What Are the “Look Fors” to Assess the Quality of Instructional Materials in Light of the NGSS?

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Welcome & Introductions
Session Overview

• Background

• What are the “look fors” in instructional materials?

• A look at instructional materials
Project Background

• Purpose

• Progress
Categories of Evaluative Criteria

• NGSS-based Learning Goals
• Coherence
• Science Learning Experiences
• Monitoring of Learning Across the Dimensions
Science Learning Experiences

When evaluating **student materials**, consider the extent to which....

11. Materials provide substantive opportunities for students to express and negotiate their ideas, prior knowledge, and experiences across all three dimensions.

When evaluating **teacher materials**, consider the extent to which....

15. Materials support teachers in anticipating students’ ideas and include guidance for exploring student ideas across all three dimensions.
Pre-think the Evaluative Criteria

• Why are these criteria important?

• What would be the “look fors” in high quality, NGSS-aligned materials?
  – Student
  – Teacher
Evaluative Criteria 11 & 15

• Read the narrative descriptions for Evaluative Criteria 11 and 15. Keep the following questions in mind.
  – According to the authors,
    • why are these criteria important?
    • what are the “look fors” in instructional materials?

• How do these ideas compare to yours?
Student and Teacher Materials

• Selection 1 (post-NGSS; middle school)
  Disruptions in Ecosystems: Ecosystem Interactions, Energy, & Dynamics, Chapter 2 Activity 2.1
  American Museum of Natural History & Lawrence Hall of Science

• Selection 2 (pre-NGSS; high school)
  BSCS Science: An Inquiry Approach (Level 2), Chapter 3 Engage
  BSCS

• Selection 3 (pre-NGSS; high school)
  BSCS Biology: A Molecular Approach, Chapter 5 excerpt
  BSCS

• Selection 4 (post-NGSS; high school)
  Interactions, Investigation 2 excerpt
  CREATE for STEM Institute, Michigan State University, & Concord Consortium
A look at instructional materials...

- Scan your selection for relevant features
- What are the strengths and limitations of the materials in light of Evaluative Criteria 11 (student materials) and 15 (teacher materials)?

<table>
<thead>
<tr>
<th>Selection &amp; Criteria</th>
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• Be prepared to share your ideas