

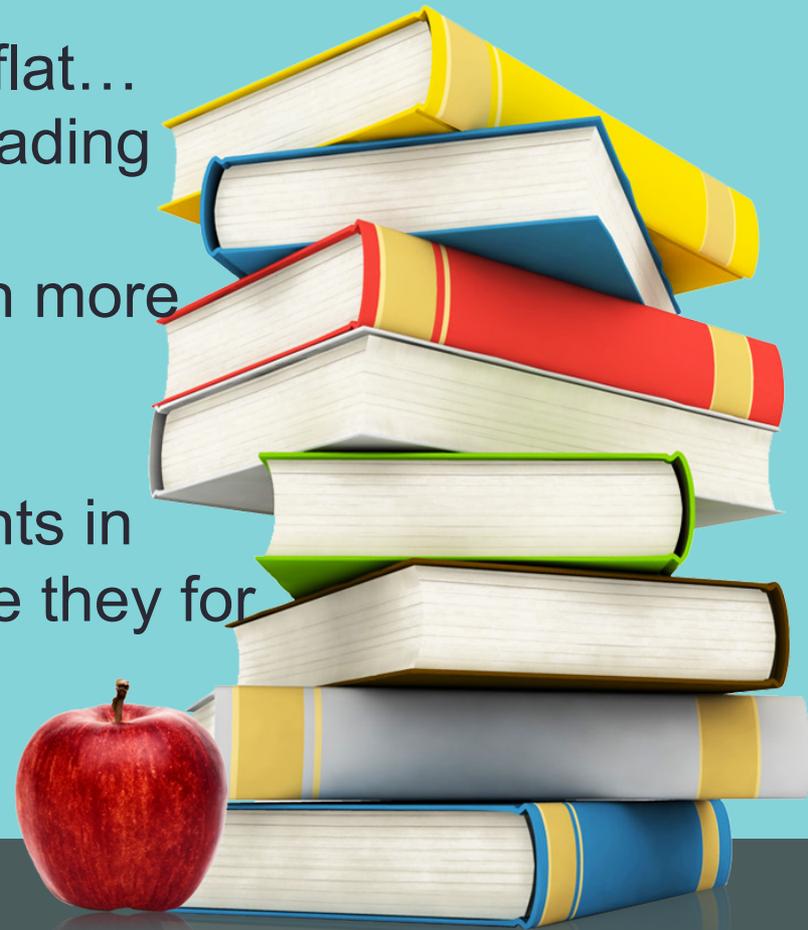
Teaching Reading with Complex Texts?

