TEACHER LICENSURE:
IN THE INTEREST OF CHILDREN

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OUR WORLD, AND OUR FUTURE

- There are 2,600,000,000 people under the age of 18 in our world. 1,900,000,000 are in schools.
- Almost 40% of the world’s population.

How can we educate so that people stop hating and killing one another?

Adapted from Maisha Winn, inspired by Ihab Hassan
① SETTING THE STAGE: WHY IS THIS TOPIC SO IMPORTANT?
A VISIT TO A CLASSROOM

- Grade 3 class, 8-year-olds
- multi-lingual and multi-cultural
- Middle of school year, very transient school

Shea:

“I was just thinking about 6 . . . it can be an odd number, too.”
WHAT TO WATCH

1. What might the students be learning?
2. What might the teacher be teaching?
3. What is your evidence?

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VIDEO:
WHAT IS BEING LEARNED AND TAUGHT?

This video and additional supporting materials are available online here.

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DEVELOPING PEOPLE FOR THE 21ST CENTURY

Teaching is powerful.

*Here are some examples:*

- Differences in teachers account for 12%–14% of total variability in children’s mathematical achievement in grades 1, 2, and 3.
- Children assigned to three effective teachers in a row score at the 83rd percentile in math at the end of 5th grade; children assigned to three ineffective teachers in a row score only at the 29th percentile.
- The cumulative effects of being taught by a highly effective teacher can substantially reduce differences in student achievement that are due to family background.
DEVELOPING PEOPLE FOR THE 21ST CENTURY

Teaching is powerful in other ways, too.

*Here are other examples:*

• Teachers can help orient students toward other people and to learn to listen to and respect others.

• Teachers can help students know they are valuable, competent, and capable.

• Teachers can create environments where different people make knowledge together.
WHAT IS “INSTRUCTION”? 

Instruction is co-constructed

- ... in broad socio-political, historical, economic, cultural, community, family environments

- ... through the interpretations and interactions of teachers, students, and “content”

Cohen, Raudenbush, and Ball (2003)
WHAT IS THE WORK OF TEACHING?

Taking responsibility for deliberately maximizing the quality of these interactions . . .

- . . . in ways that maximize the probability that students learn
- . . . worthwhile content and skills
- . . . and that advance a just society
ENTRY-LEVEL TEACHING AS A CRITICAL POLICY ISSUE

- More U.S. children have a teacher with fewer than five years of experience than a teacher with any other number of years of experience.
- Most beginning teachers say they are underprepared for teaching. Data also confirm that students learn less.
- Distribution of beginning teaching is concentrated disproportionately in low-income and high-minority schools.
WHAT IS A LICENSE?

license:
a permission granted by competent authority to engage in an occupation, business, or in an activity otherwise unlawful; official permission to engage in a regulated activity
EVERYDAY VERSUS “PROFESSIONAL” TEACHING*

- **Everyday teaching:**
  - Helping your child learn to tie her shoes
  - Showing your uncle how to make a Skype call
  - Your friend teaching you some cultural norms when you visit her country

- **Professional teaching:**
  - Having specialized skills that can reliably help students learn
  - Being able to do that for diverse students
  - Orienting students’ learning to curriculum expectations

*Cohen, 2011; *Teaching Practice and Its Predicaments*
WHAT SHOULD A TEACHING LICENSE MEAN?

Ensure that the beginning teacher meets a professional standard of safe practice.
WHAT IS “SAFE” PRACTICE?

What does it mean to “meet” this standard?

Whose safety?

What is a “professional standard”?
② WHAT DOES PREPARATION FOR PROFESSIONAL PRACTICE ENTAIL?

“PRACTICE-BASED” TEACHER EDUCATION
PREPARATION FOR RESPONSIBLE PROFESSIONAL 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

3. **Performance assessment of individual competence** before allowing independent practice
FOCUSING THE TEACHER EDUCATION CURRICULUM TO PREPARE NOVICES FOR THE WORK OF TEACHING
HIGH-LEVERAGE PRACTICES

Things teachers DO—

- All the time!
- That leverage students’ learning
- That put young people at risk when done badly
- That create equitable access to learning rigorous content and skills

- That can be named at a “grain-size” that is useful for learning to do the work of teaching
- That can be illustrated, unpacked, and practiced
- That support the development of more advanced teaching skills
- That can be assessed
EXAMPLES OF HIGH-LEVERAGE PRACTICES

- Explaining and modeling content, practices, and strategies
- Leading a group discussion
- Eliciting and interpreting students’ thinking
- Establishing norms and routines for classroom discourse and work
- Diagnosing 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
- Checking student understanding during and at the conclusion of lessons
- Providing oral and written feedback to students on their work
- Setting long- and short-term learning goals for students
- Talking about a student with parents or caregivers

1TeachingWorks and the University of Michigan School of Education
TOWARD PRACTICE-BASED TEACHER EDUCATION

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

3. Performance assessment of individual competence before allowing independent practice
ASSESSING PRACTICE

1. Need to assess actual practice of teaching
   - Not only: proxies for practice (e.g., academic marks, written reflections on teaching lessons)

2. Create fair ways to assess novice teachers’ practice
   - Not under completely different conditions
   - With clear standards for practice that can be seen and appraised
WHAT DO “CLEARLY SPECIFIED PROFESSIONAL STANDARDS” REQUIRE?

