Thinking Deeply or Just Working Harder?

Supporting Rigor for All Students

A Video Workshop with Dr. Karin Hess

Workshop Facilitator Guide

EDUCATIONALRESEARCH IN ACTION UNDERHILL, VT | www.karin-hess.com

Thinking Deeply or Just Working Harder? Supporting Rigor and Deeper Thinking for All Students A Video Workshop Presentation with Dr. Karin Hess

About this workshop and the materials

This presentation is one of Karin Hess' most popular workshops. It provides an overview of Webb's Depth-of-Knowledge (DOK) framework; challenges seven common misconceptions about rigor and DOK; introduces the development of her Cognitive Rigor Matrices (CRMs); and provides opportunities for participants to examine tasks and strategic scaffolding strategies to help all students achieve deeper understanding.

This workshop was filmed in 2015 while working with the Weber School District in Ogden, Utah. The materials were collaboratively designed with school leaders for locally facilitated delivery. After experiencing the workshop with Karin, participants were able to use the materials with the video to customize and conduct their own school-based workshops during the school year. To develop these project materials, Karin's half-day presentation was repeated on the day of taping so that two different videographers were able to capture audience engagement with the different workshop activities and a variety of grade-level examples. One group was comprised of elementary instructional coaches, content specialists, and school/district leaders; the other session included secondary instructional coaches, content specialists and department heads, and school/district leaders. The result is that two different edited videos of the workshop were produced: version 1 of the video was taped and edited by the School Improvement Network, Inc. Version 2 of the video was taped and edited internally by IT staff at the Weber School District. This version is included as "bonus" material. While covering essentially the same core content, the formats used for the video displays and segmenting of video clips are different. This offers users choices in how they envision using the materials.

The professional development packet includes two hours of edited video of Karin's presentation (in two different edited versions), Karin's workshop handouts and PowerPoint, and this guide with suggested "Turn & Talk" opportunities and additional facilitator notes. Possible uses of these materials include: (1) self-pacing of the workshop to meet varying levels of individual or small group need; (2) reviewing what was experienced in the workshop with Karin in order to identify which key ideas to share or reinforce with local staff or other educators; or (3) using the materials to customize professional development for different purposes and/or different stakeholder groups (e.g., introducing DOK to newly-hired staff, sparking discussions with parents, engaging content specialists/administrators in support of rigor in all classrooms for all students).

Users of the video clips and workshop materials will be able to customize professional development activities for a half-day workshop, two 2-hour workshops, or several shorter sessions with focused discussions and activities, such as for staff and PLC meetings or personalized pacing. Note that slightly different slides and examples are used in each version of the video workshops.

Version 1 of the *Thinking Deeply* video has been edited into seven separate segments of varied lengths. In these segments, you will see Karin interacting with participants, providing directions to activities, or making connections to related research. These segments do not have "Turn & Talk" signals imbedded in them. You'll have to decide when to stop and re-start the video in order to allow your participants to have some time for engaging in table discussions. The annotated Quick Reference Guide (on pages 6-10), with video time stamps for each segment's content, includes suggested places where you could stop for discussion and sharing of ideas. The examples included for discussion and analysis in version 1 of the video are: Kindergarten math student work, TBEAR, chunking text strategy, Hess' Observation Tool (Looking for Rigor), and the Teaching Channel video clip, *Increasing Participation with Talk Moves*.

This version may be most useful if you want to focus on a few particular content aspects of the workshop. For example, some of the instructional leaders at Weber School District decided to give directions and facilitate many of the activities they had done with Dr. Hess. They also decided that they would be more comfortable showing some portions of the video that they felt less comfortable doing on their own, such as making specific connections to related research in Part 1.

Version 2 of the *Thinking Deeply* video is presented as one continuous video, divided into two main parts of approximately one hour each. Watching this version, you'll simultaneously see both the slides advancing and the participant interactions. This format does include "Turn & Talk" slides, so you will know exactly when to stop for 2-5 minutes before restarting the video. The annotated Quick Reference Guide (on pages 11- 15), with video time stamps for smaller segments of content, includes additional notes and suggested handouts for each part. Additional examples are included for discussion and analysis in version 2 of the video: Text Decks, Infographics, TBEAR, Anatomy of an Opinion, chunking text close-reading strategy, Hess' Observation Tool (Looking for Rigor), Hess' Quick Tips for Differentiation, and the Teaching Channel video clips, *My Favorite No, Hint Cards*, and *Learning Menus*.

This version may be most useful if you want to get a feel for the flow of a half-day or 2-hour session, or to help you to synchronize slides with the speakers and Turn & Talk activities.

Additional facilitator notes can be found at the end of this document, following the Quick Reference Guide for each version of the video. The PowerPoint slide deck also includes additional notes for most slides. To download the content-specific Hess Cognitive Rigor Matrices (CRMs), go to www.karin-hess.com Resources Page.

