RAISING THE QUALITY OF BEGINNING TEACHING
AN IMPERATIVE FOR OUR NATION AND ITS FUTURE

Deborah Loewenberg Ball
@deborah_ball
Thursday, November 3, 2016
Towson University • Towson, MD
RAISING UP QUALITY TEACHING AS THE #1 POLICY IMPERATIVE OF OUR TIME

1. 50,000,000 young people in our nation’s schools
2. Schooling as a key lever for individual opportunity and for the future of a democratic and just society
3. Evidence of the power of teaching
4. Huge gap between who the children are and who the teachers are
5. No collective sense of responsibility for teaching quality
6. Overwhelming lack of public respect for the work of teaching

→ This is a public policy problem of vital moral, practical, and political urgency.

November 3, 2016
THE MORAL URGENCY, 
BY THE NUMBERS

1400

1/3

1.5 million

50

15%  45%  11%

78,000,000

26%  9%

November 3, 2016
“Teaching has always come naturally to me.”

“I have learned teaching from experience; I like to pass on what I know to student teachers.”

“Teaching requires a lot of improvisation and can’t be specified in advance.”

“I have developed a style of teaching that works for me.”
WHAT ARE THEY TALKING ABOUT?

“Teaching has always come naturally to me.”

“I have learned teaching from experience; I like to pass on what I know to student teachers.”

“Teaching requires a lot of improvisation and can’t be specified in advance.”

“I have developed a style of teaching that works for me.”
THEORY OF ACTION: HOW TO MAKE THE VISION A REALITY

What is teaching and how does it work?
THEORY OF ACTION: HOW TO MAKE THE VISION A REALITY

What is involved in improving the quality of initial preparation?
WHY “WORK” OF TEACHING”?

1. To focus our attention on what teachers DO and to distinguish this from other features of classrooms, such as curriculum.

But what about small group work, or inquiry-based learning, or personalized learning? Aren’t those what teachers DO?
WHY “WORK” OF TEACHING”?

1. To focus our attention on what teachers DO and to distinguish this from other features of classrooms, such as curriculum

2. To honor the effortful and deliberate nature of teaching and not to leave it invisible, implicit, and taken for granted
A LOOK AT THE WORK OF TEACHING

3.NFA.1: Understand a fraction 1/b as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a parts of size 1/b.

3.NFA.1 and 2: Understand a fraction as a number on the number line; represent fractions on a number line diagram.

MP.1. Make sense of problems and persevere in solving them.

MP.3. Make and critique mathematical arguments.
What number does the orange arrow point to? Explain how you figured it out.
VIDEO: ANIYAH’S ANSWER AND REASONING

Teacher: Listen closely and see what you think about her reasoning and her answer.

This video and additional supporting materials are available online here.
What do Aniyah, Toni, Lakeya, and Dante know and what can they do?
WHAT DO MANY “HEAR” IN ANIYAH AND TONI?

ANIYAH
- She has the wrong answer: 1/7

TONI
- She is playing with her hair and trying to get attention
- She is trying to embarrass Aniyah
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
THE URGENCY, AND OUR SPECIAL ROLE
THE URGENCY, AND OUR SPECIAL ROLE

Skillful teaching is powerful. Unskillful teaching is dangerous.

Many, many children are being taught by underprepared beginning teachers.

Skillful teaching can be taught and learned.
PolicyMakers’ and Others’ Ideas About What to Do

The big problems with the Obama administration’s new teacher-education regulations

By Valerie Strauss October 24

Education Secretary John B. King Jr. speaks during the daily briefing at the White House on Sept. 29. (Susan Walsh/Associated Press)

October 24, 2016
http://wpo.st/WuRA2
SKILLFUL TEACHING IS NOT NATURAL

- What does the actual work involve?
- How can it be unpacked and explicitly taught to novices?
HIGH-LEVERAGE PRACTICES

Things teachers DO—

- All the time!
- That leverage students’ learning and flourishing
- That put young people at risk when done badly
- That create equitable access to ambitious content
- That can be named at a grain-size that is useful for learning to do the work
- That can be represented, decomposed, and approximated
- That can be taught to beginners, and support the development of more advanced practice later
- 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
PURPOSE OF THE HIGH-LEVERAGE PRACTICES

The high-leverage practices:

1. Decompose the work of teaching into **learnable chunks** that support learning to do that work (and teaching it to novices).

2. Intertwine central aspects of instructional practice:
   - developing students’ academic and social-emotional skills;
   - valuing diversity (e.g., learning and using students’ funds of knowledge and resources) and promoting and advancing equity and inclusion (e.g., building respectful classroom communities, connecting with and also extending and supporting students’ possibilities, interests, and agency).
WE ALL KNOW HOW TO MULTIPLY!

\[ 49 \times 25 \]
BUT WE DON’T KNOW MULTIPLICATION WELL ENOUGH TO TEACH IT

(a) \[ \begin{array}{c}
49 \\
\times \ 25
\end{array} \]
\[ \begin{array}{c}
405 \\
108
\end{array} \]
\[ \begin{array}{c}
1485
\end{array} \]

(b) \[ \begin{array}{c}
49 \\
\times \ 25
\end{array} \]
\[ \begin{array}{c}
225 \\
100
\end{array} \]
\[ \begin{array}{c}
325
\end{array} \]

(c) \[ \begin{array}{c}
49 \\
\times \ 25
\end{array} \]
\[ \begin{array}{c}
1250 \\
25
\end{array} \]
\[ \begin{array}{c}
1275
\end{array} \]
CONTENT KNOWLEDGE FOR TEACHING (CKT)

