WITH RESPECT FOR K-12 TEACHING
A SPECIAL NEED FOR TEACHER LEADERSHIP
GOALS FOR TODAY

1. Articulate and prepare to address a major public problem for which expert experienced teachers are needed: the lack of respect for the work of teaching

2. Unpack the work of teaching: What can we see and make visible?
   - In general
   - In the case of a particular part of the complex work of teaching

3. Consider the special and urgent problem of beginning teaching

4. Develop ideas for a campaign for the advancement of teaching
K-12 TEACHING AS THE #1 POLICY IMPERATIVE OF OUR TIME

- 74,000,000 children in U.S.
- Schooling: Our society’s professed commitment to individuals’ lives and to the future of our society
- Educational opportunity and quality are pervasively inequitably distributed, based on income and race
- OECD data are revealing
  - The U.S. spends more per pupil than any other OECD country
  - U.S. students score below the median of the OECD countries
  - The U.S. is fourth from the bottom in upward social mobility
- Evidence of the power of skillful teaching
- Overwhelming lack of public respect for the work of teaching: Examples?
WHY DOES THIS MATTER THAT THERE IS SUCH LOW RESPECT FOR OUR WORK?

- It reflects a lack of caring about children, particularly those who most depend on public schools.
- It means that policies are developed in ways that at best circumvent teaching and at worst interfere with it, again hurting children.
- It makes it difficult to recruit people to the profession (see current significant decline).
② UNPACK THE WORK OF TEACHING
WHAT DO WE SEE WHEN WE WATCH TEACHING?

- Who are you?*
- Why are you here?*
- What are you fascinated with, interested in, concerned about with respect to classrooms?

*Thanks to Maisha Winn for these first two provocative questions.
A LITTLE BIT ABOUT THE SETTING…

- “Elementary Math Lab” (or “EML”): summer program for 29 fifth grade students
- Demographic: majority African American, several Latin@; many multi-dialectical or multi-lingual; mostly low-income families; from a school district in a traditionally working class urban community
- Program focuses on fractions, mathematical explanation and reasoning, and developing students’ mathematical and academic identities
- Observers: teachers, interns, researchers, and others who are learning about students, teaching practice, and developing their own skills
EXPLORATION: A FIRST VIEWING

- We’ll watch a few minutes of a mathematics lesson.
- Afterwards: Quiet writing time (QWT)
QUESTION

Which rod is three times as long as light green?
FIRST VIEWING
QUIET WRITING TIME (QWT)

- Choose a blank row in the Google doc:
- Jot a few notes:
  - What did you see?
  - What did you hear?
  - What did you feel?
PARTNER READING TIME

Read what people wrote; discuss with the person next to you

- What did people see, hear, and feel?
- What differences do you notice?
- Are there patterns of commonality?
THINK . . .

- How does who we are—our social identities (racial, ethnic, linguistic, gendered, class-based, national origin, professional) and what we have experienced, and studied—as well as why we are here shape what we see when we watch teaching?
SEEING TEACHING: WHY IS IT DIFFICULT—AND DOES IT MATTER?

1. Much of teaching is invisible work (Lewis, 2007; Star, 1999).
2. Disconnect between those who comment on teaching and those who do it and experience it, as a function of racial, ethnic, linguistic, gendered, class-based, and professional identities.
3. Student perspective and experience often not included in analyses of teaching.
4. Language for describing teaching is thin and imprecise.
5. Weak norms within the profession (and across communities) for watching and discussing teaching (compare typical observation of teaching with sports video analyses).
6. Rush to judgment and evaluation.

But: Teaching has powerful impact on learning; seeing teaching is necessary for helping to develop and improve it. It matters.
Seeing, Hearing, and Building on Students’ Strengths

ZOOMING IN ON A COMPLEX PIECE OF WORK OF TEACHING
All this talk about not focusing on children’s deficits — why does this matter so much? Isn’t our job to figure out what children don’t know and help them grow?

So — focusing on children’s strengths is crucial for effective and equitable and for advancing social justice.

