

Planning for Rigor

Fall 2012 Gifted Directors' Meeting
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Quiz: Agree or Disagree?

1. Rigor means that the work is harder.

Quiz on Rigor: Agree or Disagree?

1. Rigor means that the work is harder.
2. Rigor means more work.
3. The work is not rigorous if it asks students to apply what they learned in only one context.
4. The lower half of Bloom's taxonomy is not rigorous.
5. In order to engage in rigorous instruction, students first have to master the basics.

Notes on Characteristics of Rigorous Learning Material

- Explicit teaching
- Scaffolding
- Exams
- Complexity

Agree or Disagree?

2. Rigor means more work.

Agree or Disagree?

3. The work is not rigorous if it asks students to apply what they learned in only one context.

Agree or Disagree?

4. The lower half of Bloom's taxonomy is not rigorous.

Agree or Disagree?

5. In order to engage in rigorous instruction, students first have to master the basics.

How do *you* define rigor?

- ▶ Write your own definition.
- ▶ Think/Pair/Share
- ▶ Share out

Defining Rigor

Rigorous instruction requires students to:

- ▶ Construct meaning for themselves
- ▶ Impose structure/organization on information
- ▶ Integrate skills into processes
- ▶ Apply their skills in more than one context and to unpredictable situations

Characteristics of Rigorous Learning Material

- ▶ Read your assigned section on pages 42–46:
 - Implicit meaning
 - Ambiguity
 - Layers
 - Complexity
- ▶ Share your information in groups of 4

Blending Rigor Attributes

▶ Depth	▶ Implicit meaning
▶ Complexity	▶ Ambiguity
▶ Novelty	▶ Layers
▶ Sophistication	▶ Complexity

Traditional Gifted Education

Integrated Framework

Blending Rigor Attributes

▶ Depth	▶ Implicit meaning
▶ Complexity	▶ Ambiguity
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Traditional Gifted Education

Integrated Framework

Assessment: The First Step

How will you know if your students have met the standard *in a rigorous way*?

- ▶ The first step is to select or create a *rigorous unit assessment* to guide your instruction.
- ▶ If your assessment is not rigorous, the rest of your instruction won't matter.

Assessment of Thinking

What makes an assessment rigorous?

- ▶ A rigorous assessment measures *student thinking*, not factual recall.
- ▶ It sustains or reinforces rigorous engagement.
- ▶ It asks students to apply their learning in real-world or unpredictable situations.

Assessment of Thinking

- ▶ Rigorous assessments make student thinking more observable.
- ▶ Rigorous assessments do not require students to reproduce what they have learned, but require students to think about and use what they have learned.

Assessment: Emphasize Thinking Skills

- ▶ Think about the *kind of thinking* you want students to engage in
- ▶ That will determine the assessment format that makes the most sense
- ▶ It will determine how you plan the rest of your unit

Planning for Rigorous Instruction

- ▶ Analyze the rigor of your learning goals
- ▶ Analyze the rigor of your learning materials
 - Make sure materials is ability- and age-appropriate
 - Select materials for relevance and relatability
 - Build capacity to engage with rigorous material over time
 - Make sure material is *directly connected* to learning goals
 - Choose material that most closely matches content on summative assessments

Planning for Rigorous Instruction

- ▶ How to select appropriate and rigorous instructional strategies:
 - Plan for *thinking*, not just *doing*.
 - Set a rigorous learning goal; select rigorous learning material.
 - Find the thinking process in the standard.
 - Work backwards to identify the thinking skills.
 - Select Habits of Mind to encourage transfer to new situations.

Planning for Rigorous Instruction

- ▶ Work through the four levels of rigor.

Acquisition

- ▶ To make Acquisition rigorous:
 - Ask students to organize what they have learned
 - Consider short- and long-term memory
 - Link new knowledge to prior knowledge
- ▶ Acquisition: Frayer diagram

Assimilation

- ▶ What is the definition....characteristics
- ▶ Activity: fill out Frayer
- ▶ Example and non-example

Handout

- ▶ *Moving Students Through the Four Stages of Rigor*

References

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