Timothy Shanahan
University of Illinois at Chicago
www.shanahanonliteracy.com



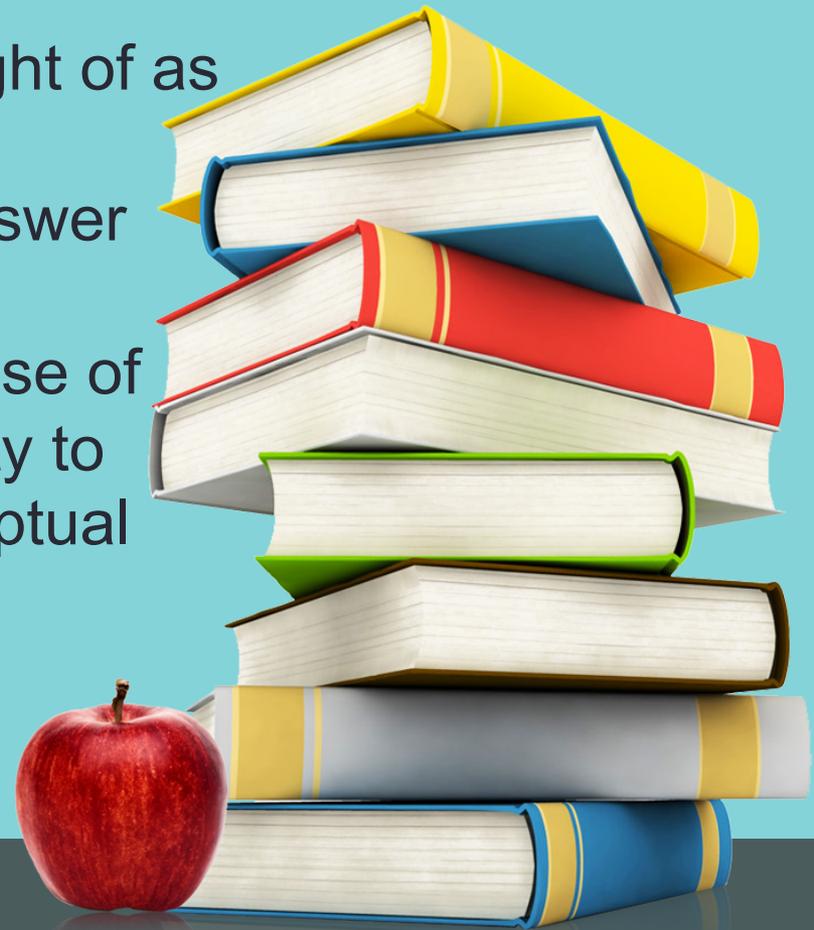
2017 NAEP scores released last week

- Nationally, scores were relatively flat... slight improvement in 8th grade reading (first time in 20 years) and no improvement in grade 4 reading in more than 10 years
- Pennsylvania saw no improvements in reading in Grades 4 or 8 (nor have they for more than a decade)



Reconceptualizing Reading

- These problems are usually thought of as skills deficiencies
- But reading is not the ability to answer certain kinds of questions
- Reading is the ability to make sense of ideas expressed in text—the ability to negotiate the linguistic and conceptual barriers or affordances of a text



Clarification: No one is trying to raise challenge level of K-1 texts

- Readability measures are not effective at those levels
- Standards are silent about K-1, there is no text standard there
- There is a small amount of empirical evidence and a lot of theory arguing that beginning reading is different



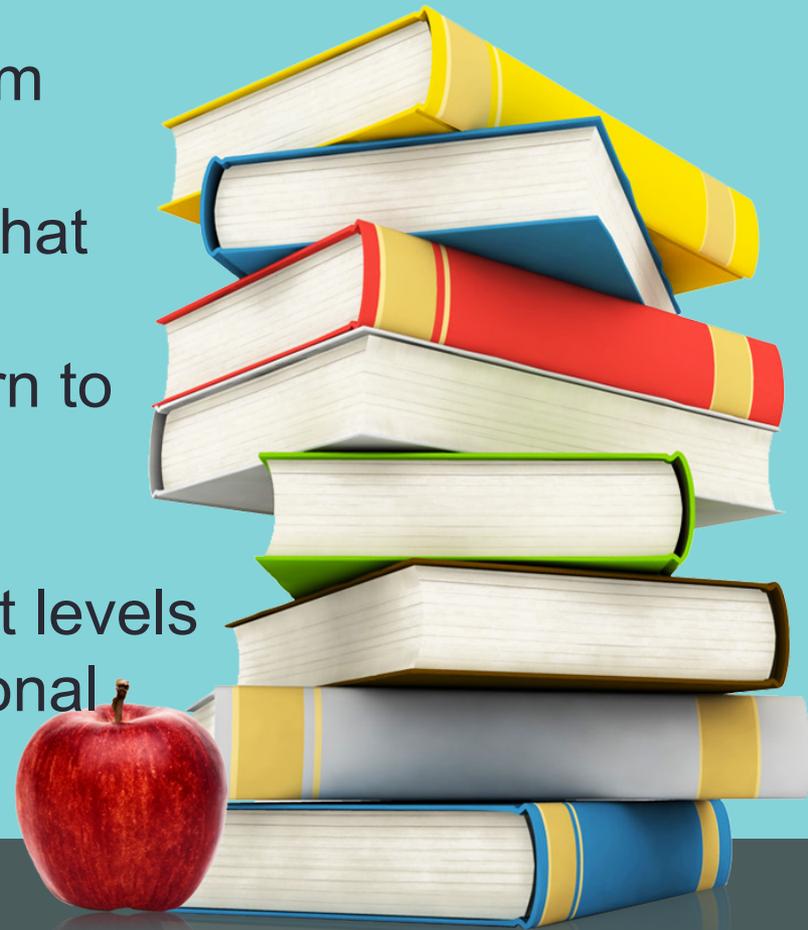
Four Common Classroom Responses to Text Complexity