Facilitator Guide

Thinking Deeply or Just Working Harder? Video Workshop

Quick Reference Guide to Video Segments (version 1) Workshop Topics, Video Timestamps, Comments, and Related Slides

Video	Overview with Facilitator Notes	PowerPoint
Time Stamp	Overview with Facilitator Notes	Slides
	Version 1 - Part 1 (Approximately 18 minutes)	
0:00 -	Part 1: Why should we care about rigor? (Approximately 18 minutes)	#1 - #11
18:09	This clip provides an introduction to rigor, transfer, and some related research	
	You may want to share (or customize) the first 7 slides prior to starting the video	#1 - #7
	Overview of purpose, workshop goals, and the Weber School District Instructional Planning Cycle	
	Slide #6 – suggests where to find Hess CRMs for Reading, Math-Science, Writing, etc.	
0:00 -	Why do we care about rigor?	#8
1:20	Karin's Key Point: Rewarding memorization versus honoring deeper thinking?	
1:36	References to Marzano & Toth white paper, "Teaching for Rigor"	#9
	Karin's Key Points:	
	Need to prioritize content: when to go deeper into content and how to use foundational learning as	
	a stepping stone to deeper thinking	
3:25	Karin's Key Points:	#10
	Don't forget the importance of strategic scaffolding to achieve rigor	
	Differences between scaffolding (rungs of ladder to same task) and differentiation (different	
	/complementary tasks)	
4:32	(4:40) TURN & TALK 1: Moving from Personal Rigor Definitions to Common Understandings: Pause	#11
	the video so participants have a few minutes to individually jot down words and phrases, and then	
	to discuss at tables before sharing with the larger group (T&T about 5-8 min.)	
5:00 -	Linking Rigor with Research – note that Karin continually asks for support and elaboration of ideas	
16:30	during the sharing (probing to get to DOK 3 thinking!)	
	Karin's Key Research Points in Response to Participants' Comments:	
	Time – for planning, engagement, assessing use of evidence Transfer – Grant Wiggins metaphor; formative assessment = scrimmages	
	Proof in logic, use of/analysis of evidence	
	Engagement, Wait time, Collaboration	
	Open versus closed questions	
	Relevance, and short- and long-term memory	
16:30 -	Optional Handout: The Hess "One Pager"	
18:09	, and the second	
Part 1		
My Notes		
iviy ivotes		

Video Time Stamp	Overview with Facilitator Notes (continued for version 1 of video)	PowerPoin t Slides
	Version 1 - Part 2 (Approximately 18 minutes)	
0:00 -	Part 2: Developing Questions & Origins of the CRM (Approximately 18 minutes)	#12 - # 17
17:40	This clip provides an opportunity to apply ideas about rigor to question development	
	It also provides insights into the origins of Bloom's Taxonomy and Webb's DOK Levels	
0:00 -	(0:50) TURN & TALK 2: After hearing or giving directions, stop the video to allow for about 2-4	#12
0:50	minutes for table groups to develop 2 questions for the given text, Little Red Riding Hood. Questions	
	are set aside until later in the workshop	
0:55	Focus on the thinking behind each type of question – NOT on the specific questions	
	Karin's Key Points in Response to Participants' Comments:	
	Basic questions – have a right answer (right there questions), easy to correct, easy to develop,	
	we've seen many models	
	Deeper/more rigorous questions – more than one possible right answer or approach, not as easy to	
	correct – look for evidence used to support analysis/inferences/perspectives, more to consider	
	when developing, we have not seen many strong models, need to consider prior knowledge and	
	what might transfer from this lesson to future lessons – this is the intended learning trajectory	
6:40	Developing the Hess CRM	#13 - #16
	Background of Bloom and Webb models; Karin gives some content examples for each DOK level	
	Karin's Key Points:	
	Even Revised Bloom has some weaknesses	
	Webb's DOK model has content-specific examples, not generic verbs, like Bloom's	
	All levels should be assessed, but rarely were assessed on state assessments	
16:36	(16:36) TURN & TALK 3: Allow about 5 minutes for participants to process some of the differences	#17
	between Bloom and Webb models. Then allow for some sharing among participants	
16:36 -	Listen the to the ideas/insights of others	
17:40		
Part 2		
My Notes		
iviy itotes		
	Version 1 - Part 3 (Approximately 9 minutes)	
0:00 –	Part 3: Common Misconception #1 (Approximately 9 minutes)	#18 - #19
8:39		=
	Discussion of Misconception #1 -All kids can't do this/All kids don't need scaffolding to do this	
	Karin's Key Research Points:	
	Oral language/discussion and group work = good strategic scaffolding	
	Analysis builds schema; Creating is using/applying a variation on exiting schema	
	Evaluation requires appropriate criteria; criteria point students to the right/best evidence	
	Optional Handout: Blank CRM template can be used by small groups to examine unit assignments	
Part 3		
My Notes		