1. Learning occurs through a process of building on prior knowledge and experience.

2. Strong academic and mathematical identities are a means to developing competence. They are also instructional goals.

3. For children of historically marginalized groups, stereotype threat and other biases interfere with and impede children’s performance.
Okay, I see why this is important. But it isn’t easy. How do I learn to be more skillful at recognizing and using children’s strengths?
MAKING THE SHIFT FROM A PREOCCUPATION WITH DEFICITS TO A FOCUS ON STRENGTHS

- Pausing on “apparently incorrect” answers
  - Actually not incorrect
  - Answer to a different (and reasonable) question
  - More correct than incorrect

- Seeing past “distractions” or non-mathematical issues
  - Behavior that distracts the teacher, but not the child or the other children (Noel, 2014)
  - How children talk (as they are learning; and when they are speaking academic language, or in English when that is not their first language)
DILEMMAS OF LEARNING TO SEE AND HEAR STUDENTS’ RESOURCES

1. Feeling committed to students as sensemakers who bring many strengths and feeling pressure to make sure students get it “right”

2. Using yourself yet also suspending assumptions based on what you would mean or feel

3. Knowing mathematics well enough to see “mathematics” in children’s talk, representations, etc. while also not letting your own mathematical knowledge to overtake your capacity to see and hear what they are saying or showing
What number does the orange arrow point to? ____________

Explain how you know: ____________________________________________

_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
ANIYAH AND TONI

Who'd like to come up to the board and try to tell- And you know, it might not be right. That's okay 'cause we're learning something new.
WHAT DO YOU SEE AND HEAR ABOUT ANIYAH AND TONI IN THIS SHORT CLIP?
WHAT DO PEOPLE TYPICALLY SEE?

ANIYAH
- Wrong answer, not identifying the correct whole

TONI
- Giggling while talking
- Playing with her hair
WHAT STRENGTHS DO YOU SEE?

ANIYAH

- Her presentation skills
- Production of a mathematically well-structured explanation
- Knowing the definition for a fraction, which she uses carefully

TONI

- Her careful attention to another child’s thinking
- Her skill in asking a perfectly posed question about Aniyah’s reasoning
SEEING STUDENTS’ RESOURCES AND ASSIGNING MATHEMATICAL COMPETENCE

A set of practices that deliberately deploy the power of teaching to:

1. Broaden and label what being competent in mathematics means
2. Intervene to position who (and what) is seen as competent in math class
3. Support individual children to develop their mathematical and academic identities and competence

Sources: E. Cohen and R. Lotan, complex instruction; J. Boaler’s work; Smarter Together: Collaboration and Equity in the Elementary Mathematics Classroom (Featherstone, Crespo, et al., 2011);
Sounds good. What does that require of me?
WHAT DOES “ASSIGNING COMPETENCE” REQUIRE IN TEACHING?

1. Broaden and label what being competent in mathematics means
2. Intervene to position who (and what) is seen as competent in math class
3. Support individual children to develop their mathematical and academic identities and competence

1. Be able to see what is “mathematical” and what is “competent”
2. Have techniques for making these moves to intervene
3. Strategically using these techniques with particular students in authentic and well-timed ways
QUESTION
Which rod is three times as long as light green?
STEP 1: WHAT IS MATHEMATICS AND MATHEMATICAL PRACTICE? WHAT IS “COMPETENCE” IN MATHEMATICS?

- What mathematics do you see in this segment?
- Who is doing mathematics, and what math are they doing?
- Identify specific examples and why you would label that “mathematics.”
WHAT IS “MATHEMATICS” AND WHAT DOES IT MEAN TO BE “COMPETENT”?
STEP 2: SEEING STUDENTS’ COMPETENCE

Select two of these five students: Langston, Madison, Lauren, Michio, Larayne, Jerone

- What does each one know and know how to do?
- What is your evidence?
STEP 2: SEEING STUDENTS’ COMPETENCE

Langston, Madison, Lauren, Michio, Larayne, Jerone

- What does each one know and know how to do?
- What is your evidence?
STEP 3: USING TECHNIQUES AND STRATEGIES FOR ASSIGNING COMPETENCE

*Identify the competence to be highlighted. Consider how to disrupt hierarchies of status in class by which child is to be “called out” as competent.*

- Call out an individual’s child’s competent move or contribution publicly (“___ just shared a very important idea”)
- Ask a child to explain another child’s contribution that the teacher highlights
- Ask the class to identify things that were part of an important contribution by one of the children
- Writing something publicly that a child or children came up with or contributed that is important
- Accord expertise to children through assigning roles explicitly in a group
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OPPORTUNITIES TO LEARN TO BUILD SKILLS IN SEEING, HEARING, AND BUILDING ON STUDENTS’ RESOURCES

- Examining challenging video clips with others
- Looking at students’ written work
- Doing the mathematics that children are doing
- Seeing children outside of school, in community settings: look not just for mathematical content but also practices
③ THE SPECIAL PROBLEM OF BEGINNING TEACHING
ENTRY-LEVEL TEACHING AS A CRITICAL FOCUS

1. More U.S. schoolchildren have a teacher with fewer than five years of experience than a teacher with any other number of years of experience.
EARLY CAREER TEACHING ON THE RISE

![Teacher Experience as Share of Workforce](chart)

Mode: 15 years of experience.
Mode: 1 year of experience.