- Move students to easier text
- Read text to students (communicates the information, but doesn't increase student reading ability)
- Tell students what texts say (same as reading to kids in its impact)
- Ignore the problem (more drawbacks than the previous approaches)



Reasons for teaching students with easier text

- The basic idea has been that students learn to read best from texts that are relatively easy
- Various experts have claimed that if the books are too hard, then students will not be able to learn to read them
- Consequently, there are many schemes for placing kids in text levels and for teaching with “instructional level texts



Instructional Level Criterion

Betts (1946): informal reading inventories used to estimate students' reading levels

- Independent (fluency 99-100%; comprehension 90-100%)
- Instructional (fluency 95-98%; comprehension 75-89%)
- Frustration (fluency 0-92%; comprehension 0-50%)



Source of Betts' criteria

- Betts claimed text-matching was validated by Killgallon study
- But, Killgallon examine only a small group of children at one grade level with no measure of learning
- I discovered this huge gap in the research record (Shanahan, 1983)



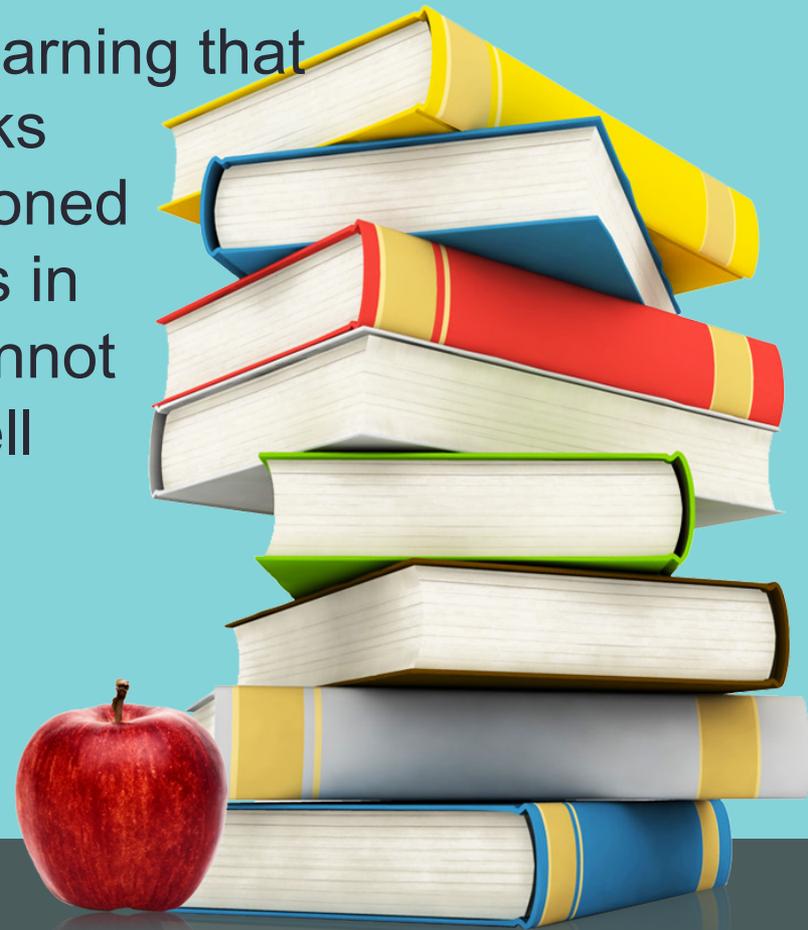
Matching texts to student levels doesn't improve achievement

- Powell (1968): same methods as Killgallon, but more grade levels and different results
- Dunkeld (1982): harder placements associated with more learning
- Jorgensen, et al. (1977): no relation between placement and achievement gains
- Morgan, et al. (2000): frustration level placements led to greater learning gains
- O'Connor et al (2002, 2010): only benefit was for students reading at grade 1 level, but even this benefit went away if scaffolding was equated
- Kuhn et al (2006): frustration level placement led to greater learning gains
- Brown et al (2017): no learning benefit



But can we just throw students into difficult text?