Video Time Stamp	Overview with Facilitator Notes (continued for version 1 of video)	PowerPoin t Slides
	Version 1 - Part 4 (Approximately 11 minutes)	
0:00 - 11:00	Part 4: Common Misconceptions #2, #3, #4 (Approximately 11 minutes)	#20 - #24
0:00 – 5:50	Connecting Vygotsky's work on scaffolding, research related to engagement, challenge, working in groups	
	Discussion of Misconception #2 -DOK is a Taxonomy Karin's Key Points:	
	Balance is important, all levels of DOK are important; half of the summative assessment score points should focus on conceptual understanding (DOK 2) Essays do not always have to be scored with multi-criteria rubrics; use 4-point scoring guides	
5:53	Discussion of Misconception #3 -Bloom's levels and verbs equate to Webb DOK levels Karin's Key Points: The "DOK Wheel of Misfortune" – many of the same verbs appear on more than one level\It's what comes after the verb that determines complexity of content and tasks	#22
6:46 - end	Discussion of Misconception #4 – DOK is about difficulty Karin's Key Points: Complexity means: "What mental processing is required to complete the task?" You can use the same verbs for different DOK levels. If you change what comes after the verb, you can change the complexity of the task. Even a wordless book can be used with increasingly complex questions/tasks/thinking.	#23-24
Part 4 My Notes		
	Version 1 - Part 5 (Approximately 29 minutes)	
0:00 – 29:00	Part 5: Common Misconception #5 (Approximately 29 minutes)	#25 - #34
0:00 – 4:20	What mental processing is required? Sample questions in different content areas are analyzed	#25 - #26
4:25	An animation showing the development the Hess CRM. It started by writing descriptors for each level of Bloom's Taxonomy and each DOK level. The "ah-ha" moment was seeing all DOK levels for all Bloom levels. Karin's Key Points: Higher order thinking is not always deeper thinking; lower order thinking (Understanding and Application) can go deep, depending on the context "UGs" are opinions without support/elaboration/analysis/references	#27 - #28
7:25	Karin's Key Research Point: Each content domain has its own schema. Content-specific CRMs lead to better articulation of expectations and thinking in each domain	
8:08	Discussion of Misconception #5 - All DOK levels can be assessed with a multiple choice question Karin's Key Research Point: When students construct an answer, they understand the content and can use it in unfamiliar situations better than if they simply memorize it	#29 - #30

18:40 S	Overview with Facilitator Notes (continued for version 1 of video)	
19:50 I	Part 5 (continued)	
19:50 I	Student work samples from performance tasks provide much more about learning than do short	
19:50	answer/multiple-choice questions	
	Optional Handout: Kindergarten math work samples	#22
1	Revisit Little Red Riding Hood Questions Karin's Key Points:	#33
	DOK 2/Creative learning activities can be fun and engaging without ever requiring deep thinking	
	Engagement is the first step to deeper thinking	
	These types of activities provide a foundation for deeper thinking and transfer	
	Little Red Riding Hood Questions (continued)	
	TURN & TALK 4: Allow time for groups to revisit their Little Red Riding Hood questions (about 5	#34
	minutes)	
	Ask for some examples of what was revised and why. Then listen to the examples from the video	
Part 5		
My Notes		
	Version 1 - Part 6	
0:00 -	Part 6: Common Misconceptions #6, #7, TBEAR (Approximately 16 minutes)	#35 - #38
16:00		
0:00 -	Back to slide #33 – order of questions will vary; generate options for your unit of study	#33
	Optional Handout: Hess CRM Planning Template – To have some time to process these ideas, allow	
	15 minutes to work in grade-level teams or content groups and generate unit questions	
	Discussion of Misconceptions #6 – Higher order thinking always means deeper learning.	#35 - #36
	Rules of Thumb for DOK levels	
	Discussion of Misconceptions #7 – Multi-step tasks, longer tasks, tasks with more texts, tasks with	#37
	complex texts always lead to deeper thinking	
	Karin's Key Points:	
	Pair texts of varying complexity - one more accessible to provide foundation/background	
	Optional Handout: Strategically scaffolding complex texts by chunking texts	#20 #42
	Karin's Key Points: TBEAR gets at varying DOK levels. Analysis (A) is the key to "saying more" about text evidence.	#38, #43
l I	When using the Kindy TBEAR, start at the "B" beating heart (what's the book about?) Next, what	
	does it make you think (T)? Can you give some examples? Can you add more (A)? etc.	
,	(12:56) TURN & TALK 5: Discuss applications for TBEAR for different content areas and grade levels	
	See additional notes on use of TBEAR on page 16	
	ı Ç	
!	Optional Handouts: TBEAR and TBEAR for K students	
Part 6	ı Ç	
	ı Ç	
Part 6	ı Ç	
Part 6	ı Ç	

