

How Can We Get Good Teaching for All Students?

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SCHOOL OF EDUCATION UNIVERSITY OF MICHIGAN

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An alternative (stealth) title:

In Praise of Detailed Teacher Training

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Main argument

We need a system that can reliably equip "regular" people for effective professional practice in teaching.

- Doing that requires:
  - Focusing on the *work of teaching*;
  - Zooming in developmentally on the highest-leverage practices;
  - Emphasizing the *performance of teaching* in the curriculum and in assessments.

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Overview

1. The view from 20,000 feet
2. What is skillful teaching?
3. What does it take to get skillful teaching in every classroom?
4. Concluding thoughts

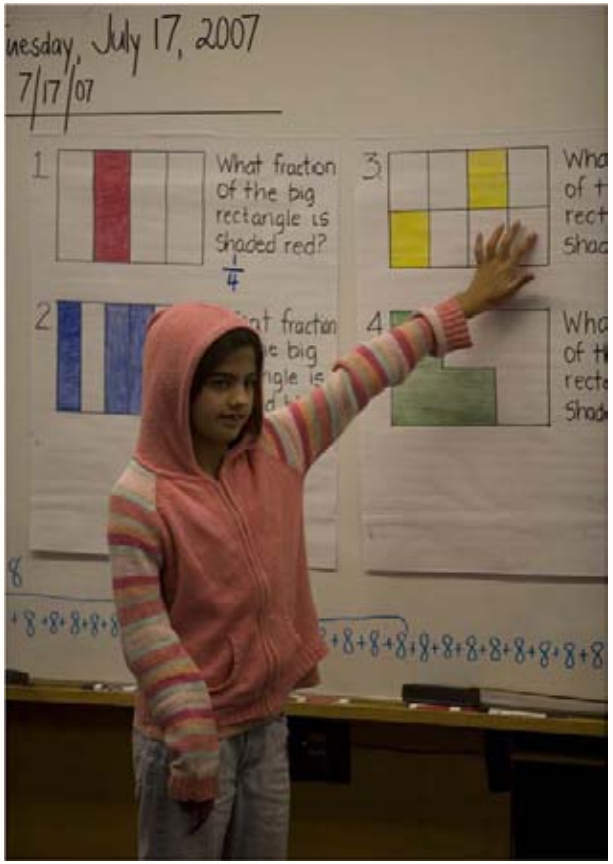
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1. The view from 20,000 feet

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The urgency

1. Enormous gaps in learning opportunities and disparities in achievement (within U.S. and in international comparisons)
2. Rapidly changing school population
3. Higher, more complex academic goals
4. High expectations for <u>all</u> students



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Teachers matter — a lot

- Persistent evidence that a large proportion of the variability in student achievement gains is due to the teacher
- So one obvious strategy for improving students' opportunities and learning is to ensure that they have teachers who are able to help them learn
  - ❑ Recruitment
  - ❑ Professional training

