

Strategic Scaffolding: Supporting Deeper Understanding for *all* Students

Keeping the focus of learning on deeper understanding for all students means that teachers must be willing to shift their role as the person who delivers direct instruction to being more of a learning coach. In turn, this will shift the role of their students from acquiring information to producing and deepen their knowledge. Of course, we cannot assume that all students will learn at the same rate or require the same type of supports in any given lesson. This is especially true of students with learning disabilities and language delays and English language learners (ELLs). When I work with school leadership teams to analyze and refine their instructional and assessment practices, we explore ways that administrators and instructional coaches can support both teachers and students in the classroom. Several things are central to providing strategic support to students:

- (1) understanding how the brain works and how memory and learning can be optimized;
- (2) clarifying the instructional purpose and what to look for and promote that would indicate cognitive rigor and deeper thinking;
- (3) developing a repertoire of various instructional and assessment approaches linked with indicators of rigor; and
- (4) using ongoing formative assessment to understand the unique needs of students and adjust instruction to meet those needs.

Three broad areas of support can be useful for educators to consider when helping students develop the skills needed for accomplishing more challenging tasks or understanding complex texts. In the table on the following page, I've provided research-based strategies for different DOK levels for each of these:

- ▶ **Language & Vocabulary Development**
- ▶ **Executive Functioning & How to Apply Skills and Processes**
- ▶ **Developing Content Knowledge & Connecting to “Big Ideas”**

Highlighted tools and strategies are described in more detail in *A Local Assessment Toolkit to Promote Deeper Learning*. Some of these are posted at <http://www.karin-hess.com/formative-and-performance-assessments> or featured on my blog <http://www.karin-hess.com/blog>.

Why pay attention to executive functioning?

Executive functions are a diverse, but related set of skills that help learners to initiate, monitor, and complete multi-step tasks. Scaffolding examples in the following table focus on these executive functions:

- **Initiation** - The ability to begin a task or activity and to independently generate ideas, responses, or problem-solving strategies.
- **Working memory** - The capacity to hold information in mind for the purpose of sustaining engagement with a task.
- **Planning/Organization** - The ability to manage current and future-oriented task demands.
- **Self-Monitoring** - The ability to monitor one's own performance and to measure it against some standard of what is needed or expected.

Why teach cognates?

“Cognates are words in two languages that share a similar meaning, spelling, and pronunciation. While English may share very few cognates with a language like Chinese, 30-40% of all words in English have a related word in Spanish. For Spanish-speaking ELLs, cognates are an obvious bridge to the English language. Cognate awareness is the ability to use cognates in a primary language as a tool for understanding a second language. Children can be taught to use cognates as early as preschool. As students move up the grade levels, they can be introduced to more sophisticated cognates, and to cognates that have multiple meanings in both languages, although some of those meanings may not overlap.” For examples of cognates and how to use them instructionally, you can read more at <http://www.colorincolorado.org/article/using-cognates-develop-comprehension-english>.

Additional Tools & Resources

- Use Hess Walk-Through Tools #26A & #26B to plan or give feedback on lessons
- Use Hess PLC Tool #9 to examine Principles of Universal Design in assessments
- Use Hess PLC Tool #10 to examine formative use of assessments
- English Language Learners Network - <https://www.nwp.org/cs/public/print/programs/ell?x-t=resources.view>
- Writing Instruction for ELLs - <http://www.colorincolorado.org/teaching-ells/literacy-instruction/writing-instruction-ells>
- 40 Strategies For Teaching ELD Students - <http://tweenteacher.com/2012/04/24/40-strategies-for-teaching-eld-students/>
- Teaching strategies for ELLs - <http://www.supportrealteachers.org/strategies-for-english-language-learners.html#sthash.pjMw6AeB.dpuf>