Video Time Stamp	Overview with Facilitator Notes (continued for version 1 of video)	PowerPoint Slides
	Version 1 - Part 7 (Approximately 28 minutes)	
0:00 – 28:00	Part 7: Exploring Classroom Examples (Approximately 28 minutes) Workshop facilitators need to decide which classroom examples to use. This version of the video only includes some of the ones listed on slide #38	#38 - #51
00:00 – 03:20	Introduces VIDEO – Increasing Participation with Talk Moves (Teaching Channel video) – see link to this video on slide #39 TURN & TALK 6: After viewing the video, have small groups discuss questions on slide #40. Then participants can listen to sharing of ideas on the workshop video. This is part of a longer Teaching Channel video clip, Reasoning with Division on www.teachingchannel.org that can also be viewed. Karin's Key Points: Talk Move - Repeating (DOK 1 – maintains engagement and attention to go deeper later) Talk Move - Adding on (most likely DOK 2) Talk Move - Silent Signal (DOK 3 - probe for reasoning with evidence) Talk Move - Revising Thinking (DOK 3 - probe for reasoning with evidence)	#39 - #40
7:00	Personal story about classroom discourse – Volleyball Metaphor shared by Heidi Hayes Jacobs: "Who handles the ball the most?"	
8:40 – 15:00	Hess Observation Tool - Looking for Rigor This segment provides an explanation for each teacher and student behavior on the Hess observation tool Karin's Key Research Points: Five teacher and student behaviors (drawn from research) to look for as evidence of deeper thinking and student engagement Ways to encourage building a growth mindset and time to process and think more deeply Student questions reveal thinking and engagement with complex tasks Handout: Hess Observation Tool - Looking for Rigor	#45
15:30 - end	(15:46) TURN & TALK 7: Reflect & Connect Share take-aways at tables; then listen to others sharing	#51
Part 7 My Notes		

Quick Reference Guide to Video (version 2)

Workshop Topics, Video Timestamps, Comments, and Slides

Video Time Stamp	Overview with Facilitator Notes	PowerPoint Slides
	Version 2 - Part 1 (Approximately 1 hour)	
0:00 -	Part 1: Why should we care about rigor? (Approximately 1 hour)	#1 - #11
59:05	This clip provides an introduction to rigor, transfer, and some related research	
	Discussion of Common Misconceptions #1, #2, #3, and #4	
	There are 3 embedded Turn & Talk Opportunities in Part 1	
0:00 -	You may want to share (or customize) the first 7 slides prior to starting the video	#1 - #7
2:00	Overview of purpose, workshop goals, and the Weber School District Instructional Planning Cycle	
	Slide #6 – suggests where to find Hess CRMs for Reading, Math-Science, Writing, etc.	
2:24	Why do we care about rigor?	#8
	Karin's Key Point:	
	Are we rewarding memorization or honoring deeper thinking?	
1:36	References to Marzano & Toth white paper, "Teaching for Rigor"	#9
	Karin's Key Points:	
	Need to prioritize content: Decide when to go deeper into content and how to use foundational	
	learning as a stepping stone to deeper thinking	
3:25	Karin's Key Points:	#10
	Don't forget the importance of strategic scaffolding to achieve rigor	
	Differences between scaffolding (rungs of ladder to same task for all students) and differentiation	
	(different /complementary tasks for different students)	
6:53	TURN & TALK 1: Moving from Personal Rigor Definitions to Common Understandings: Pause the	#11
	video so participants have a few minutes to individually jot down words and phrases, and then to	
	discuss at tables before sharing examples with the larger group (T&T about 5-8 min.)	
7:00 –	Linking Rigor with Research – note that Karin continually asks for support and elaboration of ideas	
24:23	during the sharing (probing to get to DOK 3 thinking!)	
	Karin's Key Research Points in Response to Participants' Comments:	
	Making Connections – applying in new situations in multiple ways; moving information from short-	
	term to long-term memory: connect to what you know and personalizing /relevance	
	Apply: practice (DOK 1-2) versus transfer (DOK 3-4) (12:00) Transfer – Grant Wiggins metaphor – playing the game; formative assessment = scrimmages	
	Tasks that go from simple skills to prepare for more complex tasks	
	(17:15) Use of different types of sources, creating different products, use of/analysis of evidence	
	Open versus closed questions – it's the second question you ask that pushes to deeper thinking!	
	Engagement, Wait time, Collaboration (students learn more, deeper, and faster)	
	Time – for planning, engagement, assessing quality and use of evidence	
	Optional Handout: The Hess "One Pager"	
Version 2 -		
Part 1		
My Notes		
iviy itotes		