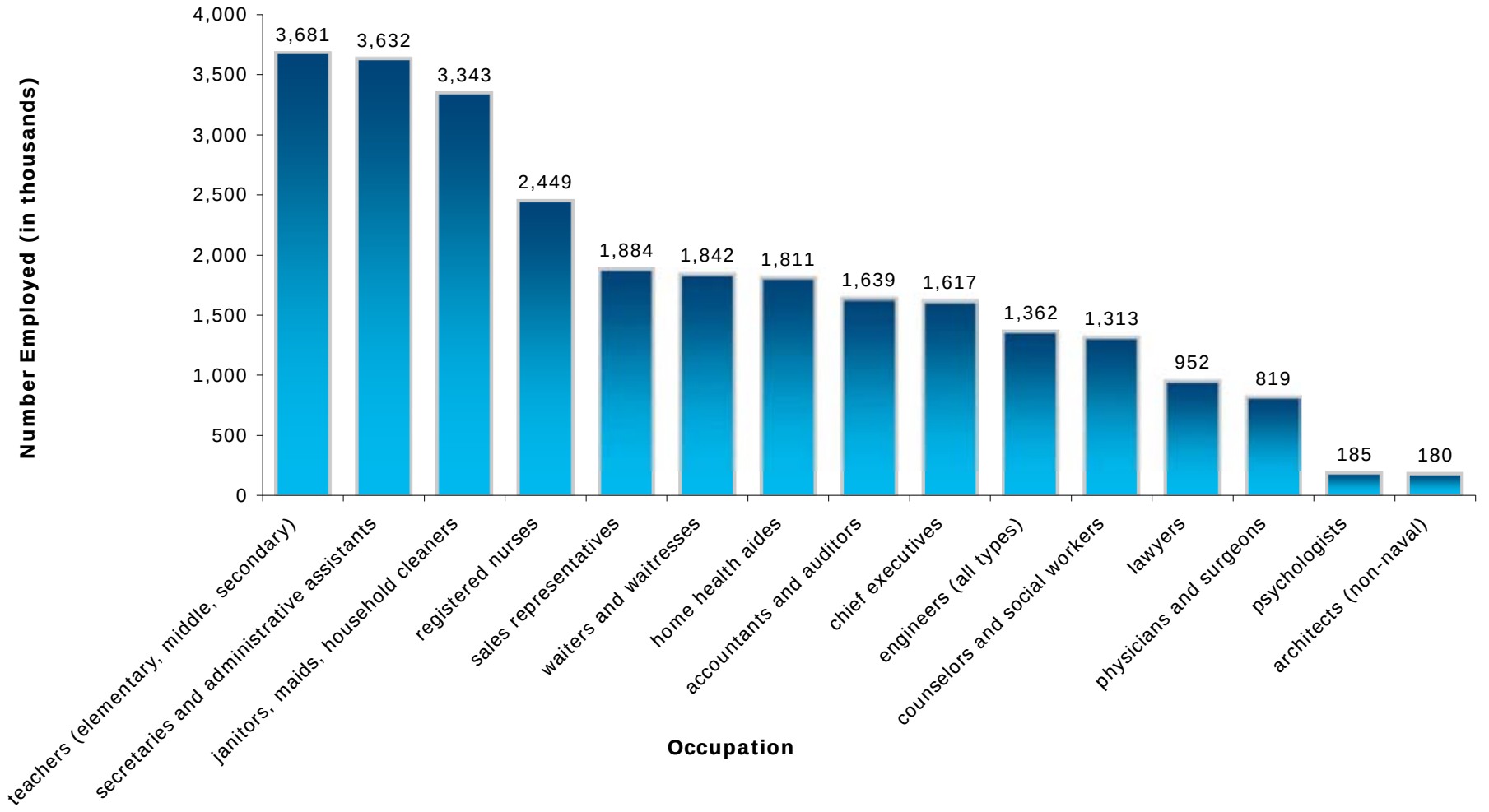
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Why the problem is one of professional training

- The scale of the need
- Teaching as unnatural, intricate, and deliberate work

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The realities of scale



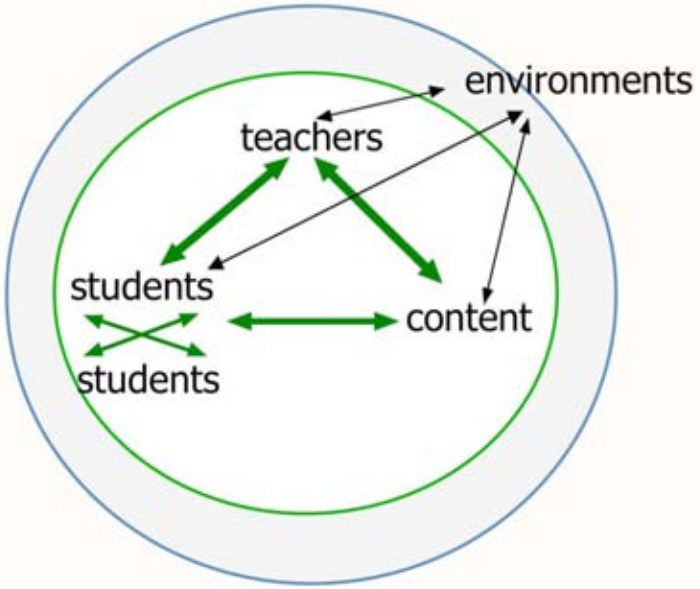
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2. What is skillful teaching?