RESEARCH-BASED STRATEGIC SCAFFOLDING IDEAS TO SUPPORT DEEPER UNDERSTANDING

Matching Strategies to Purpose	Supporting Language & Vocabulary Development	Supporting Executive Functioning & How to Apply Skills, Processes	Developing Content Knowledge & Connecting to “Big Ideas”	Possible Student Activities/Products
1 Acquire a Foundation	<ul style="list-style-type: none"> o Use bilingual tools/apps to find definitions, synonyms, word families, cognates o Build word walls with visuals (photos, drawings, symbols) o Build prior knowledge of content-specific vocabulary (Tier 3) using different modalities, word banks 	<ul style="list-style-type: none"> o Post 1-2 daily “I can...” statements for specific skills to be applied today o Co-create (color-coded) anchor charts visually breaking down steps or parts o Model how to apply “academic” terms in each content area: list, define, brainstorm, locate, follow steps/rule o Structured note-taking (2-columns, visuals) 	<ul style="list-style-type: none"> o Build prior knowledge with field trips, video, concrete objects, hands-on explorations, skits/roles o Create class tableaus for events, ideas, concepts (e.g., division) o Use KWHL charts: H= how can we find out (this leads into the lesson activities - read, build model, etc.) 	<ul style="list-style-type: none"> o Use different modalities or resources (visuals, gestures, manipulatives or word banks) to respond to basic questions o Create personal picture dictionaries/glossaries o Use frames and word banks to practice short responses: restate, describe, list o Label photos, artifacts
2 Use, Connect, Conceptualiz	<ul style="list-style-type: none"> o Model using word solving strategies, patterns, context cues o “Think aloud” to model how to do a key word search o Move from definitional to conceptual, abstract, non-literal, or multiple meanings (Tier 2) o Check understanding with Turn & Talk (frames) every 10-12 min. 	<ul style="list-style-type: none"> o Model how to apply “academic” terms in each content area: predict, compare, categorize examples & non- examples, summarize, record/organize data, etc. o Provide customized graphic organizers, tables, flow charts, and software tools to organize ideas/data o Break tasks into steps & checkpoints o “Chunk text” and insert questions to sustain engagement 	<ul style="list-style-type: none"> o Preview texts prior to listening, viewing, reading – discuss how to use text features: diagrams, visuals, subheadings, bold print, etc. o Model use of graphic for main idea-details, cause-effect, cause-effect, concept or story maps o Use gallery walks to add/build on ideas of others 	<ul style="list-style-type: none"> o Peers build anchor charts for characters/ events/key concepts o Use anticipation guides to predict and then check what text says o Make cartoon strip showing sequence of a process or story line (draw, cut out pictures) o Complete/create a timeline, etc.
3 Deepen & Construct Meaning	<ul style="list-style-type: none"> o Use Hess TBEAR model to use supporting evidence: Topic/Thesis, Bridge to evidence/ Brief summary, Evidence/examples, Analyze examples, Reflect o Use sentence frames to share each part of TBEAR o Create TBEAR vocabulary posters o Reinforce 5 new vocabulary/day: repeat, use in context, define, connect root meaning to similar words, use in responses 	<ul style="list-style-type: none"> o Model how to apply “academic” terms in each content area: analyze by breading into parts, use criteria, find evidence o Provide “hint cards” with definitions, bilingual cues, illustrated examples to use when solving problems, completing tasks o Provide guided practice for whole class and later small group performance tasks o Regularly monitor progress using performance tasks while lessening scaffolding over time 	<ul style="list-style-type: none"> o Guide small groups to co-develop inquiry plans to investigate open-ended research questions/tasks o Teach students to annotate texts (underline key idea, circle key terms, paraphrase each section) o Provide structured ways to re-read texts for different purposes o Use “carousels” for peers to critique reasoning or solutions o Provide guidelines for use of visuals 	<ul style="list-style-type: none"> o Use anticipation guides to gather evidence & reflect on initial ideas after reading o Use turn & talk frames, inner-outer circles to practice listening skills, connect or support ideas o Use jigsaw for groups to take apart exemplars or models o Create captioned photo essay for topic, with given criteria/or frames provided o Groups create “text decks” as close interpretive reading of short texts
4 Extend, Transfer, Broaden Meaning	<ul style="list-style-type: none"> o Use pre-post “word splashes” to reinforce and integrate word meanings and concepts across a unit or project o Use anchor charts with stems for research / listening activities (e.g., This text says...; How does this compare?; This source doesn’t agree with...; This fact/source is important/credible because...) o Use video/audio recordings to self-assess, or give peer feedback 	<ul style="list-style-type: none"> o Model how to apply “academic” terms in each content area: analyze across sources or data sets, research, investigate, check sources/credibility; first drafts; revising for clarity, flow of ideas o Provide graphic organizers and models that encourage cross-text analyses o Use a structured process/steps for multiple readings/viewing of texts or to self-assess task completion 	<ul style="list-style-type: none"> o Provide simulations (e.g., GRASPS), investigations, or debate formats to show varying perspectives or possible causes-effects o Pair content-specific texts so more basic print/ non-print texts provide background for second text o Use a structured process/steps for self-assessment of content acquisition and understanding 	<ul style="list-style-type: none"> o Small groups complete a One Pager to illustrate and connect the meaning of a selected quote o Small groups complete a “Picture-Photo Search” activity where an unknown visual is presented with a series of inquiry-based questions to be answered (e.g., what event is depicted, when was this taken, why is it significant, what sources did you check)