(WHAT) DOES PRACTICE-BASED TEACHER EDUCATION HAVE TO DO WITH DISRUPTING RACISM AND OPPRESSION?

Deborah Loewenberg Ball
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Monday, July 16, 2018

SCHOOL OF EDUCATION
UNIVERSITY OF MICHIGAN

TeachingWorks
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TEACHING EFFECTS

COMPOUND EFFECTS
- Teacher sequence can affect student achievement by up to 50 percentile points after only three years.
- Low achieving students have the most to gain from an effective teacher.
- The top quintile of teachers facilitate appropriate to excellent gains for students of all achievement levels.

SANDERS & RIVERS (1996)

VARIATION IN TEACHER QUALITY
- The most important in-school factor affecting student learning is the teacher.
- There is wide variation in effectiveness among teachers.

WRIGHT, HORN, & SANDERS (1997)

LONG-TERM IMPACT
- Children who do not read proficiently by the end of third grade are four times more likely to drop out.
- Workers with a bachelor’s degree or more earned almost twice as much as workers with only a high school diploma.

FIESTER (2013)

DISCIPLINE
- Latinx, Black, and Native/Indigenous students are punished more often and more harshly than other groups.
- Black girls are disproportionately subjected to exclusionary discipline practices.
- Students with disabilities are punished more often and more harshly than other groups.
- Discipline disparities for Black students, boys, and students with disabilities are observed as early as pre-K.

GREGORY, SKIBA, & NOGUERA (2010)
SKIBA, HORNER, CHUNG, RAUSCH, MAY, & TOBIN (2011)
BLAKE, BUTLER, LEWIS, & DARENSBOURG (2011)
MORRIS (2016)
WALLACE, GOODKIND, WALLACE, & BACHMAN (2008)
NOLTEMeyer & MCOLUGHlin (2010)
Teaching is constrained by policies, curriculum, testing regimes. . .

- Teaching is highly idiosyncratic and individual.

Lipsky (1980), Shulman (1983)
THE PARADOX OF CONSTRAINT AND DISCRETION IN TEACHING

CONSTRAINTS CAN:

- Support efforts to disrupt inequity.
- Restrict teachers’ professional freedom through standardization.
- Reproduce racism and other forms of oppression.
- Impede efforts to make schools responsive, contextual, culturally relevant.

DISCRETION CAN:

- Make possible teachers’ efforts to teach in contextually sensitive and culturally responsive ways.
- Enable teachers to connect school to the world.
- Enable racism and other forms of oppression to flow into schools and schools.

(e.g., Aguirre, Celédon-Pattichis, Civil, Dewey, Gutiérrez, Ladson-Bilings, Paris, Walker, Winn)
<table>
<thead>
<tr>
<th>Speaker</th>
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<tr>
<td>Teacher</td>
<td>Why would you like to try to explain what you think the answer is? And show us your reasoning by coming up to the board? We'd like to come up to the board and try to tell you. And you know, it might not be right. That's okay because we're learning something new. I'd like someone to come up and sort of be the teacher and explain how you are thinking about it. Who'd like to try that this morning?</td>
</tr>
<tr>
<td>Milly, Andy?</td>
<td></td>
</tr>
<tr>
<td>Sam</td>
<td>Playing with her</td>
</tr>
<tr>
<td>Other students</td>
<td>Laying on arms</td>
</tr>
<tr>
<td>Teacher</td>
<td>When someone's presenting at the board, what should you be doing?</td>
</tr>
<tr>
<td>Students in chorus</td>
<td>Looking at them.</td>
</tr>
<tr>
<td>Teacher</td>
<td>Looking at that person.</td>
</tr>
<tr>
<td>Teacher</td>
<td>Um right?</td>
</tr>
<tr>
<td>Andy</td>
<td>You want me to write it?</td>
</tr>
<tr>
<td>Teacher</td>
<td>You're trying to mark what you think this number is and explain how you figured it out.</td>
</tr>
<tr>
<td>Teacher</td>
<td>Listen closely and see what you think about her reasoning and her answer. (Lori: whisper) 11 by the orange one.</td>
</tr>
<tr>
<td>Andy</td>
<td>I put one seventy because there's</td>
</tr>
<tr>
<td>Sam</td>
<td>But the way one seventy?</td>
</tr>
<tr>
<td>Andy</td>
<td>Before you agree or disagree, I want you to ask questions if there's something you don't understand about what she did. No agreeing and disagreeing. Just: All you can do right now is ask Andy questions. Who has a question for her?</td>
</tr>
<tr>
<td>Teacher</td>
<td>Okay, Tam, what's your question for her?</td>
</tr>
<tr>
<td>Andy</td>
<td>You did not</td>
</tr>
<tr>
<td>Sam</td>
<td>Why did? (looks at another student who says something to her from across the room)</td>
</tr>
<tr>
<td>Teacher</td>
<td>Go ahead, it's your turn.</td>
</tr>
<tr>
<td>Sam</td>
<td>Why did you pick one seventy?</td>
</tr>
<tr>
<td>Teacher</td>
<td>Andy</td>
</tr>
<tr>
<td>Teacher</td>
<td>Let's listen to her answer now. That was a very good question.</td>
</tr>
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</table>
Who would like to try to explain what you think the answer is? And show us your reasoning by coming up to the board?