- Identification of core practices, including judging, ways of knowing and reasoning
- Decomposition of core practices into fundamental organic elements that can be observed
- Language for naming both practices and their decomposition
ELICITING AND INTERPRETING AN INDIVIDUAL STUDENT’S THINKING*

Description of the specific practice:

- Teachers pose questions or tasks that provoke or allow students to share their thinking about specific academic content. They do this to: understand student thinking, including novel points of view, new ideas, or misconceptions; guide instructional decisions; and surface ideas that will benefit other students.

- To do this effectively, a teacher draws out a student’s thinking through carefully chosen questions and tasks and considers and checks alternative interpretations of the student’s ideas and methods.

*One of TeachingWorks’ 19 high-leverage practices
THE SOUL OF ELICITING

“When we are curious about a child’s words and our responses to those words, the child feels respected. The child is respected. ‘What are these ideas I have that are so interesting to the teacher? I must be somebody with good ideas’.”

- Vivian Gussin Paley, On Listening to What the Children Say (1986)
**LEARNING TO TEACH SKILLFULLY CANNOT BE LEFT TO CHANCE**

### WHAT NOVICES NEED

- Naming and understanding purpose of specific teaching practices, moves, tasks
- Seeing, noticing these in action
- Practicing them in carefully sequenced ways

### WHAT IS NEEDED TO TEACH NOVICES

- Decomposition
- Representation
- Approximation

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1Grossman, Hammerness, & McDonald, 2009
WHAT IS A DECOMPOSITION?

A careful unpacking of a teaching practice into chunks or elements that can be taught helpfully to novices.

This is what we do when we teach anything—writing an introductory paragraph, using primary sources, setting up an experiment!

But often have not done in teaching teaching…
Formulating questions designed to elicit and probe student thinking

Posing questions

Developing additional questions

Making sense of what students know and can do

Listening to and interpreting

Children

Content & practices
Listening to and interpreting

Developing additional questions

Posing questions

Children

Making sense of what students know and can do

Formulating questions designed to elicit and probe student thinking

• Developing general, open-ended questions
• Choosing a focus
• Developing hypotheses to test

Content & practices
Listening to and interpreting

Formulating questions designed to elicit and probe student thinking

Posing questions

Developing additional questions

Making sense of what students know and can do

Content & practices

• Delivering questions in ways that are sensitive to how students might hear and respond to the question

Children
Formulating questions designed to elicit and probe student thinking

- Giving students time to speak
- Paying close attention to what the student says
- Noticing features of the student’s thinking

Listening to and interpreting

Posing questions

Developing additional questions

Making sense of what students know and can do

Content & practices
Listening to and interpreting

- Identifying elements that the student has said little about
- Identifying interesting aspects
- Focusing on a strategic aspect of student thinking
- Using this information to formulate questions

Formulating questions designed to elicit and probe student thinking

Posing questions

Developing additional questions

Making sense of what students know and can do

Content & practices
Formulating questions designed to elicit and probe student thinking

Posing questions

Developing additional questions

Listening to and interpreting

Children

• Identifying evidence of student understanding
• Interpreting such evidence in light of disciplinary knowledge

Making sense of what students know and can do

Content & practices
VIDEO: ELICITING A STUDENT’S THINKING

What are the features of the teacher’s work in this segment?
③ WHAT IS THE NATIONAL OBSERVATIONAL TEACHING EXAMINATION (NOTE)?
WHAT IS NOTE?