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From “teachers” to “teaching”

- Teaching is what is co-produced by students and teachers in contexts, around specific content and curriculum
- Teachers are the ones uniquely responsible for increasing the probability that students learn important content and skills, and gain at least a school year’s worth each school year



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Teaching as unnatural work*

Common ways of being

- Asking questions to which you do not know the answers
- Telling and showing others, doing things for people
- Assuming you know what others mean
- Correcting and smoothing over mistakes
- Assuming others experience things as you do
- Liking/disliking people
- Being "yourself"

Ways of being in teaching

- Asking questions to which you often do know (at least part of) the answer
- Listening and watching others, help others do
- Probing others' ideas
- Provoking disequilibrium and error
- Not presuming shared identity; seeking to learn others' experiences and perspectives
- Seeing people more descriptively
- Being in professional role

*Jackson, 1986; Murray, 1999

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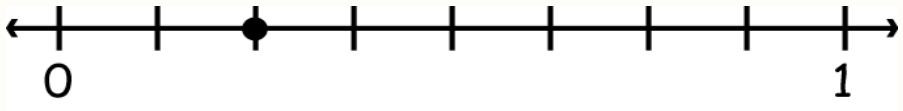
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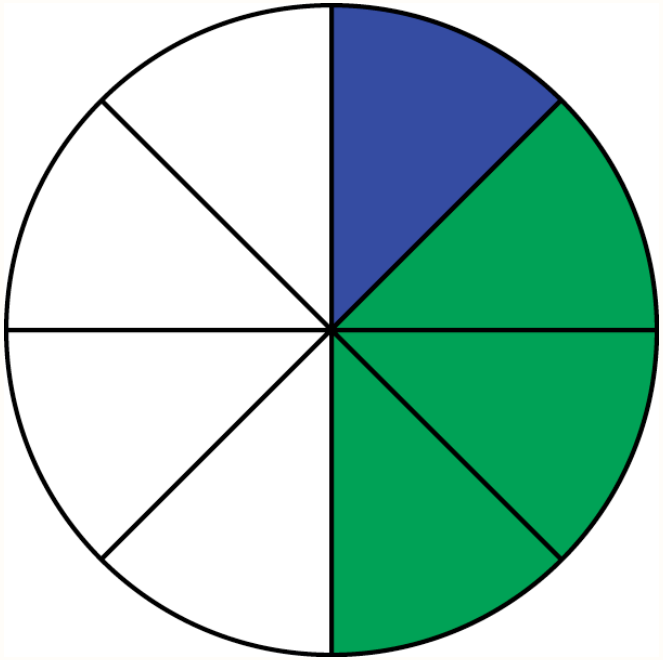
Let’s land on the ground . . .

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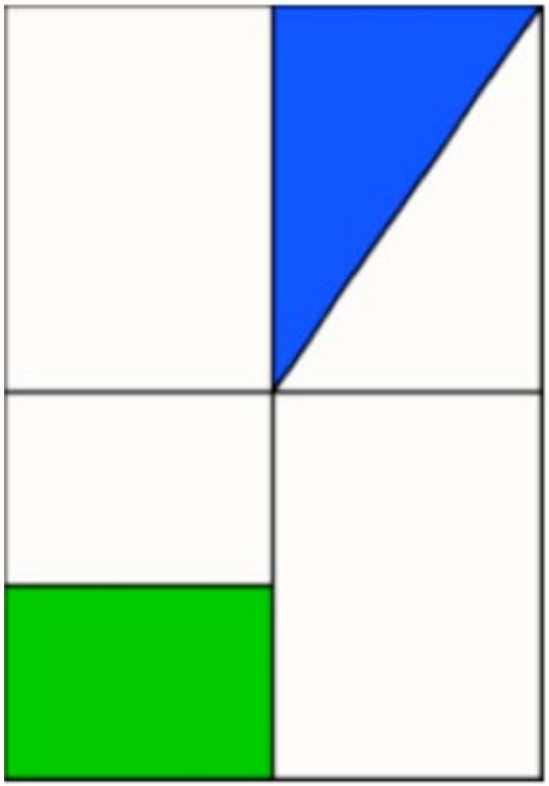
How are fractions typically taught at the upper elementary level?