- No real evidence based on learning that shows instructional level works
- However, the idea has burgeoned because just placing students in demanding texts that they cannot read well was not working well
- Where does that leave us?

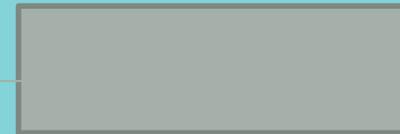


Traditional instructional level theory

Instructional level theory: learning is facilitated by ensuring students can read instructional texts with relatively good fluency and comprehension; accomplished by placing students in relatively easy texts



Reader Level

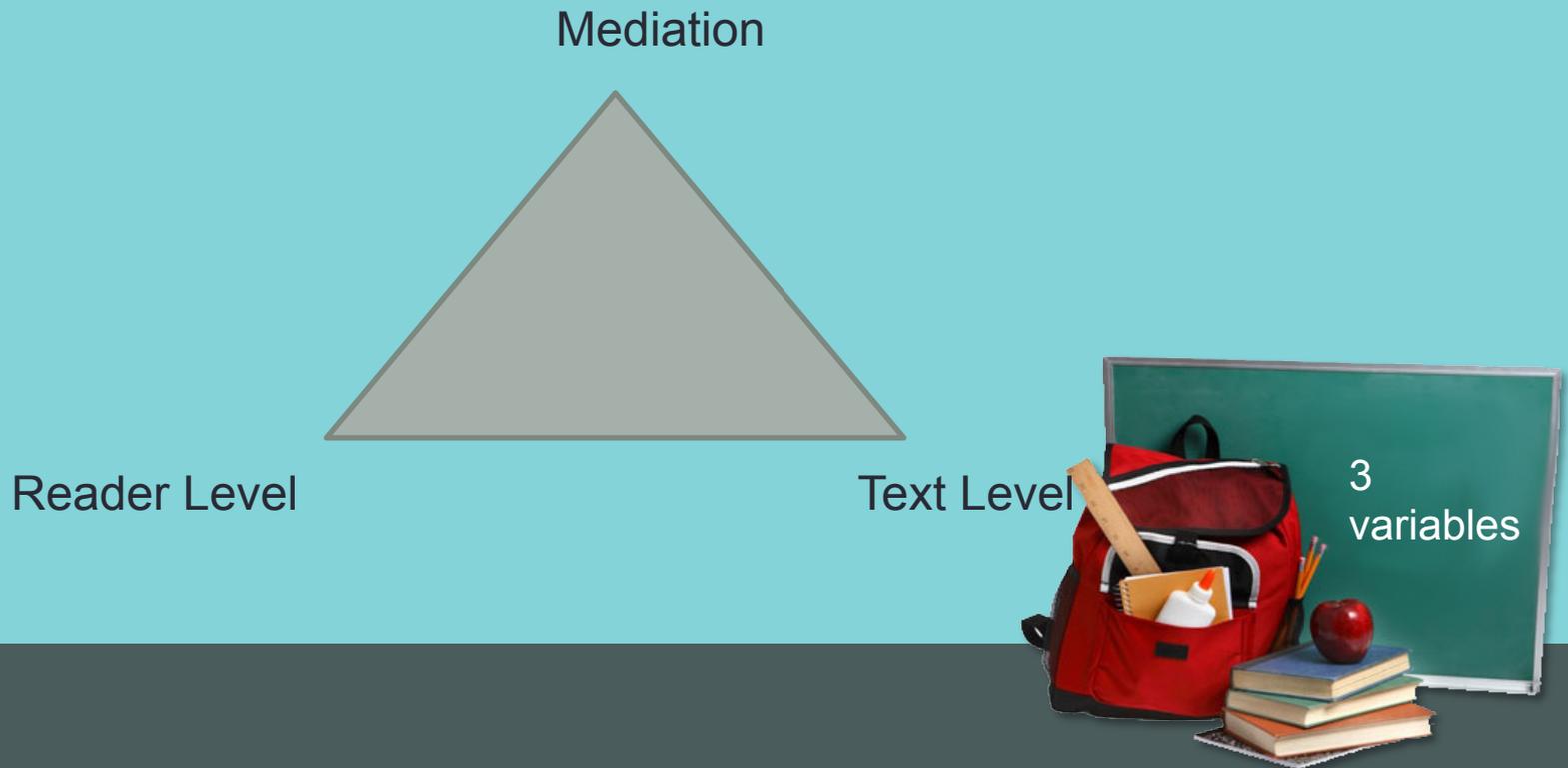


Text Level



Powell's mediated text theory

Learning from relatively harder texts is superior because teaching can facilitate/mediate students' interactions with text in ways that allows students to bridge the gap



Any evidence that this is possible?

- Yes, quite a bit
- Many studies show that – with scaffolding – students can read “frustration level” texts as if they had been placed in books at their “instructional levels”
- Remember the O’Connor studies: instructional level made a learning differences until she standardized the teacher scaffolding... that’s one