ENTRY-LEVEL TEACHING AS A CRITICAL FOCUS

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2. Most beginning teachers say they are underprepared for teaching, and on average they are less effective.
EARLY CAREER TEACHING IS ON AVERAGE LESS EFFECTIVE

ENTRY-LEVEL TEACHING AS A CRITICAL FOCUS

1. More U.S. schoolchildren have a teacher with fewer than five years of experience than a teacher with any other number of years of experience.

2. Most beginning teachers say they are underprepared for teaching, and on average they are less effective.

3. Distribution of beginning teaching is concentrated disproportionately in low-income and high-minority schools.
THE CONCEPT OF “AVERAGE”

- What is an “average” of a set of data?
- How would you explain the key idea to a group of 10-year olds?
VIEWING FOCUS

- What is skillful about this teaching?
- What is less skillful?
LEADING A CLASSROOM DISCUSSION FROM A TEXTBOOK LESSON ON “AVERAGE”
QUIET WRITING TIME (QWT)

- Choose a blank row in the Google doc
- Jot a few notes:
  - What was skillful about this teaching?
  - What was less skillful?
FEATURES OF STRONG TRAINING FOR RESPONSIBLE INDEPENDENT PRACTICE

1. Clear specification of knowledge, skills, capabilities, and qualities of performance necessary for independent practice

2. Detailed developmental clinical training, progressing from observing to simulations to apprenticeship to supervised independent practice; including attention to role of practitioners in novices’ learning

3. Performance assessment of individual competence before allowing independent practice
HIGH-LEVERAGE PRACTICES

- Explaining and modeling mathematical ideas and practices
- Leading a mathematics discussion
- Eliciting and interpreting students’ thinking
- Establishing norms and routines for classroom discourse and work
- Recognizing particular common patterns of student thinking and development
- Learning about students’ cultural, religious, family, intellectual, and personal experiences and resources for use in instruction
- Setting up and managing small group work
- Building respectful relationships with students
- Selecting and modifying tasks and texts for a specific learning goal
- Checking student understanding during and at the conclusion of lessons
- Providing oral and written feedback to students on their work
- Talking about a student with a parent or caregivers

TeachingWorks and the University of Michigan School of Education
WHAT WOULD IT MEAN TO LAUNCH A CAMPAIGN FOR THE ADVANCEMENT OF TEACHING?
REPRESENTING TEACHING AS SKILLFUL WORK THAT DEMANDS AND DESERVES TRAINING

- Share examples that display the complexity of the work (and that “regular” people can’t do)
- Stand up for the importance of rigorous licensure for beginning to teach
- Help to develop shared knowledge useful for initial and continuing professional training
- The notion of “public education objects”
THE SCALE OF THE TEACHING PROFESSION

[Bar chart showing the scale of the teaching profession compared to other professions. soak scale from 0 to 5,000,000. Teachers have the highest number, followed by cashiers, food prep, office clerks, nurses, waiters and waitresses, customer service reps, laborers, top executives, janitors and cleaners, secretaries and admin assistants, physicians and surgeons, engineers, lawyers, social workers, plumbers, pipefitters, steamfitters, pilots and flight engineers.]
THE MORAL URGENCY, BY THE NUMBERS

- 1/3
- 11%
- 70%
- 1.5 million
- 50
- >1400
- 2x
- 78,000,000
- 15%
- 45%
INTERPRETING LEARNERS’ THINKING: ANALYZING ERRORS

What mathematical steps could have produced this answer?

(a) \[ 49 \times 25 = 1485 \]
(b) \[ 49 \times 25 = 1275 \]
(c) \[ 49 \times 25 = 1250 \]

What mathematical steps could have produced these answers?
SMALL GROUP WORK

- Develop
  (1) one concrete idea that could be carried out at small scale
  (2) one that would require more collective action.
- Record in the Google doc

For each one:

- What is the idea, specifically?
- What is the goal (i.e., how might it help to advance teaching)?
- Why might it help to advance teaching?
THANK YOU!

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Slides will be available on my website
(“Google” Deborah Ball)
CREDITS

Image on slide 47:
“almost forbidden territory....” by Flickr user Esthr
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