What difficulties do students frequently have?





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What fraction of the big rectangle is shaded blue?

What fraction of the big rectangle is shaded green?

What fraction of the big rectangle is shaded altogether?

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Context for videoclip

- Intensive summer "turnaround" program for struggling upper elementary students (math)
- Laboratory for professionals' learning and research on "turnaround" instruction
- Focus on integrating concerns for equity with attention to the content

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Key practices of teaching to enable achievement for all students

1. Expecting and enabling complex work of each student
2. Coordinating subject-specific, school, and students' language
3. Using "real world" connections with sensitivity to students' funds of knowledge and to the integrity of the content
4. Creating a respectful academically-focused learning environment

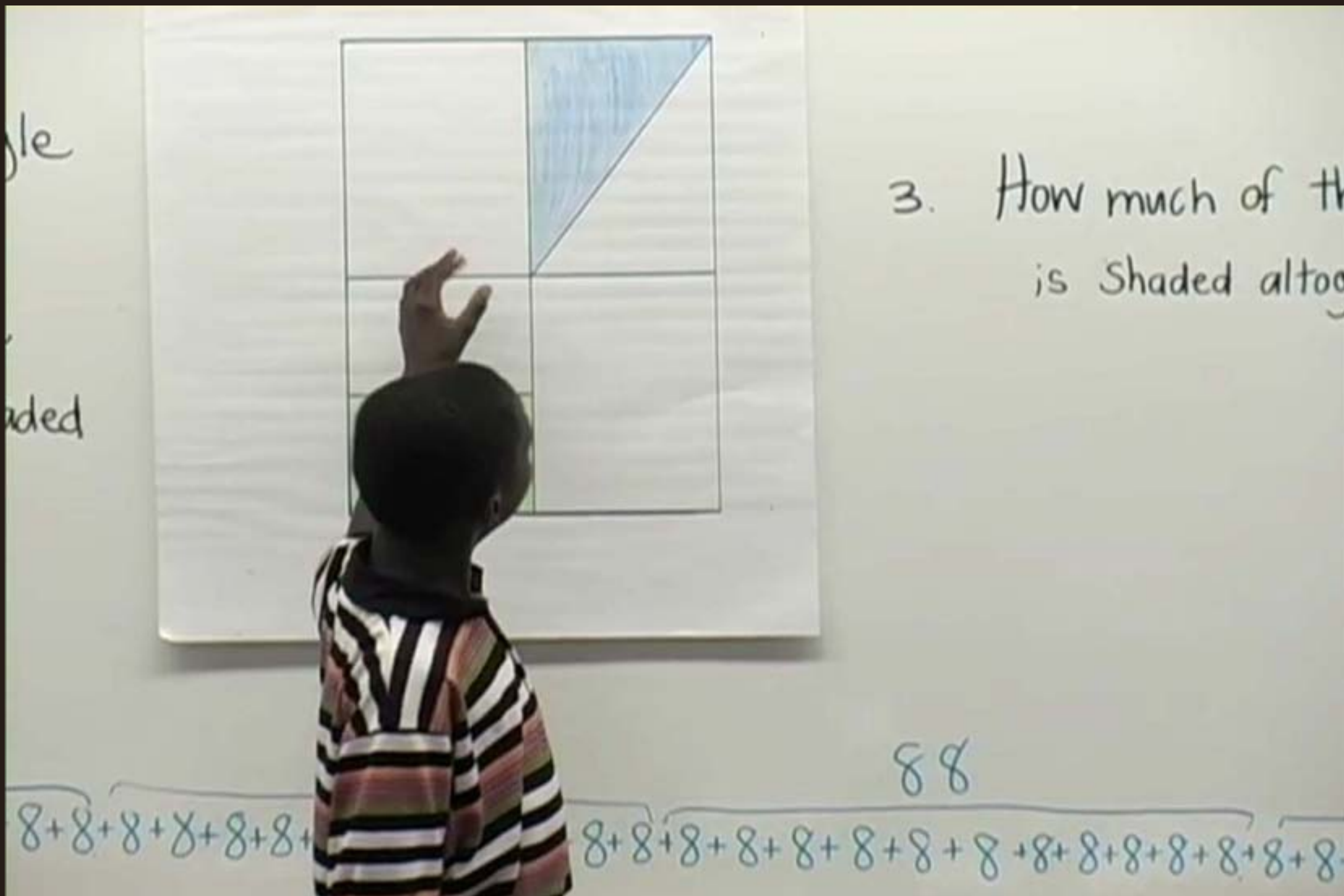
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Teaching as intricate and deliberate work

