TEACHING AS PROFESSIONAL WORK
WHAT IS (MATHEMATICALLY AND PEDAGOGICALLY SKILLFUL) TEACHING?
WHAT IS TEACHING?
How many different three-digit numbers can you make using the digits 4, 5, and 6, and using each digit only once? Show all the three-digit numbers that you found. How do you know that you found them all?
Okay. I'm going to ask you a surprising question. Not the question you think I'm going to ask you probably, so listen up.
WHAT DOES SKILLFUL TEACHING ENTAIL?

- Knowing mathematics in ways that go beyond knowing and doing it yourself
- Being able to hear and understand learners’ thinking
- Being able to enact timely specific instructional practices to support learners’ mathematical growth
WHAT IS THE QUOTIENT OF \( \frac{5}{6} \div \frac{1}{3} \)?
WHAT NUMBER DOES THE ORANGE ARROW POINT TO?
A FEW SERIOUS FACTS ABOUT EQUITY, SCALE, AND QUALITY

- 51% of the 74,000,000 people under the age of 18 are youth of color, while only 15% of the teachers are people of color.
- Gaps in school-based opportunities associated with race and class have widened over the last 50 years.
- There are 50,000,000 school-age children and 3.7 million teachers.
- The U.S. does not have a professional system for preparing, licensing, or improving the quality of teaching.
EARLY CAREER TEACHING ON THE RISE

**Teacher Experience as Share of Workforce**

- **2007-2008**: Mode: 1 year of experience.

EARLY CAREER TEACHING IS ON AVERAGE LESS EFFECTIVE

PREDOMINANT APPROACHES TO “QUALITY TEACHING”

- Recruitment, raise selectivity
- Residency and induction programs
- Teacher evaluation (concerns for ineffective teaching)
- Small, local innovations

WHAT IS NOTABLY MISSING?

- A broad strategy for preparing responsible beginners
EXAMPLES OF HIGH-LEVERAGE PRACTICES

- Explaining ideas or skills (including content, practices, and strategies) using modeling, representations, examples
- Leading a group discussion
- Eliciting and interpreting individual students’ thinking
- Diagnosing particular common patterns of student thinking and development
- Establishing and maintaining a productive learning environment by implementing organizational routines and strategies and giving directions
- Learning about students’ cultural, religious, family, intellectual, and personal experiences and resources
- Knowing and managing one’s cultural and personal resources and practices with sensitivity to context
- Selecting and modifying tasks and texts for a specific learning goal
- Checking student understanding during lessons
- Providing oral and written feedback to students
- Communicating about a student with a parent or guardian
PRACTICING DEFIBRILLATION
A COMMON PROFESSIONAL CURRICULUM

1. A professional practice curriculum that focuses on high-leverage practices of teaching and core mathematical knowledge essential for responsible beginning practice

2. Training and structuring experience to prepare novices to carry out these practices

3. Performance assessments and require them for entry to teaching
REFINE ENTRY STANDARDS BASED ON PROFESSIONAL CONSIDERATIONS, AND ON PROFESSIONAL PRACTICE

CONSIDER THE RESOURCES CRUCIAL FOR LEARNING TO TEACH

1. What are the resources, experiences, and skills that are most likely to be crucial in success in learning to teach?
2. How could evidence of these be obtained or assessed?

SPECIFY THE THRESHOLD FOR ENTRY TO THE CLASSROOM

1. What are the essential skills, knowledge, and qualities for responsible first-year practice?
2. How could evidence of these be obtained or assessed?
A SYSTEM FOR THE DEVELOPMENT OF PROFESSIONAL, ADVANCED, AND SPECIALIZED LEVELS OF TEACHING PRACTICE

1. A staged series of licenses based on levels of skill and expertise: initial; continuing (renewal of initial); professional (to be renewed periodically); advanced (Board-certified) practice; various Board specializations

2. Different complexities of teaching assignment depending on licensure level

3. Professional systems of infrastructure for support, development, and advancement
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
IT WON’T BE EASY.

1. The scale of the enterprise is vast and the U.S. has weak educational infrastructure.

2. It will take a movement to build a rigorous system of professional training for the responsibility of teaching our nation’s youth, in order to achieve fairness in common access to skilled teaching.

3. It focuses on teaching, not teachers. It focuses on building capacity, not finding talent and firing.

4. It is not the “American way”—it is detailed (even prescriptive), not individually discretionary, common.
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