

A Prescription for a Better Balance of Rigor: Collecting Evidence of Shifting Teacher and Student Roles

DOK Levels	Teacher Roles	Evidence Planned for/Observed	Student Roles	Evidence Planned for/Observed
1 Acquire Foundation	<ul style="list-style-type: none"> Questions to focus attention (<i>Who? What? Where? How? When?</i>) Directs, leads, demonstrates, defines, provides practice Scaffolds for access & focus 		<ul style="list-style-type: none"> Acquires vocabulary, facts, rules Memorizes, recites, quotes, restates Retrieves information Practices & self-monitors basic skills Clarifies procedures, asks for support using resources, tools 	
2 Use, Connect, Conceptualize	<ul style="list-style-type: none"> Questions to build schema: differentiate parts-whole, classify, draw out inferences Models & scaffolds conceptual understanding (<i>Why? Under what conditions? Gives example/non-example?</i>) 		<ul style="list-style-type: none"> Explains relationships, sorts, classifies, compares, organizes information Makes predictions based on estimates, observations, prior knowledge Proposes problems or issues/questions to be investigated Raises conceptual or strategy questions 	
3 Deepen & Construct Meaning	<ul style="list-style-type: none"> Questions to probe reasoning, thinking, & promote peer discourse/self-reflection; links Big Ideas (<i>How will you know/do this? Where is the evidence?</i>) Designs tasks requiring proof, justification, analysis of evidence quality & accuracy 		<ul style="list-style-type: none"> Uncovers relevant, accurate, credible information, flaws in a design, or proposed solution & links with “Big Ideas” Plans how to develop supporting (hard) evidence for conclusions or claims Researches/tests ideas, solves non-routine problems; perseveres Self-assesses; Uses feedback to improve 	
4 Extend, Transfer, Broaden Meaning	<ul style="list-style-type: none"> Questions to extend thinking, explore sources, broaden perspectives/Big Idea (<i>Are there potential biases? Can you propose an alternative model?</i>) Encourages & scaffolds use of relevant & valid resources, peer-to-peer discourse/self-reflection 		<ul style="list-style-type: none"> Initiates, transfers, and <i>constructs</i> new knowledge/insights linked to “Big Ideas” Modifies, creates, elaborates based on analysis and interpretation of multiple sources Investigates real-world problems and issues; perseveres; manages time-task Self-assesses; Uses feedback to improve 	

Does the teacher...	<i>Record teacher/student questions, reactions, tasks, & strategic supports</i>	Do all students...
<ol style="list-style-type: none"> 1. Provides accurate conceptual information, examples, models; asks questions that reflect substantive understanding of the <u>concepts & builds overall schemas</u> (e.g. parts of the whole, essential criteria/characteristics). (DOK 2) 2. Models <u>probing questions</u> and allows adequate wait time for all students (e.g., what makes you say that? Can you find/show some evidence?). Encourages all students to actively grapple with concepts and freely exchange ideas. <ul style="list-style-type: none"> o uses a range of formative probes (DOK 1-3) o designs lessons for student-student discourse o encourages self/peer assessment (DOK 3) o asks students to support reasoning, elaborating on examples, analyzing evidence (DOK 3) 3. Tasks emphasize DEEPER thinking linked to Big Ideas, not simply correct answers. Tasks ask all students to make AND JUSTIFY or SUPPORT connections made (e.g., students cite sources; analyze relevance and accuracy of evidence). (DOK 3-4) 4. Closely monitors all students' understanding and STRATEGICALLY SCAFFOLDS instruction to <u>advance/deepen student thinking</u>. Assists all students in grappling with confounding factors. (e.g., provides unambiguous mentor texts, examples & non-examples, organizers, alternate models, counter points) (DOK 1-4) 5. Provides REFLECTION TIME during the lesson for all students to <u>review/react to what was learned</u> and <u>consolidate learning</u> (e.g., exit slips, peer-peer conferencing, self- or peer-assessment, such as "favorite no"). (DOK 2-4) 		<ol style="list-style-type: none"> 1. Engage in substantive discourse about concepts, relationships, observations, predictions (e.g., if- then; compare- contrast, cause-effect). (DOK 2) 2. Provide responses that reflect real thinking, <u>not just recall of "canned answers" or basic procedural explanations</u>. <ul style="list-style-type: none"> o (DOK 2) shows conceptual understanding o (DOK 3) analyzes evidence; links to Big Ideas o (DOK 4) draws evidence across multi sources 3. Generate ideas, questions, propositions, alternative strategies, representations, examples in <u>extended tasks</u>. RECORD student questions/ideas/insights. <ul style="list-style-type: none"> o Procedural? (DOK 1-2) o Conceptual? (DOK 2) o Contextual? Conditional? (DOK 2-3) o Problem finding (DOK 3) o Planning/Reasoning/Strategizing? (DOK 3) o Seeking or connecting sources? (DOK 3-4) 4. Persevere when encountering challenges (e.g., revising/rethinking steps of multi-step tasks, try alternate approach if one does not work, self-monitors). Document examples of <u>how they do this</u>. 5. Do not dismiss ideas of others; can challenge each other respectfully and ask probing questions; <u>provide their own evidence, claims, qualifiers; willing to self-assess and revise thinking using feedback and success criteria</u>. (DOK 3-4)

