

Bringing it All Together: Informing Practice with Research

Supporting Effective & Systemic Assessment Use

Reidy Interactive Lecture Series

Karin Hess, Ed.D., Senior Associate

Some issues raised by our panel...

- **Data use** does not always translate to targeted teaching or a focus on who students are as learners and what they need
- **Assessment use** does not always lead to assessment literacy or instructional planning informed by student performance data
- **Curricular programs and local assessment “systems”** sometimes limit how we interpret, plan, teach, and assess standards
- **Roll-out/implementation supports & PD** are often uneven, incomplete, and/or non-inclusive
- **School & classroom culture** are closely tied to leadership support, staff collaboration/teaming, & communicating results
- **When these things occur...change is not systemic.**

4 Big Ideas

- Big Idea #1 – ***What is the Theory of Action?***
- Big Idea #2 – **Base assessment on a model of learning**
- Big Idea #3 - **Student Work Analysis**
- Big Idea # 4 - **Collaboration & Teaming**

- And **“a picture worth a thousand words”**

Big Idea #1 – *What is the Theory of Action?*

“Teachers ... consider where the lesson resides in the **larger learning trajectory**... The right learning target for today’s lesson builds upon the learning targets from previous lessons in the unit and connects to learning targets in future lessons to advance student understanding of important skills and concepts.”


Moss & Brookhart, *Learning Targets*, p.2 (2012), ASCD

Learning Targets (continued)

“When educators share learning targets throughout today’s lesson (teacher-student), they reframe what counts as evidence of **expert teaching** and **meaningful learning**” (Moss & Brookhart, 2012, p. 9).

“Guided by learning targets, teachers partner with their students **during a formative learning cycle** to gather and apply strong evidence of student learning to raise achievement” (Moss & Brookhart, 2009).

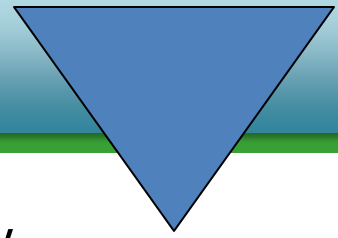
Big Idea #2 – Base assessment on a model of learning

- Planning & Modifying Curriculum/Instruction
- Developing Meaningful Assessments – formative + interim + summative & knowing how they relate to each other
- Monitoring Progress
 - Mastery of Specific Benchmark Concepts & Skills over time
 - Novice  Expert Performance: increased sophistication & deeper understanding

Standards versus Learning (e.g., trajectories)

- **Standards** identify **endpoints** – grade level targets for learning. These can only be thought of as “curricular progressions” across grades (not based in research about how student learning develops over time)
- **Standards are not prescriptive** – they do not indicate or suggest an “optimal” instructional sequencing plan (especially within grade levels)
- **Standards** do not provide guidance about how different standards might be linked for instruction ----- or how to build expertise (transfer) when learning


Think: "Assessment Triangle"



- **COGNITION:** Presents a model of how students represent knowledge and develop competence in a subject domain;
- **OBSERVATION:** Guides development of tasks/situations that allow one to observe student performance; and
- **INTERPRETATION:** Offers an interpretation method of drawing inferences from the performance evidence.

[Knowing what Students Know, 2001]

Big Idea #3 - Student Work Analysis

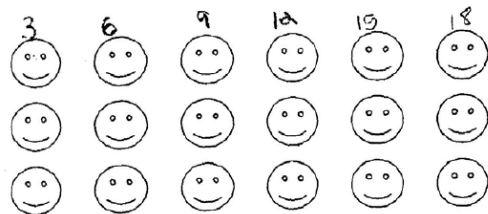
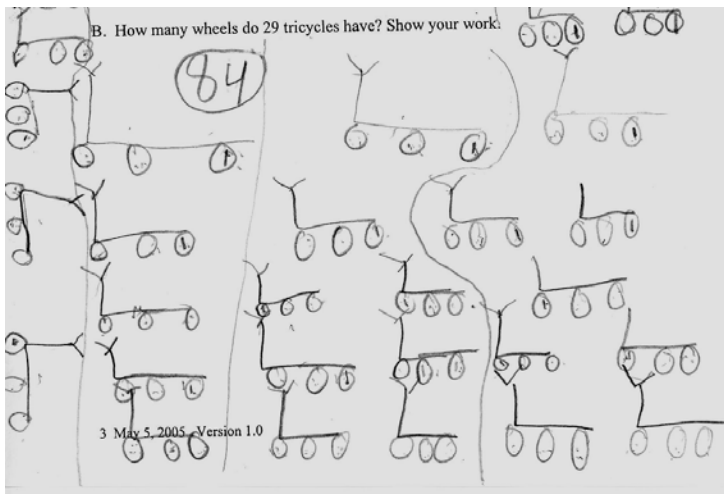
Foundational Skills	Approaching Proficient	Proficient	Exceeds Proficient
List Students + Describe what they did & what they need			
___% of class	___% of class	___% of class	___% of class

One tricycle has three wheels.