Version 2 - Part 1 (continued) Developing Questions & Origins of the CRM his segment provides an opportunity to apply ideas about rigor to question development. Talso provides insights into the origins of Bloom's Taxonomy and Webb's DOK Levels URN & TALK 2: After hearing or giving directions, stop the video to allow for about 2-4 minutes for able groups to develop 2 questions for the given text, Little Red Riding Hood. Questions are set side till later in the workshop. Discussion: Focus on the thinking behind each type of question – NOT on the specific questions. Darin's Key Points in Response to Participants' Comments: Dasic questions – have a right answer (right there questions), easy to correct, easy to develop, we've seen many models Developer/more rigorous questions – more than one possible right answer or approach, not as easy to prize the look for evidence used to support analysis/inferences/perspectives, more to consider when developing, we have not seen many strong models, need to consider prior knowledge and what might transfer from this lesson to future lessons – this is the intended learning trajectory or deeper questions consider: What will students interpret? What evidence will they use? What rior knowledge is required? What connections will they need to make? Developing the Hess CRM ackground of Bloom and Webb models; Karin gives some content examples for each DOK level arin's Key Points:	#12 - # 17 #12 #13 - #16
his segment provides an opportunity to apply ideas about rigor to question development. It also provides insights into the origins of Bloom's Taxonomy and Webb's DOK Levels URN & TALK 2: After hearing or giving directions, stop the video to allow for about 2-4 minutes for able groups to develop 2 questions for the given text, Little Red Riding Hood. Questions are set side till later in the workshop. Discussion: Focus on the thinking behind each type of question – NOT on the specific questions. Darin's Key Points in Response to Participants' Comments: Dasic questions – have a right answer (right there questions), easy to correct, easy to develop, we've seen many models Deeper/more rigorous questions – more than one possible right answer or approach, not as easy to correct – look for evidence used to support analysis/inferences/perspectives, more to consider when developing, we have not seen many strong models, need to consider prior knowledge and what might transfer from this lesson to future lessons – this is the intended learning trajectory Our deeper questions consider: What will students interpret? What evidence will they use? What rior knowledge is required? What connections will they need to make? Detection of the Hess CRM ackground of Bloom and Webb models; Karin gives some content examples for each DOK level arin's Key Points:	#12
Lalso provides insights into the origins of Bloom's Taxonomy and Webb's DOK Levels URN & TALK 2: After hearing or giving directions, stop the video to allow for about 2-4 minutes for able groups to develop 2 questions for the given text, Little Red Riding Hood. Questions are set side till later in the workshop. Discussion: Focus on the thinking behind each type of question – NOT on the specific questions. Darin's Key Points in Response to Participants' Comments: Dasic questions – have a right answer (right there questions), easy to correct, easy to develop, we've seen many models Deeper/more rigorous questions – more than one possible right answer or approach, not as easy to correct – look for evidence used to support analysis/inferences/perspectives, more to consider when developing, we have not seen many strong models, need to consider prior knowledge and what might transfer from this lesson to future lessons – this is the intended learning trajectory Dor deeper questions consider: What will students interpret? What evidence will they use? What rior knowledge is required? What connections will they need to make? Determine the Hess CRM ackground of Bloom and Webb models; Karin gives some content examples for each DOK level arin's Key Points:	
URN & TALK 2: After hearing or giving directions, stop the video to allow for about 2-4 minutes for able groups to develop 2 questions for the given text, Little Red Riding Hood. Questions are set side till later in the workshop. Discussion: Focus on the thinking behind each type of question – NOT on the specific questions. Darin's Key Points in Response to Participants' Comments: Dasic questions – have a right answer (right there questions), easy to correct, easy to develop, we've seen many models Deeper/more rigorous questions – more than one possible right answer or approach, not as easy to correct – look for evidence used to support analysis/inferences/perspectives, more to consider when developing, we have not seen many strong models, need to consider prior knowledge and what might transfer from this lesson to future lessons – this is the intended learning trajectory Door deeper questions consider: What will students interpret? What evidence will they use? What rior knowledge is required? What connections will they need to make? Determine the Hess CRM ackground of Bloom and Webb models; Karin gives some content examples for each DOK level arin's Key Points:	
able groups to develop 2 questions for the given text, Little Red Riding Hood. Questions are set side till later in the workshop. Discussion: Focus on the thinking behind each type of question – NOT on the specific questions. Discussion: Focus on the thinking behind each type of question – NOT on the specific questions. Discussion: Focus on the thinking behind each type of question – NOT on the specific questions. Discussion: Focus on the thinking behind each type of question – NOT on the specific questions. Discussion: Focus on the thinking behind each type of question – NOT on the specific questions. Discussion: Focus on the thinking behind each type of questions – NOT on the specific questions. Discussion: Focus on the specific	
side till later in the workshop. Discussion: Focus on the thinking behind each type of question – NOT on the specific questions. arin's Key Points in Response to Participants' Comments: Dasic questions – have a right answer (right there questions), easy to correct, easy to develop, we've seen many models Deeper/more rigorous questions – more than one possible right answer or approach, not as easy to correct – look for evidence used to support analysis/inferences/perspectives, more to consider when developing, we have not seen many strong models, need to consider prior knowledge and what might transfer from this lesson to future lessons – this is the intended learning trajectory or deeper questions consider: What will students interpret? What evidence will they use? What rior knowledge is required? What connections will they need to make? Dethink how you assess deeper responses onsider offering optional assignments = student choice Developing the Hess CRM Dockground of Bloom and Webb models; Karin gives some content examples for each DOK level arin's Key Points:	#13 - #16
discussion: Focus on the thinking behind each type of question – NOT on the specific questions. arin's Key Points in Response to Participants' Comments: asic questions – have a right answer (right there questions), easy to correct, easy to develop, ye've seen many models beeper/more rigorous questions – more than one possible right answer or approach, not as easy to correct – look for evidence used to support analysis/inferences/perspectives, more to consider when developing, we have not seen many strong models, need to consider prior knowledge and what might transfer from this lesson to future lessons – this is the intended learning trajectory or deeper questions consider: What will students interpret? What evidence will they use? What rior knowledge is required? What connections will they need to make? ethink how you assess deeper responses consider offering optional assignments = student choice eveloping the Hess CRM ackground of Bloom and Webb models; Karin gives some content examples for each DOK level arin's Key Points:	#13 - #16