Teacher: Okay, Dante?

Dante: You did it!
# Teaching Is Dense with "Discretionary Spaces"

## Table

<table>
<thead>
<tr>
<th>Speaker</th>
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<tbody>
<tr>
<td>Teacher</td>
<td>Who would like to try explaining what you think the answer is? And show us your reasoning by coming up to the board.</td>
</tr>
</tbody>
</table>
|         | What will you come up to the board and try to tell?
|         | And you know, it might not be right. That's okay because we're learning something new. I'd like someone to come up and sort of be the teacher and explain how you are thinking about it. Who'd like to try that this morning? |
| Student | Okay, Anyone? |
| Student | Playing with hair |
| Student | Laying on arms |
| Student | When someone's presenting at the board, what should you be doing? |
| Student | Looking at them. |
| Teacher | Looking at that person |
| Teacher | Um, okay? |
| Adult | You want me to write it? |
| Teacher | You're trying to work out what you think this number is and explain how you figured it out. |
| Teacher | Listen closely and see what you think about her reasoning and her answer. (Adult writes 1/7 by the orange dot.) |
| Adult | I put one-seventh because there's |
| Adult | Still the same one-seventh |
| Adult | (Starts to read.) There are seven equal parts, one, two, three, four, five, six, and seven. If you were to count the parts of the number one. |
| Teacher | Before you agree or disagree, I want you to ask questions if there's something you don't understand about what one did. No agreeing and disagreeing. Just, all you can do right now is ask seven questions. Who has a question for her? |
| Teacher | Okay, Tina, what's your question for her? |
| Student | Yes? |
| Student | Why did? (Looks at another student who says something to her from across the room.) |
| Teacher | Go ahead, it's your turn. |
| Adult | Why did you pick one-seventh? |
| Adult | Yes? |
| Adult | Listen to her answer now. That was a very good question. |

## Diagram

- **Students**
- **Teachers**
- **Environments**

20 in 1:28
WHAT REGULARLY FILLS THE DISCRETIONARY SPACES IN TEACHING?

1. Teachers’ experiences in a society filled with racism and oppression.
2. Normalized practices in schools that institutionalize dominant values and habits.

Lortie (1975), Banks, Grant and Koskela, Moll
Anyon (1981), Heath, Martin, Tuck
WHAT REGULARLY FILLS THE DISCRETIONARY SPACES IN TEACHING?

1. Teachers’ experiences in a society filled with racism and oppression.
2. Normalized practices in schools that institutionalize dominant values and habits.

Professional education does not effectively intervene on these.

Professional education and teaching experience often teach these.

Lortie (1975), Banks, Grant and Koskela, Moll
Anyon (1981), Heath, Martin, Tuck
How do macro-structures play out in the micro-moments of Black and Brown children’s experiences in classrooms?

Gholson & Wilkes, 2016
What number does the orange arrow point to? Explain how you figured it out.
LAKEYA

What number does the orange arrow point to? 

\[ \frac{1}{2} \]

Explain how you know: Because there are equal parts and you are pointing to the second one out of 2.

JAMARI

What number does the orange arrow point to? 

\[ \frac{5}{12} \]

Explain how you know: First I thought it was 5 because the zero messed me up.

