OVERVIEW

- Contextual challenges
- Coherent systems that *can* support learning
- Critical ingredients: quality assessment, smart use
- Getting there
Contextual Conundrum

- Enduring Belief: Assessment/accountability can benefit learning

- But:
  - Too much testing
  - Too little assessment literacy
Definitions: Assessment and Literacy

- **Verb**: The process of using “data” -- at various levels of detail -- for various purposes, improving learning
- **Noun**: Strategies yielding scores and/or inferences that enable us understand student learning -- at various levels of detail, for various purposes
- Good practice requires quality on both counts
- And knowledgeable users at every level of the system who can understand and well use assessment in their decision-making
From too much testing, to coherent systems of assessment that support CCRS:

Colorado’s framework for building better systems and assessment literacy.
Guiding Premise: Coherent Focus, Variation in Grain Size to Support Use
How Framework Helps

- Lays out common vision of how various types/levels of assessment are supposed to work
  - *Conflicting definitions hamper effective communication and action*
- Help districts and schools assess their needs and move to better, more efficient systems
- Too much testing? Get rid of duplicates or what’s not working; devise more effective/efficient alternatives
- Associated PD modules
Coherent Assessment Systems: On-going Data for Improvement
# Description of Each Assessment Type

<table>
<thead>
<tr>
<th>Type and User</th>
<th>Purpose</th>
<th>Frequency and Relationship to Instruction</th>
<th>Methods</th>
<th>Information</th>
<th>Uses/Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category of assessment and who uses the assessment type and results</td>
<td>Function assessment serves within a comprehensive system of standards-based curriculum, instruction, and assessment</td>
<td>How often and when to assess students in relation to instructional goals</td>
<td>Strategies for obtaining evidence of learning</td>
<td>Types of evidence or information gained from assessment to inform uses and actions (see next column)</td>
<td>Actions that educators and students might take in relation to assessment information</td>
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</tbody>
</table>

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**THE CENTER ON STANDARDS & ASSESSMENT IMPLEMENTATION**

UIC's Urban Education Research and Service Trust (UIC UEd® CRESST)
Where are your states in creating and/or support coherent systems?
Differentiating Users, Uses for Different Assessment Types
## Short-term goals

<table>
<thead>
<tr>
<th>Assessment Type</th>
<th>Purpose</th>
<th>Frequency and Relationship to Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classroom Formative: Formal checkpoints on learning progress</td>
<td>Assist/evaluate teaching and learning</td>
<td>Minute-by-minute</td>
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<tr>
<td>Classroom Formative: Embedded in ongoing teaching and learning</td>
<td>Monitor learning relative to lesson goals</td>
<td>Daily</td>
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<td></td>
<td>Signal important learning goals</td>
<td>Weekly</td>
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<td></td>
<td>Monitor progress with specifically targeted intervention</td>
<td>During teaching and learning</td>
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<td></td>
<td></td>
<td>Or as fits with instructional plan or schedule</td>
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<tr>
<td>Assessment Type</td>
<td>Purpose</td>
<td>Frequency and Relationship to Instruction</td>
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<tr>
<td>Classroom Summative</td>
<td>Motivate</td>
<td>After a more extended period of teaching and learning (e.g., after a unit is completed and before another unit begins)</td>
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<tr>
<td>Interim/benchmark Summative</td>
<td>Signal important learning goals</td>
<td>At the end of a semester</td>
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<tr>
<td></td>
<td>Evaluate achievement</td>
<td>3x per year or more</td>
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<td></td>
<td>Monitor student learning, based on learning goals</td>
<td>Across instructional units/calendar periods</td>
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<tr>
<td></td>
<td>Predict end of year proficiency</td>
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<td></td>
<td>Inform improvement strategies for:</td>
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<tr>
<td></td>
<td>• Teachers</td>
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<td></td>
<td>• Schools</td>
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<tr>
<td>Summative: State, district, school, other external mandated National &amp; International Assessments</td>
<td>Signal important learning goals Accountability Identifying/prioritizing gross needs Informing/evaluating improvement strategies</td>
<td>After a year’s worth or a course’s worth of instruction and learning</td>
</tr>
</tbody>
</table>
A Common Process of Assessment for Improvement: Key Attributes

- Expected learning progression
- Clear learning goals and success criteria
- Goals and success criteria shared with others
- Methods/Strategies for assessing student learning
- Methods/strategies for interpreting/reporting student learning/results
- Results used to take action to improve
- Stakeholders involved in the process
ASSESSMENT QUALITY: VALIDITY

the extent to which an assessment enables accurate inferences to well serve intended purpose(s)
Recent Views on Assessment Quality

- **Criteria for High Quality Assessment** (Darling Hammond et al, 2013)

- **CCSSO Criteria for Procuring and Evaluating High-Quality Assessments**

- **Standards for Psychological and Educational Testing**
  (AERA, APA, NCME, 2014)
General Guidance on Quality Criteria

- Alignment
- Reliability
- Fairness
- Evidence of relationship to purpose
- Instructional sensitivity
- Utility/usability
- Feasibility
Getting Alignment Right in ELA

- Reading and writing
- Appropriate text complexity
- Balance of literary and information texts
- Require close reading and analysis of texts, consistent with standards
- Range of cognitive demand, item/task types
- Emphasize vocabulary and language use
- Research and inquiry, speaking and listening
Getting Alignment Right in Math

- Emphasize content most needed for later success
- Balance of concepts, procedures and application
- Connect content to practice
- Require a range of cognitive demand
- Range of item and task types
Traditional Alignment Study: Webb

- Item by item review by content experts
- Each item rated for content (standard/target) and depth of knowledge (DOK)
- Results summarized to yield content concurrence, range, balance, depth of knowledge consistency, etc.
- Increasing DOK key to deeper learning goals
Webb’s DOK Framework

- **DOK 1**: Basic knowledge/procedures, recall
- **DOK 2**: Simple application (some mental processing)
- **DOK 3**: analysis, reasoning, inference, abstract thinking
- **DOK 4**: Extended planning, synthesis/investigation of multiple sources, non-routine problem
Read this sentence from the passage (after reading a passage on space diamonds).

“Besides being beautiful to contemplate, space diamonds teach us important lessons about natural processes going on in the universe, and suggest new ways that diamonds can be created here on Earth.”

Explain how information learned from space diamonds can help scientists make diamonds on Earth. Use evidence from the passage to support your answer.

Type your answer in the space provided.
You’ve read 3 texts describing Amelia Earhart. All three include the claim that she was a brave, courageous person. The three texts are......

Consider the argument each author uses to demonstrate Earhart’s bravery.

Write an essay that analyzes the strength of the arguments about Earhart’s bravery in at least two of the texts. Remember to use textual evidence to support your ideas.
Alignment:

Good match in content and cognitive demand
Getting to coherent systems that actually benefit learning
Bringing the Vision to Reality

• System of quality assessments, seriously aligned with meaningful learning goals

• Assessment literacy supporting intelligent selection/creation, analysis and use; reflective, evidence-based practice

• Which comes first? How to get there?
IN THE FINAL ANALYSIS

Data don’t solve teaching and learning problems, educators do.
Let’s work together:
herman@cse.ucla.edu

CSAI resources can help:
csai-online.org