- A suite of **on-demand performance assessments** that measure teaching candidates’ performance, including their level of skill, knowledge, and judgment, with a specific set of high-leverage practices and content.
- Developed by TeachingWorks and the Education Testing Service.
- Currently being field-tested in states across the U.S.
- Slated to be ready for states to adopt from ETS by 2018.
TESTS FOR NEW TEACHERS
THAT FOCUS ON:

Content Knowledge for Teaching (CKT)

The specialized knowledge of content that a teacher uses in the work of teaching

High-Leverage Practices (HLPs)

Basic elements of the work of teaching that are crucial for student learning
PRACTICES FOR TEACHING CONTENT: THREE HIGH-LEVERAGE PRACTICES

1. Modeling and explaining content
   - Thinking aloud and demonstrating
   - Narrating the work to make strategies and processes explicit

2. Leading classroom discussion
   - Launching the discussion
   - Supporting students in doing the work of the discussion
   - Coordinating student contributions and moving the discussion in a productive direction
   - Bringing the discussion to a productive close

3. Eliciting and interpreting student thinking
   - Posing questions and tasks
   - Analyzing student responses
NOTE EXAMPLE #1
LEADING CLASSROOM DISCUSSION
DESCRIPTION: LEADING A WHOLE-CLASS DISCUSSION

- In a whole-class discussion, the teacher and all of the students work on specific content together, using one another’s ideas as resources.
- The purposes of a discussion are to build collective knowledge and capability in relation to specific instructional goals and to allow students to practice listening, speaking, and interpreting.
- In instructionally productive discussions, the teacher and a wide range of students contribute orally, listen actively, and respond to and learn from others’ contributions.
LEADING A WHOLE CLASS DISCUSSION

Grade level: First grade
Content area: English language arts
Task: The candidate will facilitate a small group discussion aimed at helping students develop their ability to make and support inferences.

- Elicit thinking from all students by asking targeted questions about the main character in the book. What is he like as a person?
- Coordinate students’ ideas and steer the discussion toward the learning goal.
- Represent the content accurately, either verbally or visually, as you would do with typical first graders.
- Conclude the discussion by summarizing the key ideas covered during the discussion.

Materials: Pet Show! by Ezra Jack Keats
Performance time: 15 minutes.
Mursion simulated classroom
VIDEO OF NOTE EXAMPLE
NOTE EXAMPLE #2
MODELING AND EXPLAINING CORE CONTENT
HOW CAN “POSITIVE” AND “NEGATIVE” CUBES REPRESENT SUBTRACTION OF INTEGERS?
(-1) - (-3)
-1 - (-3)
-1 - (-3)
WHAT IS INVOLVED IN USING THE CUBE MODEL TO EXPLAIN AND MODEL INTEGER ARITHMETIC?

- **Content knowledge:**
  - Interpretation of subtraction as “taking away” (not as difference)
  - Adding opposites (a, -a) equals 0

- **Language to explain these ideas**

- **Skill in using model so that others can follow and can see the correspondence between the model and the concept.**
HIGH-LEVERAGE CONTENT FOR CKT ASSESSMENT

BASIC PRINCIPLES

- Fundamental ideas and concepts: which topics of the curriculum?
- Fundamental skills and practices
- Basic learning practices for successful study of mathematics

And all of these “known” in ways that go beyond one’s own personal capability
CONTENT KNOWLEDGE FOR TEACHING (CKT)

Subject Matter Knowledge

- Common Content Knowledge (CCK)
- Horizon Content Knowledge (HCK)

Pedagogical Content Knowledge

- Specialized Content Knowledge (SCK)
- Knowledge of Content and Students (KCS)
- Knowledge of Content and Teaching (KCT)
- Knowledge of Content and Curriculum (KCC)
COMMON CONTENT KNOWLEDGE (CCK)

- What is a key theme in Zola Neale Hurston’s *Their Eyes Were Watching God*?
- What is (-1) – (-3)?
- Where do green plants get nutrition?
- What is “voting”?
- Kick a ball to pass to a player slightly ahead of you.
What is a “theme” of a text? How is it different from the “main idea”?

Explain (-1) – (-3) on a number line in a way that explains what it means, not just show the answer.

Explain how plants get their nutrition.

Choose two contrasting examples of reaching a decision through voting that highlight what it is for.

What are the key parts/skills of passing a soccer ball?
What is a good way to explain what a “theme” is to junior high school students? What would be a good text to use?

Choose a sequence of examples to help students progress in understanding how to add and subtract integers using the number line.

How would you model passing a soccer ball so that a group of six-year-olds could understand how to try it?

Choose two contrasting examples of reaching a decision through voting that highlight what it is for.
④ WHAT ARE THE CHALLENGES IN PUTTING STUDENTS’ INTEREST FIRST IN BUILDING NEW APPROACHES TO LICENSURE?
CHALLENGES TO DEVELOPING PRACTICE-BASED ASSESSMENTS OF TEACHING

- Lack of agreement about what is the threshold for entry to responsible first-year teaching practice
- Attuning to contexts of teaching (e.g., diversity of students and communities) while also creating common thresholds
- Lack of common language and resistance to specification of teaching (“too technical”)
- Strong belief in intellectual evidence for teaching (e.g., reflection, content knowledge, scores)
THANK YOU!

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