MARIANA

What number does the orange arrow point to? 

\[ \frac{1}{2} \]

Explain how you know: How I know it's zero to one is that there's an interval from zero to a one, there was 2 line between 0 and 1.

LARRY

What number does the orange arrow point to? 

\[ \frac{5}{4} \]

Explain how you know: I count it by 1 and keep going \[ \frac{5}{4} \] till \[ \frac{5}{4} \] got whole.

Write a complete sentence with one goal for yourself for our math class today. Give an example of what it looks like to do this really well:

Learned more about the number line.
ANIYAH AND TONI
VIDEO: ANIYAH AND TONI

This video and additional supporting materials are available online here.
DISCRETIONARY SPACES IN JUST THESE FEW SECONDS

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<th>Speaker</th>
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<tr>
<td>Teacher</td>
<td>Who would like to try to explain what you think the answer is? Show us your reasoning by coming up to the board? And you know, it might not be right. That’s okay because we’re learning something new. I’ll like someone to come up and sort out the teacher and explain how you are thinking about it. Would you like to try that this morning?</td>
<td>1. Deciding when to open whole-group discussion. 2. Deciding what to do to launch discussion. 3. Framing the expectation for presenting. 4. Framing of what it “coming to the board” entails.</td>
</tr>
<tr>
<td>Tonii</td>
<td>Playing with hair.</td>
<td>5. Selecting a student to present. 6. Deciding whether to comment. 7. Deciding whether to comment.</td>
</tr>
<tr>
<td>Other children</td>
<td>Laying on arms.</td>
<td></td>
</tr>
<tr>
<td>Teacher</td>
<td>When someone’s presenting at the board, what should you be doing?</td>
<td>8. Setting norms for what to do when a student is presenting.</td>
</tr>
<tr>
<td>Students in silence</td>
<td>Looking at them.</td>
<td>9. Responding to students.</td>
</tr>
<tr>
<td>Teacher</td>
<td>Looking at that person.</td>
<td></td>
</tr>
<tr>
<td>Teacher</td>
<td>Uh-huh?</td>
<td>10. Taking up an individual student question.</td>
</tr>
<tr>
<td>Anyaiah</td>
<td>You want me to write it?</td>
<td>11. Clarifying task.</td>
</tr>
<tr>
<td>Teacher</td>
<td>You’re trying to make what you think the number is and explain how you figured it out.</td>
<td></td>
</tr>
<tr>
<td>Teacher</td>
<td>Listen closely and see what you think about her reasoning and her answer. Anyaiah writes in by the orange line.</td>
<td>12. Setting task for the other students.</td>
</tr>
<tr>
<td>Anyaiah</td>
<td>I put one seventh because there’s-</td>
<td></td>
</tr>
<tr>
<td>Tonii</td>
<td>Did she say one-seventh?</td>
<td>13. Responding to student.</td>
</tr>
<tr>
<td>Anyaiah</td>
<td>(bends to Tonii) Yeah. (continues to explain) Because there’s seven equal parts... like one, two, three, four, five, six, and then seven. (Uses her fingers to count the parts on the number line).</td>
<td>14. Setting task for responding to student explanation.</td>
</tr>
<tr>
<td>Teacher</td>
<td>Before you agree or disagree, I want you to ask questions if there’s something you don’t understand about what she did. No agreeing and disagreeing. Just- All you can do right now is ask Anyaiah questions. Who has a question for her?</td>
<td></td>
</tr>
<tr>
<td>Teacher</td>
<td>Okay, Tonii, what’s your question for her?</td>
<td>15. Deciding student to speak.</td>
</tr>
<tr>
<td>Darrelle</td>
<td>You did it.</td>
<td>16. Responding to student speaking across room.</td>
</tr>
<tr>
<td>Tonii</td>
<td>Who did it? (knocks at another student who says something to her from across the room)</td>
<td>17. Responding to student laughing.</td>
</tr>
<tr>
<td>Teacher</td>
<td>Go ahead. It’s your turn.</td>
<td>18. Responding to student laughing.</td>
</tr>
<tr>
<td>Darrelle</td>
<td>You did.</td>
<td>20. Responding to student speaking across room.</td>
</tr>
<tr>
<td>Teacher</td>
<td>Early listener to her answer now. That was a very good question.</td>
<td>21. Setting task for class. 22. Responding to student.</td>
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<td>Teacher</td>
<td>Okay, Anya?</td>
<td>5. Selecting a student to present</td>
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<td>Tony</td>
<td>Playing with hair</td>
<td>6. Deciding whether to comment</td>
</tr>
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<td>Other student</td>
<td>Laying on arms</td>
<td>7. Deciding whether to comment</td>
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<td>Uh huh?</td>
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<td>Anya</td>
<td>You want me to write it?</td>
<td>12. Setting task for the other students</td>
</tr>
<tr>
<td>Teacher</td>
<td>You're trying to mock what you think this number is and explain how you figured it out.</td>
<td>13. Setting task for the other students</td>
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<tr>
<td>Tony</td>
<td>I put one-seventh because there's-</td>
<td>14. Setting task for responding to student explanation</td>
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<tr>
<td>Anya</td>
<td>Did she say one-seventh?</td>
<td>15. Responding to student</td>
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<tr>
<td>Tony</td>
<td>Yeah.</td>
<td>16. Responding to student speaking across room</td>
</tr>
<tr>
<td>Anya</td>
<td>Yeah.</td>
<td>17. Responding to student laughing across the room</td>
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<tr>
<td>Teacher</td>
<td>Before you agree or disagree, I want you to ask questions if there's something you don't understand about what she did. Do agreeing and disagreeing. Just- All you can do right now is ask Anya questions. Who has a question for her?</td>
<td>18. Responding to student</td>
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<td>Teacher</td>
<td>Okay, Tony, what's your question for her?</td>
<td>19. Entering student to speak</td>
</tr>
<tr>
<td>Daniel</td>
<td>You did tell</td>
<td>20. Responding to student speaking across room</td>
</tr>
<tr>
<td>Tony</td>
<td>Willy did (laughs at another student who says something to her from across the room)</td>
<td>21. Responding to student laughing across the room</td>
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<td>Teacher</td>
<td>God ahead, it's your turn.</td>
<td>22. Responding to student</td>
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<td>Tony</td>
<td>Why did you pick one-seventh?</td>
<td>23. Responding to student</td>
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<td>Daniel</td>
<td>You did not.</td>
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VIDEO: RE-VIEW AND RE-LISTEN TO THESE DISCRETIONARY SPACES