1. "Off camera": Before this episode
2. During these 5 minutes

What are some specific tasks required in order to teach this segment?

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Teaching as intricate and deliberate work

"Off camera": Before this episode

1. Learn about individual children and what they know, care about, are worried about, can do, etc.
2. Establish the environment to manage behavior
3. Teach intellectual habits (e.g., drawing, speaking to peers, knowing and being able to choose and make different kinds of mathematical moves)
4. Choose the specific problem: Why that diagram? Why that wording? Why the three specific questions?

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During these 5 minutes

00:00—Open the discussion: encourage participation by more students; establish expectation for explanation; use wait time; choose whom to call on; call on that child.

00:26—Mamadou gives answer of ½. Ask Mamadou to explain his reasoning; make sure other students can hear and are listening; interpret Mamadou's explanation; recognize relationship to key mathematical idea; determine how to respond (whether to take up, whether to clarify question, whether to call on different student).

00:47—Ask Mamadou to come to the board and explain using the diagram. Orient class toward Mamadou's explanation: get student to repeat what Mamadou said without explaining the error; comment about listening carefully; focus students on understanding reasoning.

01:37—Mamadou uses diagram to explain his answer. Invoke the working definition of fractions: ask Mamadou what he is calling the whole, how many equal parts, and how many are shaded.

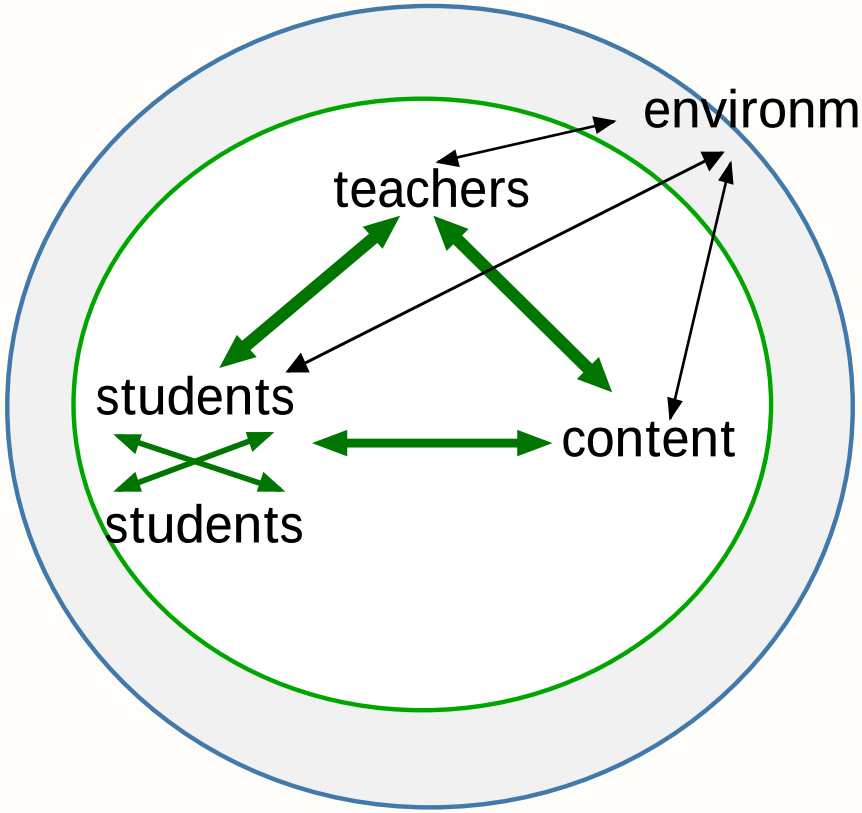
02:26—Check class' understanding and manage risk of losing rest of class: call on student to explain Mamadou's solution; trace whole on diagram; establish correctness of Mamadou's answer given his selection of the whole.