Scaffolding an Instructional Level

Bonfiglio, Daly, Persampieri, & Andersen, 2006

Burns, 2007

Burns, Dean, & Foley, 2004

Carney, Anderson, Blackburn, & Blessings, 1984

Daly & Martens, 1994

Eckert, Ardoin, Daisey, & Scarola, 2000

Faulkner & Levy, 1999

Gickling & Armstrong, 1978

Hall, Sabey, & McClellan, 2005

Levy, Nicholls, & Kohen, 1993

McComas, Wacker, & Cooper, 1996

Neill, 1979



Scaffolding an Instructional Level

O'Shea, Sindelar, & O'Shea, 1985

Pany & McCoy, 1988

Rasinski, 1990

Reitsma, 1988

Rose & Beattie, 1986

Sanford & Horner, 2013

Sindelar, Monda, & O'Shea, 1990

Smith, 1979

Stoddard, Valcante, Sindelar, O'Shea, et al., 1993

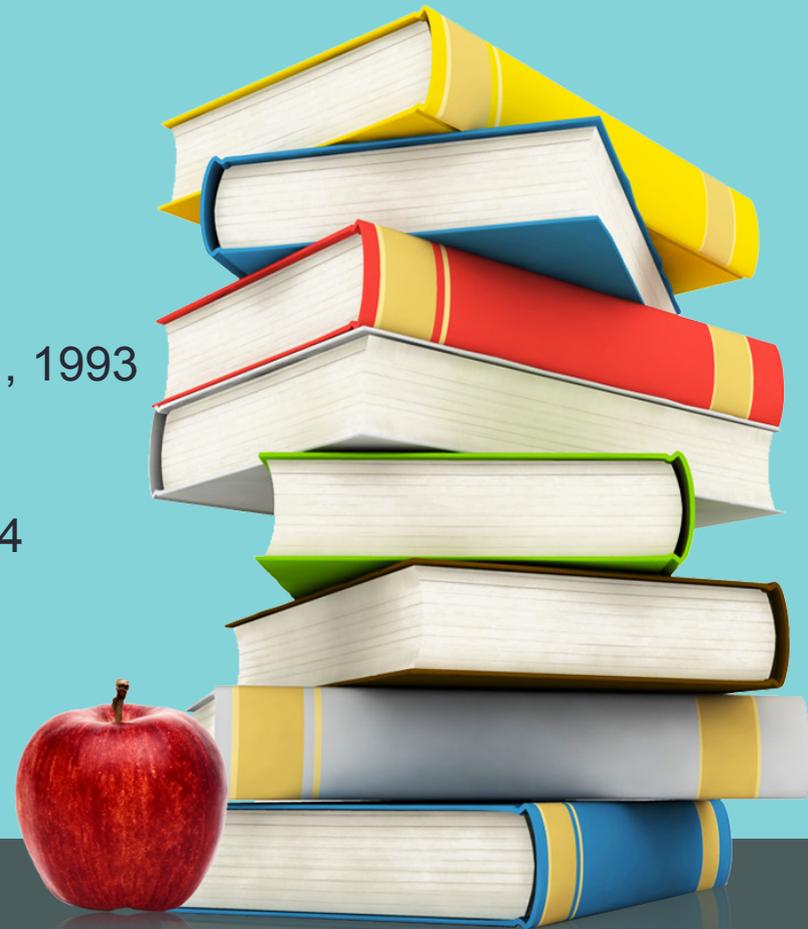
Taylor, Wade, & Yekovich, 1985

Turpie & Paratore, 1995

VanWagenen, Williams, & McLaughlin, 1994

Weinstein & Cooke, 1992

Wixson, 1986



Scaffolding Challenging Text

Scaffolding Text Features

- Complexity of ideas/content
- Match of text and reader prior knowledge
- Complexity of vocabulary
- Complexity of syntax
- Complexity of coherence
- Familiarity of genre demands
- Complexity of text organization
- Subtlety of author's tone
- Sophistication of literary devices or data-presentation devices

Other Approaches

- Provide sufficient fluency
- Use stair-steps or apprentice texts
- Teach comprehension strategies
- Motivation

Tell Vocabulary

- Texts can be hard because of unfamiliar vocabulary (difference between academic vocabulary and key vocabulary in a text)
- Less widely known words tend to be harder than known words
- Metaphorical language counts as vocabulary too (“common currency”, “charming and charmed innocence”)
- But not all of the words have the same impact on the information or comprehension of the information
- Carefully analyze text for the challenging and important vocabulary—emphasize the words that influence the meaning

Which words do you teach?

