Spatial Thinking for Earth Science Teachers and Students

Agenda, 22 October 2011

Mike and Participants: “Reflections and Feedback”
What have you noticed about spatial thinking within your curriculum?

Kim: “GSA Talk”
How do we describe our program to geoscience professionals outside NYS?

Kim and Linda: “Data Analysis”
What has emerged from our initial analysis of more than 900 items from 11 exams?

Theme for today’s workshop: “Representational Correspondence”
Comparing, contrasting, and combining information from two or more images

Within the realm of “representational correspondence” there are three basic sub-types:

- “Small multiples” – similar presentations with subtle, but important differences
- “Map-Map” – differing in information content, scale, and/or projection, but requiring the alignment of information through spatial clues to solve the problem
- “Profile-Map,” “Block diagram-Map,” “Block diagram-Profile,” etc. two different kinds of representations embodying different viewpoints

➤ Opening activity: “Compare and Contrast Puzzles”
➤ Beginning to develop a “Spatial Vocabulary” for a conversation about spatial phenomena
➤ Analyzing selected sets of Regents items in terms of spatial challenges

Wrap-Up:
Reflections and evaluation