03:00—Clarify the whole in the original question. Validate Mamadou's work, while establishing that the problem is asking something different. Ask student to read question and show on the diagram what is meant by "big rectangle"; ask Mamadou if he is watching; restate question and trace whole on a new copy of diagram.

04:06—Ask Mamadou to explain the difference between this question and the one he answered. Decide how to handle language "whole square" and "half the rectangle." Elicit answer to original question.

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Teaching as unnatural, intricate, and deliberate work



- Instruction as the "black box" of interactions among students, teachers, content, technology and materials
- Requires lots of complex coordination

Cohen, Raudenbush, & Ball (2003); Lampert (2001); Lee (2007).

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We lack a reliable system to prepare professionals for practice

- A curriculum off-center, emphasizing knowledge and beliefs rather than practice
- Field experience often focused more on reflection than on development of actual skill and judgment
- Assessments that do not appraise professional effectiveness
- Inappropriate subject matter preparation
- Inadequate preparation for diversity of U.S. classrooms

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Would we do this in any other occupation or profession?

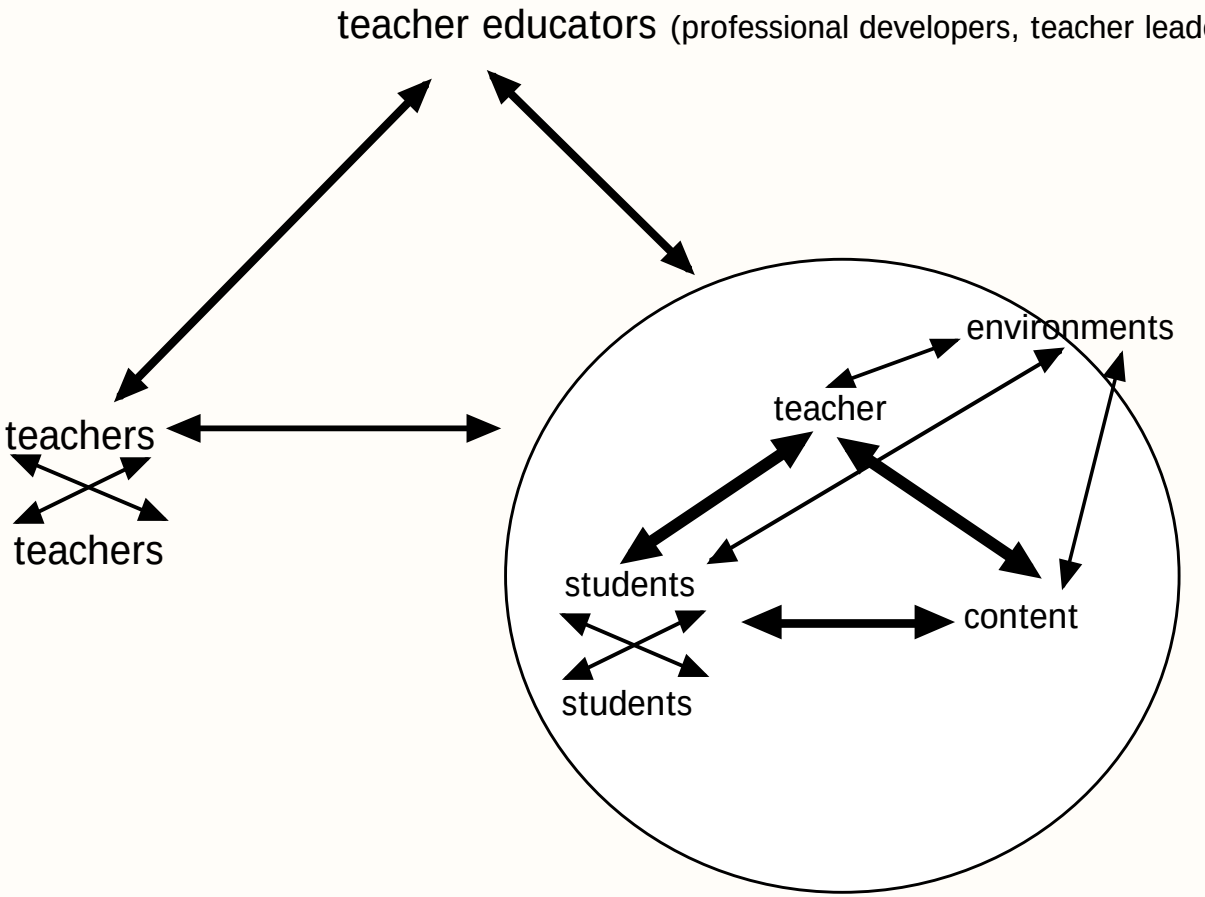
- Put untrained people to work, and in settings where skillful performance is most needed
- Allow standards of good practice to vary by income, race, or geography
- Believe that skillful performance depends on being smart and having common sense