How many wheels do 29 tricycles have?

**Transitional
Multiplicative
Strategy**

Write an equation to match this picture.

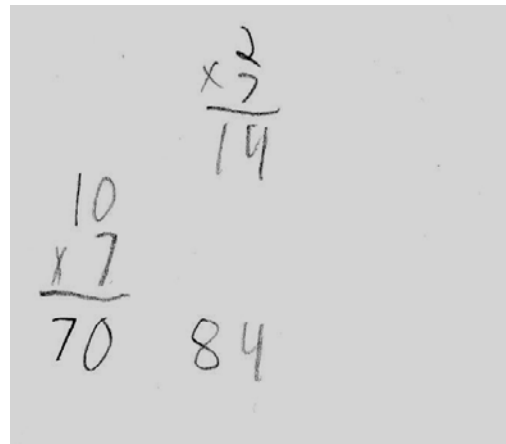


$3 \times 6 = 18$ 3, 6, 9, 12, 15, 18

Additive Strategy

Multiplicative Strategy

Farmer Brown donated 7 dozen eggs to the senior center.
How many eggs did he donate?



Source: Vermont Mathematics Partnership/OGAP

Big Idea #4 - Collaboration & Teaming

- Collaboration, Collaboration, Collaboration! (Hess, 2012)
 - Use a Student Work Analysis process that is manageable
 - Special education teachers are integrated as a member of the planning and instructional team
 - Everyone needs to know the content!
 - Everyone needs time & to be involved!!
- Research needs to be accessible to teachers – unpack it for them!
- Clarity saves time: strong instructional and assessment models, common language, shared expectations
- Recognize (and calibrate) what high quality looks like
- Build critical mass & “leadership density” in each school to support the work (Hess, 2000)

Teacher perceptions, beliefs, & practice...

Formative assessment (Hess, 2012)

- Best Assessment Tasks - short constructed responses that “uncover” student thinking
- Observations incorporated both ongoing & systematic use
- Designed to elicit specific evidence
 - What’s there/What’s not there
 - Level of reasoning (rigor) applied
 - Where a student is along the continuum
- Student work analysis addressed all levels of achievement in terms of next steps for instruction:

“I never thought of sorting papers according to what students were able to do or not do. That really changed my thinking about next steps for instruction.”

Teacher perceptions, beliefs, & practice...

Use of Learning progressions/trajectories (Hess, 2012)

- Teachers began to understand what a path to proficiency or “approaching proficiency” might actually look like
- Many teachers told us that they had been using the grade-level benchmarks for years, but never really understood them in this way (*how to get “there” from “here”*)
- Teachers found they had to know the student better in order to “place them” on a learning continuum – they needed specific formative assessment data and designed assessments accordingly
- Said that indicators in the progressions presented the “big picture” of what students could do that they could build on and use them with parents and students alike

Teacher perceptions, beliefs, & practice...

Assessment use (Hess, 2012)

- Many assessments were redesigned after Student Work Analysis

“When we looked at our first results and the assessment we used, we said, “what were we thinking?” This is an awful assessment!”

- Pre-assessments were used as “entry points” to differentiate instruction
- Pre-assessments focused on the foundational skills needed to be successful, not the “end point” of the continuum (i.e., the benchmark)

“Pretests allow me to skip over benchmarks students already know from previous years so I make up time that way. The pre-assessment is good to find out where they are now.”

- Formative assessment use increased in frequency & data was used in new ways to flexibly group students for targeted instruction/support.

“It was a real eye-opener. Some students I thought were proficient were actually below proficiency according to what they could & could not do.”

References

- Hess. (2000). *Beginning with the end in mind: A cross-case analysis of two elementary schools*. Unpublished doctoral dissertation, UVM.
- Hess. (2012). Learning progressions in K-8 classrooms: How progress maps can influence classroom practice and perceptions and help teachers make more informed instructional decisions in support of struggling learners, University of Minnesota, National Center on Educational Outcomes.
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- Moss & Brookhart. (2012). *Learning targets: Helping students aim for understanding in today's lesson*, ASCD
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For more information:

Center for Assessment
www.nciea.org



Karin Hess, Ed.D.
khess@nciea.org