



ATLAS

Looking at Data

Learning from Data is a tool to guide groups of teachers discovering what students, educators, and the public understands and how they are thinking. The tool, developed by Eric Buchovecky, is based in part on the work of the Leadership for Urban Mathematics Project and of 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 for NSRF. Revised August 2004 for Looking at Data by Dianne Leahy.

Selecting Data to Share

Data is the centerpiece of the group discussion. The following guidelines can help in selecting data or artifacts that will promote the most interesting and productive group discussions. Data or artifacts that do not lead to a single conclusion generally lead to rich conversations.

Sharing and Discussion of Data

Discussions of some forms of data sometimes make people feel “on the spot” or exposed, either for themselves, for their students or for their profession. The use of a structured dialogue format provides an effective technique for managing the discussion and maintaining its focus.

A structured dialogue format is a way of organizing a group conversation by clearly defining who should be talking when and about what. While at first it may seem rigid and artificial, a clearly defined structure frees the group to focus its attention on what is most important. In general, structured dialogue formats allot specified times for the group to discuss various aspects of the work.

1. Getting Started

- The facilitator reminds the group of the norms.
Note: Each of the next four steps should be about 10 minutes in length. It is sometimes helpful for the facilitator to take notes.
- The educator providing the data set gives a very brief statement of the data and avoids explaining what s/he concludes about the data if the data belongs to the group rather than the presenter.

2. Describing the Data (10 Minutes)

- The facilitator asks: “What do you see?”
- During this period the group gathers as much information as possible from the data.
- Group members describe what they see in data, avoiding judgments about quality or interpretations. It is helpful to identify where the observation is being made—e.g., “On page one in the second column, third row . . .”
- If judgments or interpretations do arise, the facilitator should ask the person to describe the evidence on which they are based.
- 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. Interpreting the Data (10 Minutes)

- The facilitator asks: “What does the data suggest?” Second question: “What are the assumptions we make about students and their learning?”
- During this period, the group tries to make sense of what the data says and why. The group should try to find as many different interpretations as possible and evaluate them against the kind and quality of evidence.
- From the evidence gathered in the preceding section, try to infer: what is being worked on and why?
- Think broadly and creatively. Assume that the data, no matter how confusing, makes sense to some people; your job is to see what they may see.
- As you listen to each other’s interpretations, ask questions that help you better understand each other’s perspectives.

4. Implications for Classroom Practice (10 Minutes)

- The facilitator asks: “What are the implications of this work for teaching and assessment?” This question may be modified, depending on the data.
- Based on the group’s observations and interpretations, discuss any implications this work might have for teaching and assessment in the classroom. In particular, consider the following questions:
 - What steps could be taken next?
 - What strategies might be most effective?
 - What else would you like to see happen? What kinds of assignments or assessments could provide this information?
 - What does this conversation make you think about in terms of your own practice? About teaching and learning in general?
 - What are the implications for equity?

5. Reflecting on the ATLAS-Looking at Data (10 Minutes)

Presenter Reflection:

- What did you learn from listening to your colleagues that was interesting or surprising?
- What new perspectives did your colleagues provide?
- How can you make use of your colleagues’ perspectives?

Group Reflection:

- What questions about teaching and assessment did looking at the data raise for you?
- Did questions of equity arise?
- How can you pursue these questions further?
- Are there things you would like to try in your classroom as a result of looking at this data?

6. Debrief the Process

- How well did the process work?
- What about the process helped you to see and learn interesting or surprising things?
- What could be improved?