These videos and additional supporting materials are available online [here](#).
SEEING INSIDE
DISCRETIONARY SPACE #19

- Toni is asking a question of Aniyah.
- Toni is laughing and playing with her hair.
- Toni and Aniyah are Black girls, who are positioned with different statuses in the classroom, have different physical embodiments, and perform their meanings and understandings of their Black-girlness in different ways.
- What to do next?

(Gholson, Evan-Winter, Neal-Jackson)
WHAT TO DO NEXT IN DISCRETIONARY SPACE #19?

1. “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.”

2. “You need to be a better listener, Toni. Aniyah already explained why she picked one-seventh. Who else has a real question for Aniyah?”

3. “What do others think?”
WHAT DOES EACH OF THESE DIFFERENT EXERCISES OF DISCRETION DO?

POSSIBLE NEXT MOVES

1. “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.”

2. “You need to be a better listener, Toni. Aniyah already explained why she picked one-seventh. Who else has a real question for Aniyah?”

3. “What do others think?”

POSSIBLE RESULTS

1. Toni is publicly excluded from the discussion.

2. Toni is judged to not be listening, her question is judged as not good, and she is excluded from the discussion.

3. Toni is excluded and her mathematical point is sidelined.

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WHAT DO THESE THREE DIFFERENT TEACHING MOVES DO TO TONI?

- Her contributions to the class are not positioned as appropriate or valuable.
WHAT DO THESE THREE DIFFERENT TEACHING MOVES DO TO TONI?

- Her contributions to the class are not positioned as appropriate or valuable.
- Her participation and mathematical attentiveness are made invisible.
WHAT DO THESE THREE DIFFERENT TEACHING MOVES DO TO TONI?

Her contributions to the class are not positioned as appropriate or valuable.

Her participation and mathematical attentiveness are made invisible.

She is seen as being a distraction, mocking Aniyah, and as playing with her hair.