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3. Teaching practice: Essential to getting skillful teaching in every classroom

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Teaching practice as the content of teacher education



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Context for the videoclip

- Intern teacher in a one-year training program
- Teacher educator and interns rehearsing and closely preparing before practicing with students:
  - Learning to talk about and read a book
  - Practicing articulating and integrating different instructional goals

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Performing instructional moves:
Rehearsing reading aloud

1. Word study:

   wind — wind

   (whined)

2. Setting up reading with specific guiding questions
3. Anticipating and providing directions
4. Using one's voice, writing on clipboard



(Lampert & Scott, 2007)

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Teaching practice

1. Outside the classroom (but still "in practice")
2. Real pieces of the work
3. Roles of colleagues and of the teacher developer
4. Subject-matter focused

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CONCLUDING THOUGHTS

What are the challenges —and the resources — for making teacher development more detailed and more centered in and on practice?

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Challenges of centering teacher education on practice

1. Lack of an adequate knowledge base about teaching practice
   - Inadequate language (in English)
   - Difficulty parsing the work into basic elements
2. Problem of expertise and tacit knowledge
3. Widely held view of teaching as uncertain, artistic, and unable to be specified
   - Resistance to seeing teaching as high-precision work, requiring high levels of skill
   - View of detail as "prescriptive" and as de-skilling professional work
4. Lack of people prepared to teach practice
   - Unspecified professional group, with no preparation for the work
5. No common K-12 curriculum in the U.S. and lack of agreement about what to make core

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Resources for centering teacher education in practice

- Our past history of microteaching and competency-based teacher education
  - Analyze similarities and differences
  - Integrate subject matter knowledge for teaching, skills, discretionary adaptation and judgment
- Progress made on content knowledge for teaching
- Other professions (Grossman)
  - Developing an agreed-upon curriculum of practice
  - Broadening idea of "clinical" and ways to structure and support it
  - Attention to relational work

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In Praise of Detailed Teacher Training

- We urgently need to improve all students' opportunities and learning.
- This requires skillful teaching.
- Teaching is intricate work, and not natural, and needs to be learned and, hence, taught.
- Seeing teaching as skilled, high-precision work, that is not a matter of personal style and preference, is to acknowledge its professional nature, not to repudiate its "creativity."
- We need a reliable system of supporting many ordinary people to carry out expert practice.

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THANK YOU!

Slides will be available
at Deborah Ball's website

(Google "Deborah Ball")

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