arin's Key Points in Response to Participants' Comments: asic questions – have a right answer (right there questions), easy to correct, easy to develop, re've seen many models beeper/more rigorous questions – more than one possible right answer or approach, not as easy to correct – look for evidence used to support analysis/inferences/perspectives, more to consider when developing, we have not seen many strong models, need to consider prior knowledge and what might transfer from this lesson to future lessons – this is the intended learning trajectory or deeper questions consider: What will students interpret? What evidence will they use? What rior knowledge is required? What connections will they need to make? ethink how you assess deeper responses consider offering optional assignments = student choice beveloping the Hess CRM ackground of Bloom and Webb models; Karin gives some content examples for each DOK level arin's Key Points:	#13 - #16
asic questions – have a right answer (right there questions), easy to correct, easy to develop, we've seen many models eeper/more rigorous questions – more than one possible right answer or approach, not as easy to correct – look for evidence used to support analysis/inferences/perspectives, more to consider when developing, we have not seen many strong models, need to consider prior knowledge and what might transfer from this lesson to future lessons – this is the intended learning trajectory or deeper questions consider: What will students interpret? What evidence will they use? What rior knowledge is required? What connections will they need to make? eethink how you assess deeper responses consider offering optional assignments = student choice eeveloping the Hess CRM ackground of Bloom and Webb models; Karin gives some content examples for each DOK level carin's Key Points:	#13 - #16
peeper/more rigorous questions – more than one possible right answer or approach, not as easy to correct – look for evidence used to support analysis/inferences/perspectives, more to consider when developing, we have not seen many strong models, need to consider prior knowledge and what might transfer from this lesson to future lessons – this is the intended learning trajectory or deeper questions consider: What will students interpret? What evidence will they use? What rior knowledge is required? What connections will they need to make? ethink how you assess deeper responses consider offering optional assignments = student choice reveloping the Hess CRM ackground of Bloom and Webb models; Karin gives some content examples for each DOK level farin's Key Points:	#13 - #16
orrect – look for evidence used to support analysis/inferences/perspectives, more to consider when developing, we have not seen many strong models, need to consider prior knowledge and what might transfer from this lesson to future lessons – this is the intended learning trajectory or deeper questions consider: What will students interpret? What evidence will they use? What rior knowledge is required? What connections will they need to make? The think how you assess deeper responses onsider offering optional assignments = student choice Developing the Hess CRM ackground of Bloom and Webb models; Karin gives some content examples for each DOK level farin's Key Points:	#13 - #16
when developing, we have not seen many strong models, need to consider prior knowledge and what might transfer from this lesson to future lessons – this is the intended learning trajectory or deeper questions consider: What will students interpret? What evidence will they use? What rior knowledge is required? What connections will they need to make? The tethink how you assess deeper responses consider offering optional assignments = student choice reveloping the Hess CRM ackground of Bloom and Webb models; Karin gives some content examples for each DOK level arin's Key Points:	#13 - #16
what might transfer from this lesson to future lessons – this is the intended learning trajectory or deeper questions consider: What will students interpret? What evidence will they use? What rior knowledge is required? What connections will they need to make? eethink how you assess deeper responses consider offering optional assignments = student choice eeveloping the Hess CRM ackground of Bloom and Webb models; Karin gives some content examples for each DOK level earin's Key Points:	#13 - #16
or deeper questions consider: What will students interpret? What evidence will they use? What rior knowledge is required? What connections will they need to make? ethink how you assess deeper responses consider offering optional assignments = student choice reveloping the Hess CRM ackground of Bloom and Webb models; Karin gives some content examples for each DOK level carin's Key Points:	#13 - #16
rior knowledge is required? What connections will they need to make? eethink how you assess deeper responses onsider offering optional assignments = student choice eveloping the Hess CRM ackground of Bloom and Webb models; Karin gives some content examples for each DOK level farin's Key Points:	#13 - #16
ethink how you assess deeper responses consider offering optional assignments = student choice eveloping the Hess CRM ackground of Bloom and Webb models; Karin gives some content examples for each DOK level carin's Key Points:	#13 - #16
onsider offering optional assignments = student choice Peveloping the Hess CRM ackground of Bloom and Webb models; Karin gives some content examples for each DOK level arin's Key Points:	#13 - #16
eveloping the Hess CRM ackground of Bloom and Webb models; Karin gives some content examples for each DOK level arin's Key Points:	#13 - #16
ackground of Bloom and Webb models; Karin gives some content examples for each DOK level arin's Key Points:	#13 - #16
arin's Key Points:	
35:34) Even Revised Bloom has some weaknesses	
36:15) Webb's DOK model has content-specific examples, not generic verbs, like Bloom's	
Il levels should be assessed, but rarely assessed on state /on-demand assessments; DOK 3 & 4	
asks take time to answer! DOK 4 may be best as a projects	
39:35) Introduce the Hess CRMs for different content areas	
URN & TALK 3: Allow about 5 minutes for participants to process some of the differences between	#17
loom and Webb models. Then allow for some sharing among participants.	
isten the to the ideas/insights of others	
Aisconception #1 -All kids can't do this/All kids don't need scaffolding to do this	#18 - #20
arin's Key Research Points:	
Oral language/discussion and group work = good strategic scaffolding	
	#21
	#21
diance is important, an levels of DOR are important, han of the summative assessment score points	
hould focus on concentual understanding (DOK 2)	
hould focus on conceptual understanding (DOK 2) ssays do not always have to be scored with multi-criteria rubrics: use 4-point scoring guides	#22
ssays do not always have to be scored with multi-criteria rubrics; use 4-point scoring guides	π22
ssays do not always have to be scored with multi-criteria rubrics; use 4-point scoring guides ### disconception #3 -Bloom's levels and verbs equate to Webb DOK levels	
ssays do not always have to be scored with multi-criteria rubrics; use 4-point scoring guides **Aisconception #3 -Bloom's levels and verbs equate to Webb DOK levels **arin's Key Points:	
ssays do not always have to be scored with multi-criteria rubrics; use 4-point scoring guides ### disconception #3 -Bloom's levels and verbs equate to Webb DOK levels	
\ \ \ \ \ \	nalysis builds schema; Creating is using/applying a variation on exiting schema valuation requires appropriate criteria; criteria point students to the right/best evidence, such as the hero's journey vgotsky's work (ZPD) on scaffolding, research related to engagement, challenge, working in groups ptional Handout: Blank CRM template can be used by small groups to examine unit assignments disconception #2 -DOK is a Taxonomy arin's Key Points: alance is important, all levels of DOK are important; half of the summative assessment score points arould focus on conceptual understanding (DOK 2) assays do not always have to be scored with multi-criteria rubrics; use 4-point scoring guides disconception #3 -Bloom's levels and verbs equate to Webb DOK levels arin's Key Points:

Video Time Stamp	Overview with Facilitator Notes Version 2 - Part 1 (continued)	PowerPoint Slides
54:47	Misconception #4 – DOK is about difficulty Karin's Key Points: Complexity means: "What mental processing is required to complete the task?" You can use the same verbs for different DOK levels. If you change what comes after the verb, you can change the complexity of the task. Even a wordless book can be used with increasingly complex questions/tasks/thinking. Optional Activity: Have table groups select a verb (e.g., explain, create, trace)+ content and write 4	#23 - #24
Version 2 -	statements that go deeper with the content	
Part 1 My Notes		

Video Time Stamp	Overview with Facilitator Notes Version 2 - Part 2 (approximately 1 hour 10 min.)	PowerPoint Slides
59:08 –	What mental processing is required with different tasks?	
2:15:30	Development of the Hess CRM	
2.13.30	Misconceptions #5, #6, and #7	
	Analyzing classroom examples; sample questions/tasks and scaffolding are analyzed	
	There are 4 embedded Turn & Talk Opportunities in Part 2	
59:20	What mental processing is required? Sample questions in different content areas are analyzed.	#25 - #26
1:02:33	An animation showing the development of the Hess CRM. It started by writing descriptors for each	#27 - #28
1.02.33	level of Bloom's Taxonomy and each DOK level. The "ah-ha" moment was seeing all DOK levels for all	#27 #20
	Bloom levels.	
	Karin's Key Points:	
	Higher order thinking is not always deeper thinking; lower order thinking (Understanding and	
	Application) can go deep, depending on the context	
	"UGs" are opinions without support/elaboration/analysis/references	
	Each content domain has its own schema. Content-specific CRMs lead to better articulation of	
	expectations and thinking in each domain	W20 W24
L:04:54	Misconception #5 - All DOK levels can be assessed with a multiple-choice question.	#29 - #31
	Karin's Key Research Points:	
	When students construct an answer, they remember it longer	
	DOK 3 & 4 tasks are best assessed using performance tasks or projects that uncover thinking	
	Student work samples from performance tasks provides much more about learning than do short	
	answer/multiple-choice questions	
	Ask students WHY they choose a particular response on multiple choice questions	
	(1:09:33) Reliable vs Valid assessments and test items	
L:13:32	Revisit Little Red Riding Hood questions	#32 - #33
	Karin's Key Points:	
	DOK 2/Creative learning activities can be fun and engaging without ever requiring deep thinking	
	Engagement is the first step to deeper thinking	
	Some activities provide a foundation for deeper thinking and transfer	
	DOK 4 is analyzing evidence from multiple texts or sources	
L:17:04	<u>Little Red Riding</u> Hood questions (continued)	#34
	TURN & TALK 4: Allow time for groups to revisit their Little Red Riding Hood questions (about 5	
	minutes). Ask for some examples of what was revised and why. Then listen to the examples from the	
	video.	
	Optional Handout: Hess CRM Planning Template – Give groups some time to process these ideas,	
	allow 15 minutes to work in grade-level teams or content groups and generate unit or text-based	
	questions.	
L:22:10	Misconception #6 – Higher order thinking always means deeper learning.	#35 - #36
	Rules of Thumb for DOK levels	
L:23:00	Misconception #7 – Multi-step tasks, longer tasks, tasks with more texts, tasks with complex texts	#37
	always lead to deeper thinking.	
	Karin's Key Points:	
	Pair texts of varying complexity - one more accessible to provide foundation/background	
	Summary of GA research study using chunking text	
	Optional Handout: Scaffold complex texts by chunking texts	
L:27:46	CHOOSE SOME CLASSROOM EXAMPLES TO ANALYZE	#38
	Note that each version of the video use slightly different examples. You may want to view different	
	Teaching Channel videos that are listed here (slide #39).	
L:28:00 -	View the video, <i>My Favorite No</i> (Teaching Channel video) and have table groups discuss the things to	#40