Photosynthesis may sound like a big word, but it's actually pretty simple. You can divide it into two parts: "Photo" is the Greek word for "Light," and "synthesis," is the Greek word for "putting together," which explains what photosynthesis is. It is using light to put things together. You may have noticed that all animals and humans eat food, but plants don't eat anything. Photosynthesis is how plants eat. They use this process to make their own food. Since they don't have to move around to find food, plants stay in one place, since they can make their food anywhere as long as they have three things.

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Which words would you teach?

Some scientists argued that these gases have heated up our atmosphere. They say global warming will **affect** our climate so dramatically that **glaciers** will melt and sea levels will rise. In addition, it is not just our atmosphere that can be polluted. Oil from spills often **seeps** into the ocean.

Which words would you teach?

I can never forget the scene that met us. Between us and the Barrier was a lane of some fifty yards wide, a seething cauldron. Bergs were calving off as we watched: and capsizing: and hitting other bergs, splitting into two and falling apart. The Killers filled the whole place. Looking downwards into a hole between our berg and the next, a hole not bigger than a small room, we saw at least six whales. They were so crowded that they could only lie so as to get their snouts out of the water and my memory is that their snouts were bottle-nosed. At this moment our berg split into two parts and we hastily retreated to the lower and safer floes.

Which words would you teach?

I can never forget the scene that met us. Between us and the Barrier was a **lane** of some fifty yards wide, a **seething cauldron**. **Bergs** were **calving** off as we watched: and **capsizing**: and hitting other bergs, splitting into two and falling apart. The **Killers** filled the whole place. Looking downwards into a hole between our berg and the next, a hole not bigger than a small room, we saw at least six whales. They were so crowded that they could only lie so as to get their snouts out of the water and my memory is that their snouts were bottle-nosed. At this moment our berg split into two parts and we hastily retreated to the lower and safer **floes**.

