debrief the Process (5 minutes)
  - How well did the process work?
  - What about the process helped you to see and learn interesting or surprising things?
  - What could be improved?