These combine to eclipse her humanity.
LOOKING AT THE MICRO THROUGH THE MACRO: BLACK GIRLS’ RATES OF SUSPENSION

Epstein, Blake, & González (2017)

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BLACK GIRLS MORE LIKELY TO BE DISCIPLINED FOR SUBJECTIVE INFRACTIONS

2X
For minor violations (dress code violations, inappropriate cell phone use, loitering)

2.5X
For disobedience

3X
For disruptive behavior

3X
For bullying/harassment

Epstein, Blake, & González (2017)
WHAT WOULD IT TAKE TO DISRUPT THE PATTERNS THROUGH WHICH A BLACK GIRL IS MARGINALIZED?

- Seeing Toni’s question as key to the class’s work
- Taking as axiomatic the brilliance of Black children, and thus Toni and Aniyah

WHAT WOULD IT TAKE TO DISRUPT THE PATTERNS THROUGH WHICH A BLACK GIRL IS MARGINALIZED?

- Seeing Toni’s question as key to the class’s work
- Taking as axiomatic the brilliance of Black children, and thus Toni and Aniyah

Knowing and using mathematics in teaching (MKT)

Interpreting Toni as asking a mathematical question that she means

TONI AND HER CONTRIBUTIONS

- Listens closely to a classmate’s presentation
- Uses norm of not beginning with agreeing/disagreeing
- Uses the definition for a fraction to ask how Aniyah decided on 7 parts
- Asks a mathematical question that is crucial for the collective work
WHAT WOULD IT TAKE TO DISRUPT THE PATTERNS THROUGH WHICH A BLACK GIRL IS MARGINALIZED?

- Seeing Toni’s question as key to the class’s work
- Taking as axiomatic the brilliance of Black children, and thus Toni and Aniyah
- . . . AND having something different to DO

VIDEO: ANIYAH AND TONI

This video and additional supporting materials are available online here.
USING DISCRETION TO DELIBERATELY DISRUPT THE PATTERNS THROUGH WHICH BLACK GIRLS ARE MARGINALIZED

COUNTERING THE PATTERN

- Acknowledge publicly the importance of Toni’s question

POSSIBLE RESULT

- 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
ANIYAH
- Identified the “whole” as 0 to 1 on the number line

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’ brilliance
MARTIN LUTHER KING, JR.

We are now faced with the fact that tomorrow is today. We are confronted with the fierce urgency of now. In this unfolding conundrum of life and history there is such a thing as being too late.

Now let us begin. Now let us rededicate ourselves to the long and bitter—but beautiful—struggle for a new world.

April 4, 1967
OUR RESPONSIBILITY, AND CHANGING THE PATTERNS

Given the ubiquity and density of discretionary spaces in teaching, what is the imperative for teacher preparation and development?
THE WORK OF JUSTICE LIVES INSIDE THE WORK OF TEACHING

- By understanding one’s identity and role as part of a broader system of oppression that is historical and persistent
- By knowing what “normally” happens and how these patterns reproduce oppression, and by deliberately doing things that counter those patterns
- By seeing and affirming each student—their strengths and their academic work
- By opening up “content” and possibilities for students to connect with and do complex work

Mann, Willis, Hickman, Ball, Goffney (2017)
DESIGNING TO TEACH TEACHING: ATTENTION TO DOING THE WORK OF TEACHING

DECOMPOSING PRACTICE

- Breaking teaching practices into smaller elements that can be focused on
- Doing so in careful ways that do not distort or atomize teaching

“LAYERING” ELEMENTS OF PRACTICE

- Choosing small parts of teaching that intersect content knowledge for teaching, specific HLPs, disrupting racism and inequity
- E.g.,
  - Centering work in recurrent situations in the work of teaching, such as dealing with students’ unexpected ideas, or positioning students during a discussion
AND . . . PRACTICE!

- Designing instructional activities that provide opportunities to do things that teaching actually entails
Let’s look at some examples of practice-based instructional activities that—

- **Approximate** actual parts of the work of teaching
- **Have layered** learning goals: content knowledge for teaching, specific high-leverage practices, specific discretionary moments that demand attending to and disrupting inequity
- Teacher candidates DO
ACTIVITY #1

- **Layered learning goals**: To see and identify children’s mathematical understanding (CKT, interpreting student thinking), develop orientation to see Black girls as smart.