Guidelines for vocabulary scaffold

- Focus on words that make a difference in comprehending the text.
- Do not preteach words that are explicitly defined in the text.
- Do not preteach words that can be figured out from context.
- Do not provide extensive prior instruction—telling or providing a glossary is enough.
- Follow up: reading should stimulate growth in vocabulary.

Help with Sentence Structure

- Texts may be hard because of grammar or syntax

Explain clearly using at least three different reasons or drawing three diagrams why McClellan lost the battle.

Explain clearly why McClellan lost the battle. Give at least three reasons or draw three diagrams.

Help with Sentence Structure

- Guide students to interpret complex sentences (clause and phrase analysis)
- In dense prose, help find the subject and verb:
“However, on August 24, 2006, the International Astronomical Union (IAU), a group of individual astronomers and astronomical societies from around the world, made an announcement.”
- *Complex punctuation, such as split quotes:*
“Where are you going,” Maurice asked, “I thought you were going to help Tony wash the windows.”

- *However,*
- *on August 24 2006*
- *the International Astronomical Union (IAU), a group of individual astronomers and astronomical societies from around the world*
- *made*
- *an announcement*

Who was the sentence about?
the International Astronomical Union (IAU)

Who are they?
*a group of individual astronomers and astronomical societies
from around the world*

What did they do?
made

Made what?
an announcement

When?
on August 24 2006

Another example

“The women of Montgomery, both young and older, would come in with their fancy holiday dresses that needed adjustments or their Sunday suits and blouses that needed just a touch—a flower or some velvet trimming or something to make the ladies look festive.”

--Nikki Giovanni (Rosa)

- 44 words
- 2 commas, 1 em-dash

Another example

“The women of Montgomery , ~~both young and older,~~ would come in with their fancy holiday dresses that needed adjustments or their Sunday suits and blouses that needed just a touch—a flower or some velvet trimming or something to make the ladies look festive.”

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Help with Cohesion (cont.)

- Guide students to interpret anaphora
Iguanas are lizards. They often live in deserts.
- Guide students to deal with ellipsis
Where are you going? To school.
- Guide students to deal with substitution
Which toy do you want? The big one.
- Guide students to deal with conjunction
(however, consequently, but also unmarked conjunctions)

Meanwhile, the nebula continued to orbit the new Sun until it formed a large flat ring around it. Scientists call this ring a “protoplanetary disk.” The disk, or ring, was hottest where it was closest to the Sun, and coolest at its outer edge. As the disk swirled around the Sun, the Sun’s gravity went to work. It pulled and tugged at the bits of rock, dust, ice, and gas until they came together in clumps of material we now call the planets.

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Another cohesion example

- There were several roads near by, but it did not take her long to find the one paved with yellow bricks.

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Another cohesion example

“Surely,” said John, like one who had lost faith in his memory, “he used not to sleep in the kennel?”
“John,” Wendy said falteringly, “perhaps we don’t remember the old life as well as we thought we did.”

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‘I didn’t know that Cheshire cats always grinned; in fact, I didn’t know that cats could grin.’

‘They all can,’ said the Duchess; ‘and most of ‘em do.’

‘I don’t know of any that do,’ Alice said very politely, feeling quite pleased to have got into a conversation.

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Guidelines for cohesion scaffolding

- Identify the repetitions, synonyms, pronouns (mark the text to show the connections)
- Identify the conjunctions (and, moreover, however, but, consequently, etc.)
- Spanish speakers have particular difficulty with abstract pronouns (e.g., one, any) and with gender markers (e.g., his, her, him, it)

Resources

Shanahan, T., Fisher, D., & Frey, N. (2012), March. The challenge of challenging text. *Educational Leadership*.

Shanahan, T. (2013). Letting text take center stage. *American Educator*.

Build Text Reading Fluency

- Texts can be hard because they demand more advanced reading skills than the students have
- Students need practice reading (orally) with accuracy, appropriate speed, and prosody
- Not round-robin reading (use these instead: repeated reading, echo reading, paired reading, reading while listening, etc.)
- Putting fluency first might make sense
- Parsing texts can be helpful

A Walk in the Desert

Sunbeams are flickering over the landscape as the sun rises. A kit fox heads for her den as another day in the desert begins.