Video Time Stamp	Overview with Facilitator Notes Version 2 - Part 2 (continued)	PowerPoint Slides
1:34:30	TURN & TALK 5: Allow time for groups to discuss what was seen in the video. Then listen to participants' comments about this video and/or discuss how you might use it in your classroom.	
1:44:00	Classroom Example – Creating Text Decks	
1:47:18	Classroom Example – Infographics	#42
1:48:37	Classroom Example – TBEAR graphic organizer Karin's Key Points:	#43
	TBEAR gets at varying DOK levels. Analysis (A) is the key to "saying more" about text evidence. When using the Kindy TBEAR, start at the "B" beating heart (what's the book about?) Next, what does it make you think (T)? Can you give some examples? Can you add more (A)? etc. See additional notes on use of TBEAR on page 16. Optional Turn & Talk: Discuss applications for TBEAR for different content areas and grade levels Optional Handouts: TBEAR and TBEAR for K	
1:51:52	Classroom Example – Anatomy of Opinion/Argument graphic organizer for close reading and planning writing Optional Handout: Anatomy of Opinion/Argument	
1:53:00	Hess Observation Tool - Looking for Rigor This segment provides an explanation for teacher and student behaviors on the observation tool. Karin's Key Research Points: Five teacher and student behaviors (drawn from research) to look for as evidence of deeper thinking and student engagement Ways to encourage building a growth mindset and time to process and think more deeply Student questions reveal thinking and engagement with complex tasks Handout: Hess Observation Tool - Looking for Rigor	#45
2:00:00	Classroom Example – Hint Cards (Teaching Channel video) View the video and have table groups discuss the scaffolding strategy (2:02:32) TURN & TALK 6:	#46
2:03:05 – 2:15:00	Classroom Example – Differentiation with Learning Menus (Teaching Channel video) Karin's Key Research Points: 3 ways to Differentiate: Different Content, Different Processes/DOK (tasks); or Different Products (2:10:17) show video Differentiation with Learning Menus Handout: Quick tips for Differentiation: Assignment Menus	#47 - #49
At end of video	(2:15:03) TURN & TALK 7: Reflect & Connect Share take-aways at tables; then listen to others sharing and show examples on master slide #51.	#51
Version 2 - Part 2 My Notes		

APPENDIX - Facilitator Notes for TBEAR Graphic Organizer

Sample Writing Prompt: After reading the story "Little Red Riding Hood," what is your opinion about the intelligence or cleverness of the wolf? Support your opinion with evidence from the text.

T-BEAR Letter and what it	Helpful ways to	Your topic or text and notes (e.g.,
represents	begin	evidence from text, facts, details, examples,
T=Topic Sentence/ Thesis (focus or opinion) Clearly and directly respond to the prompt. This establishes the purpose.	In the story, Little Red Riding Hood, the author creates a character that clearly is/is not very intelligent or clever.	DOK 1 – write a sentence
B = Brief explanation/ Bridge to evidence (context) Briefly explain and/or set the scene for those who do not know the topic/text. This should not retell the whole story, but focus	This story is about a girl named Little Red Riding Hood who	DOK 2 – summarize a text
on the aspect of the story that is important for your response.	Meanwhile, the wolf character tries many things to	
E = Examples Support the writer's stance OR your opinion with specific textual references.	For example, when, the wolf says, ""	Only DOK 2 – locating examples and not analyzing the examples is only DOK 2,
Include quotation marks for direct quotes and page numbers, section, chapter, etc.	Also, the wolf tries to	connecting examples
A = Analysis Analyzes the examples/evidence. Writer digs deep to uncover meaning. Consider the meaning or implications of word choice, tone, imagery, author's purpose, etc.	This part of the story shows that The author uses these words "" and "" to describe the wolf as	DOK 3 – analyzing WHY each text-based example illustrates a key idea
	Also, the illustrations also show the reader that	
R = Relate or Reflect Establish a connection to	This kind of character is	Possible DOK Levels
another literary text, historical occurrence, society, universal	also in This idea or lesson is	DOK 2 - summarize key points,
human behavior, etc. OR	similar to	DOK 3 - articulate and support new
Reflect on the main idea or a lesson	Therefore,	insights or conclusions
OR State a conclusion related to	Overall,	DOK 4 - connect and expand ideas with
your stated opinion.	All of these examples show that	additional sources, texts, etc.

(2010) T-BEAR Organizer Adapted by Karin K. Hess, in *Local Assessment Toolkit*: Cognitive Rigor & Writing. Permission to reproduce is given when authorship is fully cited karinhessvt@gmail.com.





EDUCATIONAL RESEARCH IN ACTION

Providing educators with research-based models of effective instruction and assessment, moving students towards greater engagement and deeper learning