Subject Matter Knowledge

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

Pedagogical Content Knowledge

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

- What is a key theme in Zola Neale Hurston’s *Their Eyes Were Watching God*?
- Put these fractions in order: 3/7, 5/6, 11/12, 6/14
- Where do green plants get nutrition?
- What is “voting”?
SPECIALIZED CONTENT KNOWLEDGE (SCK)

- What is a “theme” of a text? How is it different from the “main idea”?
- Explain what it means that the rational numbers are “infinitely dense” on a number line in a way that explains what that concept means.
- Explain what it means for there to be a 50% chance of rain.
- Choose two contrasting examples of reaching a decision through voting that highlight what voting is for.
PEDAGOGICAL CONTENT KNOWLEDGE

Knowledge of Content and Students (KCS)

- What are some typical difficulties that students have with understanding photosynthesis?
- What misconceptions do students often have about voting?
- What is difficult for students about the idea of “theme”?

Knowledge of Content and Teaching (KCT)

- Which representation would you use to introduce the meaning of subtraction of negative numbers? Why is “debt” not very effective?
- What is a simulation that would help students understand voting?
- What would be a good age-appropriate text to practice considering the notion of “theme”?

November 3, 2016

This work is licensed under a Creative Commons Attribution-Noncommercial-NoDerivatives 4.0 International License: https://creativecommons.org/licenses/by-nc-nd/4.0/
© 2016 Deborah Loewenberg Ball • School of Education • University of Michigan • Ann Arbor, MI 48109 • dball@umich.edu
STEPPING BACK TO CONSIDER THE PRACTICE OF TEACHER EDUCATION: WHAT DO TEACHER EDUCATORS NEED TO BE ABLE TO DO, AND TO KNOW AND CARE ABOUT?

- Practices that are critical to teaching teaching (high-leverage practices of teacher education)—e.g., giving feedback on teaching, decomposing and recomposing teaching practices
- Pedagogies (instructional activities or approaches)—e.g., using video, studying student work, rehearsals, modeling
- Knowledge of teaching for teaching (like CKT)—unpacked knowledge of teaching practice itself
ASSESSING PRACTICE

- Need to assess actual practice of teaching, not just written reports and reflections
- Create common assessments to assess candidates’ progress equitably on key knowledge, skills, and dispositions
because it was unique from what I have seen before. And I was wondering if you could, before we talk about your method,
ASSESSING: GIVING FEEDBACK, RESPONDING TO STUDENTS

1. Comment on Aniyah’s answer, highlighting her strengths (“assigning competence” [Cohen & Lotan; Featherstone, Crespo, et al.])

2. Explain responsively and precisely, in a way that responds to what Aniyah did.

What number does the orange arrow point to? ________________

Explain how you know: __________________________________________

________________________________________________________________

________________________________________________________________

________________________________________________________________

________________________________________________________________

________________________________________________________________
SCORING TOOL FOR ASSESSMENT
A MANDATE FOR US AS TEACHER PREPARATION PROFESSIONALS

- To exercise voice and agency
- To extend ourselves to develop ways to ensure that beginning teachers are ready for responsible practice in their first year
- To engage together in a renewed effort to hold ourselves accountable to preparing novice teachers who:
  - Are committed to the ethical imperatives of the profession, and to the power that teaching can leverage for students
  - Can act on these in ways that responsibly serve children and youth and that advance justice
CHALLENGES OF LEADING CHANGE TO RAISE THE QUALITY OF TEACHING

1. Deficit narratives about teachers and students and teacher preparation programs
2. Other pressures in the environment
   - Testing
   - Coverage
3. Academic freedom and professional independence
   - Resistance
   - Lack of respect for diversity
4. Support for professional learning to do new things
   - Emphasis on evaluation affects risk-taking
   - Is this really different? (“We do this already”)
   - Incentives and time
   - Lack of resources
5. What other challenges do you face? How can we support one another?
THANK YOU!

dball@umich.edu
@deborah_ball

Slides will be available on my website
deborahloewenbergball.com
(Google Deborah Ball)
Graphic on slides 6 and 7:

Image on slide 19:
“Haircut” by Flickr user I Should Be Folding Laundry
Licensed under a Creative Commons Attribution 2.0 Generic License
http://creativecommons.org/licenses/by/2.0/deed.en

Image on slide 19:
“20110916_171840” by Flickr user Team Massachusetts
Licensed under a Creative Commons Attribution 2.0 Generic License
http://creativecommons.org/licenses/by/2.0/deed.en
CREDITS

Image on slide 19:
“nursing_student” by Flickr user University of Missouri System
Licensed under a Creative Commons Attribution-NonCommercial-NoDerivs 2.0 Generic License
http://creativecommons.org/licenses/by-nc-nd/2.0/deed.en

Image on slide 19:
“almost forbidden territory....” by Flickr user Esthr
Licensed under a Creative Commons Attribution-NonCommercial 2.0 Generic License
http://creativecommons.org/licenses/by-nc/2.0/deed.en

Image on slide 19:
“Marielle Carving Francinaldo's Ear” by Flickr user ReSurge International
Licensed under a Creative Commons Attribution-NonCommercial-NoDerivs 2.0 Generic License
http://creativecommons.org/licenses/by-nc-nd/2.0/deed.en
Graphic on slide 26:

Image on slide 31:
© 2009 Stuart Isett. [www.isett.com](http://www.isett.com). All rights reserved. Used with special permission.