Deserts are surrounded by other kinds of landscapes. Scientists call these different land zones biomes. All the plants and animals in a biome form a community. In that community, every living thing depends on other community members for its survival. A biome's climate, soil, plants, and animals are all connected this way.

A Walk in the Desert

Sunbeams/ are flickering/ over the
landscape/ as the sun rises./ A kit fox/ heads/ for
her den/ as another day/ in the desert/ begins./

Deserts/ are surrounded/ by other kinds of
landscapes./ Scientists/ call/ these different land
zones/ biomes. All the plants and animals/ in a
biome/ form/ a community./ In that community,/
every living thing/ depends/ on other community
members/ for its survival./ A biome's climate, soil,
plants, and animals/ are all connected/ this way./

Provide Stair-step Texts

- Texts can be hard because students lack sufficient background knowledge
- If students have multiple texts on the same topic that are at different difficulty levels,
 - easier “apprentice” texts can help students build background knowledge for the more difficult ones.
 - The overlap in important information should increase the likelihood that students will pay attention to it.
 - Should increase a student’s ability to independently deal with the information in the hard text

Repetition

- One of the most powerful scaffolds is also one of the most obvious—reading a text more than once makes it more accessible
- In the past, we tended to have students read a text a single time, but as the text challenge increases it is essential that we encourage students to read texts (and parts of texts) more than once to make sense of it
- This is an effective strategy, but it is expensive too (the idea is to become successful with these texts—which should make it possible to succeed with other texts later with less work)
- Explain this to students

Comprehension strategies

- Research shows that when students are active readers—that is, when they are actively trying to understand a text—they comprehend and remember more
- Comprehension strategies are a proven way to get students to think about the ideas in a text
- Summarization, questioning, monitoring, seeking particular kinds of information have all been found to stimulate learning

Motivation

- The instructional level is based on the idea that students seek easy work--that if the work is challenging they will stop trying
- But research shows that students seek challenge and are motivated by it
- Challenge only works if it is not overwhelming and if students see the possibility of getting better/stronger, et.
- Don't make challenging text a secret—tell kids what is happening and show them how you will make them effective
- Research also shows that students are interested in more challenging content (and on their own, they'll fight through more challenging text to get to this content)—using challenging text opens up content possibilities

The physical fitness metaphor

- If reading and physical exercise are similar, then text complexity is akin to weight or distance
- Students need to practice reading with multiple levels of difficulty and for varied amounts (these variations can even occur within a single exercise session)
- Guiding students to read text with support is like spotting for someone during weight lifting (you have to be careful not to do the exercise for them and you have to avoid dependence)
- Do not always head off the challenges, but always be ready to respond and support

16-Week Marathon Training Schedule

Week	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
1	3	Rest	4	3	Rest	5	Rest	15
2	3	Rest	4	3	Rest	6	Rest	16
3	3	Rest	4	3	Rest	7	Rest	17
4	3	Rest	5	3	Rest	8	Rest	19
5	3	Rest	5	3	Rest	10	Rest	21
6	4	Rest	5	4	Rest	11	Rest	24
7	4	Rest	6	4	Rest	12	Rest	26
8	4	Rest	6	4	Rest	14	Rest	28
9	4	Rest	7	4	Rest	16	Rest	31
10	5	Rest	8	5	Rest	16	Rest	34
11	5	Rest	8	5	Rest	17	Rest	35
12	5	Rest	8	5	Rest	18	Rest	36
13	5	Rest	8	5	Rest	20	Rest	38
14	5	Rest	8	5	Rest	9	Rest	27
15	3	Rest	5	3	Rest	8	Rest	19
16	3	Rest	3	Walk 2	Rest	26.2	Rest	34.2

Differentiation?

- Not different books, but different scaffolding
- Students should read multiple texts across a range of challenge levels (including “frustration” level), but the degree of scaffolding should be higher the harder the text
- Large group text vs. small group texts?
- Pull-out instruction?