Ways to Handle Anomalous Data

There is an older article from the education literature that provides some structure for considering alternatives for handling new or unfamiliar data. In 1993, Chinn and Brewer wrote an article about how children learn science; their ideas extend well beyond this initial goal and provide a wonderful framework for considering our reactions to new and potentially challenging information. They discuss “anomalous data” as “evidence that contradicts a person’s current theories about how something happens/works.”

Chinn and Brewer (1993) propose that people respond in seven possible ways when presented with anomalous data (Sidebar 2-1). Let’s review the seven different ways people respond. Think of times you have responded in each of these seven ways.

Activity 2-1

Read the Chinn and Brewer (1993, pp. 1-14) excerpt located in the Appendix (Article 1).


Take note of the seven ways that people respond to new or challenging information. Think of a situation in practice that would illustrate each of the seven patterns. Complete Worksheet 2A to record your thoughts.

Activity 2-2

Meet with your study partners and be prepared to discuss Terrance’s case (Sidebar 2-2) based on what you learned from the Chinn and Brewer (1993) article. Write a scenario for each of Chinn and Brewer’s responses that would illustrate Terrance’s response to this new information (Worksheet 2B).

Summary

Understanding reactions to new information is a critical part of evidence-based practice. Sometimes reactions to reject or hold data in abeyance are appropriate, and other times these reactions represent fear or reluctance to think a new way. Considering all possibilities enables professionals to understand themselves, their colleagues, and the people they serve a little better. Critical analyses of one’s reactions to new data ensure that the best possible professional practices are being implemented.

All references for this unit can be found in the Bibliography, beginning on page 169.