Suggested Ways to Use the Hess “Looking for Rigor” Walk-Through Tools

The “Looking for Rigor” Walk-Through Tools create a focus for structured conversations and reflections on practice.

Observational descriptors are research-based indicators of deeper thinking and student engagement with a range of cognitively demanding tasks. Tools are aligned with the Hess Cognitive Rigor Matrices and designed to examine learning “in the moment” as it happens with students. The tools can be used to collect baseline data for current practice and/or to monitor “shifts” in practice over time. They have also been designed to be easy to use – and it is suggested that you do not try to look for everything, but to focus on specific aspects as you begin to use them. Indicators are somewhat unique in that student behaviors are included as essential elements in documenting effective practice.

Begin by choosing a focus for your observational walk-throughs – here a few ideas...

Focus on teacher and student roles (See page 1) – Document WHAT they are doing (e.g., how does teacher prompt certain responses?)

Identify/look for 1-2 specific teacher behaviors for engaging students in rigorous instruction (see page 2):

- Designing complex tasks, strategic scaffolding, encouraging student discourse, peer-/self-assessment or reflection
- Ability to use questioning to probe for deeper understanding (e.g., listen to the follow-up questions)

Identify/look for 1-2 specific student behaviors that indicate deeper thinking, engagement, and learner independence (see page 2):

- Tackling complex tasks (productive struggle, making meaning), respectful student discourse, quality peer-assessment
- Questions asked by students (e.g., procedural versus contextual)
- Ability to self-monitor, accept and act on feedback, construct knowledge (e.g., raise new questions, insights)

- **PRACTICE WITH A VIDEO and discussion first.** Short videos can provide observation practice (e.g., Teaching Channel, Edutopia).
- **Always record some specific examples of *observed evidence*** (actual student or teacher questions, student responses, scaffolding strategies and their effects, description or copy of the performance task/formative assessment used, etc.). A checklist is handy and efficient, but not sufficient in providing opportunities for analysis and reflection. Record “exact words” and actions whenever possible. Don’t judge or interpret. Stick to recording and describing what is observed. Then go back and categorize (e.g., types of questions).
- **Don’t stay too long (10-15 min. is usually enough) and note the part of lesson observed (beginning, middle, end).** Knowing WHEN students are asked to do/say something will help you to interpret what was observed in terms of its purpose within the lesson.
- **Visit multiple classrooms** and share observations (with teachers or leadership teams) by synthesizing or generalizing across classrooms what you learned or wonder about. This serves to “calibrate”
- **Visit classrooms with colleagues** – at least the first couple of times. This helps to calibrate what to look for and how to share and interpret observed evidence (e.g., are these strategies working? Are they working to develop dependent or independent learners?)
- **Look for opportunities to talk to a few students** – What are you doing? Why are you doing it? what are you learning? Is this challenging? What do you do when/if you get “stuck?” Note when only one, some, or all students are engaged. For example, I use coding such as S1, S2, S3, etc. in my notes to remind me if different students are talking/asking questions.
- **Collegial learning walks** can be done by small groups of teachers (up to 5) in any discipline/grade level. They agree to visit each other’s classrooms and pre-determine an observational focus. All observers visit at the same time, but interview different students at a time when direct teaching is NOT occurring...such as when collaborative groups are solving a problem.
- **Collaboratively share and debrief.** Discuss: what’s next in our learning about deeper understanding? Effective instructional strategies?
- **Don’t judge or try to “fix” the lesson!** Your job is to collect data that will inform reflection.