TEACHING AMBITIOUSLY: WHAT DOES THIS MEAN, AND WHAT DOES IT TAKE?

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What number does the orange arrow point to?
Explain how you figured it out.
VIDEO: ANIYAH AND TONI

This video and additional supporting materials are available online here.
What did you notice about the work of teaching ambitiously?

Students are oriented to work collectively and to listen and speak with one another.

Students are working on a complex and powerful mathematical idea.

The mathematical task is designed to confront that key mathematical idea.

The discourse norms focus on understanding others’ ideas and arguments.

Students are centered.

Students’ thinking is centered.

Students are encouraged to share provisional thinking.

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FOUNDATIONS FOR TEACHING AMBITIOUSLY, TAKE #1

- Using high-leverage teaching practices, e.g.,
  - Eliciting and interpreting student thinking
  - Leading group discussions
  - Establishing and supporting classroom norms for discourse
  - Modeling and explaining content
  - Building relationships with students
  - Learning about and connecting with students’ resources and communities

- Drawing on sociocultural theory: learning as social and interactive, as intertwined with identities and practices

- Knowing and using content for teaching
Classrooms that are rich in discourse and discussion are crucial for empowering young people. They are also high-risk for reproducing patterns of racism and marginalization.
So teaching ambitiously requires more.

Let’s look.
VIDEO: ANIYAH AND TONI

Teacher: Listen closely and see what you think about her reasoning and her answer.

This video and additional supporting materials are available online [here](#).
WHAT ARE THE RISKS HERE, AND FOR WHOM?

Consider: What is likely to happen next?
What would any of these likely moves do?
SOME LIKELY NEXT MOVES

COMMON RESPONSES

- “Can someone help Aniyah out and show what we call the whole on the number line?”
- “Toni, when you’re ready to participate appropriately by not playing with your hair and laughing, and have a question to ask, I will come back to you.”

OUTCOME

- Aniyah’s answer is signaled to be incorrect, she is positioned as not having contributed to the work, and her contribution to the class’s work is not used.
- Toni is publicly excluded from the discussion and her mathematical contribution is sidelined.
- The other students see two Black girls positioned as not contributing to the mathematics, and as troublemakers. (Shalaby, 2017)
What does it mean to teach ambitiously in this case?
VIDEO: ANIYAH AND TONI

This video and additional supporting materials are available online here.
COUNTERING THE PATTERNS

1. Acknowledge publicly the importance of Toni’s question.
2. Ask Aniyah to explain her reasoning again at the board.

WHAT IS THE OUTCOME?

1. Toni is trusted, seen, and recognized for her contribution to the mathematical work:
   - The mathematical precision of her question
   - Asking Aniyah a question instead of disagreeing.

2. Aniyah’s explanation is the focus of attention, it is positioned as important, and she is seen as contributing to the class’s work.
   - The logical structure of her explanation.
   - Her attention to “equal parts.”
WHAT DID YOU NOW ADDITIONALLY NOTICE ABOUT THE WORK OF TEACHING AMBITIOUSLY?

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Students are encouraged to share provisional thinking.

Students are positioned as competent.

What it means to be “smart” and who is smart are redefined.

The children and their identities and resources are taken seriously and they are treated with respect.

Oppressive patterns of control and discipline are disrupted.
WHAT DOES IT TAKE TO TEACH AMBITIOUSLY IN THIS CASE?

- Seeing Aniyah’s explanation and Toni’s question as key to the class’s work
- Interpreting Toni as asking a mathematical question that she means
- . . . And having something different to do

Knowing and using mathematics in teaching (MKT)

Taking as axiomatic the brilliance of Black children, and thus Toni and Aniyah

WHAT ARE THE OUTCOMES?

ANIYAH
- Identified the “whole” as 0 to 1 on the number line
- Felt confident and accomplished

TONI
- Modeled at the board a complete explanation of how to understand and identify a fraction on the line

THE OTHER CHILDREN
- Developed a depth of understanding of fractions as numbers on the line and how to explain them
- Saw Black girls being brilliant (Martin, 2013, Gholson, 2013)
TEACHING AMBITIOUSLY: WHAT ARE THE GOALS?

- Help students develop and use complex ideas, tools, and practices
- Support the development of strong academic identities
- Disrupt patterns of racism and marginalization
- Advance the skills and dispositions for a just, democratic society
FOUNDATIONS FOR TEACHING AMBITIOUSLY, RETAKE

- Using high-leverage teaching practices
- Drawing on sociocultural theory: learning as social and interactive, as intertwined with identities and practices
- Knowing and using content for teaching
- Using the power that teaching has to disrupt historical and systemic patterns of racism and oppression
How can we better align our palettes of assessment practices and tools with these practices and goals, in the interest of children’s flourishing and a more just world?
THANK YOU!
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Slides will be available on my website
https://deborahloewenbergball.com/
(“Google” Deborah Ball)