- Watch the video, name what Aniyah knows and can do, and what Toni knows and can do.
WHAT DO ANIYAH AND TONI KNOW AND WHAT CAN EACH DO?

ANIYAH

- Uses the definition for a fraction to explain
  - She identifies the “whole”
  - She makes sure the intervals are equal
  - She counts intervals and not tick marks
  - She knows how to write “one-seventh”
- Produces a mathematically well-structured explanation
- Presents her ideas clearly

TONI

- Listens closely to a classmate’s presentation
- Uses the definition for a fraction to ask
  - How Aniyah decided on 7 parts
- Asks a pointed mathematical question
ACTIVITY #2

- **Layered learning goals:** To develop crucial practices that are central to leading a class discussion, to consider the content, the goals, and the positioning of children.

- Tape children’s work on the walls of the classroom, walk around for 5 minutes, with class list, looking at what children are writing.

- Decide and justify and discuss whom to ask to present their solution first, and how different considerations intertwine.
**MARIANA**

What number does the orange arrow point to? \( \frac{1}{2} \)

Explain how you know: \( \frac{1}{2} \) is that interval from zero to one, there was a line between 0 and 1.5.

**ASHTON**

What number does the orange arrow point to? \( \frac{1}{3} \)

Explain how you know: \( \frac{1}{3} \) is one third of 1.

**MAKAYLA**

What number does the orange arrow point to? 0

Explain how you know: Can't from zero equal and then it's equal then can't from the 1. I saw the one then 3 is \( \frac{1}{3} \) maybe not.

Write a complete sentence with one goal for yourself for our math class today. Give an example of what it looks like to do this really well.
TONI

What number does the orange arrow point to? \( \frac{1}{3} \)

Explain how you know: Because it's in 3 parts

ANIYAH

What number does the orange arrow point to? \( \frac{1}{7} \)

Explain how you know: because this seven equal parts that's why I put seven

DANTE

What number does the orange arrow point to? \( \frac{1}{2} \)

Explain how you know: Because if you look at it and count.
LAKEYA

What number does the orange arrow point to?

Explain how you know: because there are equal parts and you are pointing to the second one so it's \( \frac{2}{4} \).

Write a complete sentence with one goal for yourself for our math class today. Give an example of what it looks like to do this really well.

to listen to other people's ideas. I like just because I know the answer that I will still listen to others.
What number does the orange arrow point to?

Explain how you know:

First I thought it was $\frac{1}{2}$ because the zero messed me up.
ACTIVITY #3

- **Layered learning goals:** To learn to notice discretionary spaces, pause, be conscious of habits that reproduce racism, break and develop new habits

- Watch video, identify possible next steps, critically analyze results of these

- Name and *practice* different steps to disrupt patterns that marginalize
What part of the rectangle below is shaded gray?

What part of the rectangle below is shaded gray?
Teacher: Is that what you said? Okay, would someone like to comment on that? Agree or disagree with him?
IN THIS MOMENT, A MOVE CAN REPRODUCE PATTERNS OF MARGINALIZATION OF BLACK BOYS

NORMALIZED NEXT MOVES

- Clarify for Antar that he is right—that the parts are not equal but that it is a fraction; ask someone else to give “the correct answer”
- Ask the class to indicate agreement/disagreement
- “What do others think?”

RESULTS

- Antar’s answer is signaled to be incorrect and he is positioned as not having contributed to the work.
- Antar’s solution is “voted” on by his classmates.
- Antar is excluded and his mathematical point is sidelined.
COUNTERING THE PATTERN

- Ask students to say what Antar said or to ask a question before agreeing/disagreeing.

- Ask Antar to say what he means by “it’s not a fraction.”

RESULT

- Maintain Antar’s authority and agency and position him and his thinking to advance the key mathematical idea.
“Education either functions as an instrument that is used to facilitate integration of the younger generation into the logic of the present system and bring about conformity, or it becomes the practice of freedom.”
We leave the power of teaching to chance.

Teaching can do great harm.

Teaching can have powerful positive impact.
THANK YOU!

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Slides will be available on my website
https://deborahloewenbergball.com/
(“Google” Deborah Ball)
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