

NGSS @ NSTA

Preparing for the Next Generation Science Standards—Major Practices

Session 3: Planning and Carrying out Investigations

Tuesday, October 9, 2012

Reflection Questions

1. The presenter discussed the four strands of the NRC reports *Taking Science to School: Learning and Teaching Science in Grades K-8* (2007) and *Ready, Set, SCIENCE!: Putting Research to Work in K-8 Science Classrooms* (2007). (both found online at www.nap.edu)
 - Understanding Scientific Explanations
 - Generating Scientific Evidence
 - Reflecting on Scientific Knowledge
 - Participating Productively in Science

What are the key aspects of each of the strands and why are they important?

2. In the activity, *Exercise for a Healthy Heart*, what aspects of data collection and data analysis could students learn?
3. Slide 50 of the presentation lists some possible student responses to anomalous data. Select a few of the possible responses and describe a situation when your students responded to the data in that way. If you encountered that situation again, how would you respond?
4. Slides 62 and 63 provide a list of attributes that can help students set up “a model of the world to study.” Select a few of the attributes and explain why these attributes might be helpful to students.