Dr. Anita Archer: Content Area Text Reading

Overview
- The challenges of text book/informational reading are huge! It calls upon all levels of the reading process from decoding / fluency/ vocab. & comprehension strategies... Expository texts are full of what we call “academic English”- the language of texts as being almost a second language - complexity of vocabulary/syntax/grammar is almost akin to a foreign language!

Why Focus on Informational/Expository Texts?
- this is one reason why we will focus today on expository texts - kids have less experience w/this form -and some 80% of secondary reading required of students is informational
- some 95% of what adults read on a daily basis is expository
- college and high school is also primarily informational/expository
- research indicates our students; especially struggling students - do far better on narrative comp – than expository - they have high background knowledge about stories from movies etc.
- secondary kids tend to read informational texts as if it were a story... little thinking, little strategizing, etc.

Active Participation
- by middle/high school many kids feel just having their bodies there ought to be enough... the whole notion of “hand raising” driven discussions don’t work - same kids dominate the discussions - and it is usually the high performers/fluent in English etc.
- must get all kids engaged - not just the most proficient/high performers/fluent in English : must avoid the unintentional, but all to common “teach the best & leave the rest”
- practices to avoid: 1) hand raising for discussion, round robin reading, blurtting
- practices to use:
  1) **choral responses** -all say together-wakes kids up -give thinking time - the response are the same - e.g. saying the new vocabulary together..
  2) **partner responses** - most useful for content area reading instruction
     - teacher chooses - high with middle performing, middle with lower
     - give a designation of 1 or 2 (or whatever)-so you can choreograph involvement
     - regularly ask kids to share answers with partners BEFORE you randomly call on them: many benefits including:
       1. kids would get feedback from their partner
       2. more time to think and rehearse - encourages reflection
       3. likely to be more confident and willing to share with the group
       4. more kids participating
       5. more kids more attentive/engaged & interested in others responses to compare/contrast with their own

** in secondary - one critical use of partners is to regularly have students review independently for 60 seconds and summarize w/their partners
Math – research is finding that if you build in partner teaching – AFTER teachers taught the process & corrected it – kids had to “teach your partner as if they were not here today – explain how this _____ works”.

3) written responses
- good to have kids write things to focus their attention/thoughts & to hold them accountable for responding to your directions (e.g. activate prior knowledge)
- often helpful to structure the language - e.g. provide sentence stems using the key vocabulary, this also structures the syntax and grammar... (“e.g. I predict that _______ because ____________.”)
- helpful to keep the written responses fairly short – so you don’t have many students engaged in off task behavior

4) doing responses
- put your finger on the ______________ “first word, first problem” etc.
- briefly act out a scenario – e.g. 1/2 the class stood up as the North (in US History study of the civil war), clarified the issues – the North was a union, hands on shoulders showing close linkage – then South stood up - clarified their issues - difference of confederacy (turned so no eye contact w/anyone in the group – states rights) – vehicle for clarifying key vocabulary like federal, confederate, states rights, union, and so forth...
** don’t need costumes and parts – but makes things more memorable...

5) randomly calling on students – (or faux randomly) – students don’t know who will be called upon - so ALL must be responsible... students are only called upon AFTER they have been prepared via writing/partner rehearsal, etc.

** No comprehension strategy is powerful enough to compensate for the inability to read the words!! - Dr. Joe Torgesen

- thus we must be sure IF students need it (assessment is obviously critical) we provide direct instruction in phonemic awareness (e.g. Language!, Earobics), decoding (REWARDS, SIPPS), fluency (Read Naturally, 6 Min. Solution, Great Leaps) are prerequisites to being able to comprehend text... powerful reading interventions require a comprehensive look at students needs... no "one size fits all" allowed!!

** This Content Area Reading Series will focus on the 3 additional domains of comprehensive reading instruction beyond phonemic awareness, decoding, fluency:
1) Vocabulary/Background Knowledge, 2) Comprehension Strategies, 3) Writing in response to reading (e.g. summaries etc.) before/during/and after reading.

PROBLEM: very possible to read something but have zero thinking - the ole cognitive siesta... or mindless reading. We need to get kids to think strategically during reading and hone in on important information... this takes active teaching - not just assigning!

Dr. Anita Archer  ContentLiteracy: What Every Teacher Must Know & Be Able to Do
- e.g. Ask students questions as they read - stop at certain junctions and have students respond to questions: ask a partner - 3 reasons why this is a good idea:
  1. Accountability - higher probability they will be awake, thinking
  1. Check for understanding - so I can reteach/correct or validate
  1. Teaching them self monitoring - if we ask good questions - e.g. why do you think the author wrote it this way? - develops independent comp. skills.

- We also need to teach them strategies that students can use - as well as the use of graphic organizers to help students elaborate and organize information...
- Tomorrow we will look at writing: summary writing very key to boosting comprehension as well as developing the actual skill of writing...

All of these areas are intertwined and co-dependent: decoding/fluency/ vocabulary & background knowledge/comprehension strategies - most struggling readers have needs across these domains.

• Content Area Teachers need to use strategies to provide students access to the history/science/math texts - NOT be reading teachers in the intervention or remediation sense - that is for the reading class... BOTH are critical..

**Key to Supporting Students Access to Content Texts:**
- Effective Strategies used BEFORE - DURING - AND AFTER READING

**BEFORE: (the MOST important of the three phases)**
- guide students in the pronunciation of difficult words
- pre-teaching key vocabulary is huge here... including pronouncing the words
- teach essential big ideas or background knowledge or schema (e.g. can’t grasp keys of the life of Ghandi without knowing something about the British empire
- when using KWL - usually have to BUILD K (not just activate) - and the L - many older kids say "nothing!!!" - find it far better to ask:
  √ what should an author tell us?
  √ what would the teacher want us to learn?
  √ what might be important to remember for the test?
- why would we use previewing or prereading in expository texts not narrative?
  1. get the big idea
  2. develops the mental schema
  3. anticiapte key elements
- would you ever preview narrative? certainly the title and predict - but not prereading in the sense that you would w/expository texts...
**a systematic school-wide focus on pre-teaching vocabulary, building background knowledge, and previewing expository chapters would be the single most powerful school-wide content literacy focus a school could adopt to make a difference in literacy and student achievement.**

**DURING**
- must get beyond round robin reading - still a common practice - come up with major disadvantages to round robin reading:
  1. psychic death to poor readers (EL and LD kids especially)
  1. kids figure out when it is their turn, rehearse and ignore the text
  1. kids probably not listening - as soon as you know it isn't you - space out and don't actively listen
  1. major cognitive floatation...
  1. small amount of actual reading practice individuals actually get...

Alternatives
- Augmented silent reading
- Choral reading
- Cloze reading
- Partner reading
- asking questions during reading
- using strategies like note taking, graphic organizers, etc.

**AFTER**
- provide fluency work using repeated readings (see www.sopriswest.com for The Six Min Solution as an example
- provide comprehension activities:
  - summarization, retelling, question answering etc.
  - written activities etc.

**Strategies we could teach kids BEFORE we read**

**VOCABULARY is the MOST ESSENTIAL ASPECT OF BEFORE READING...**

Pre-Teach the pronunciation of Key Vocabulary Words selected from a challenging reading:

**TELL** - words that have unusual pronunciations/foreign derivations/etc. we simply tell them how to pronounce the word - and what it means briefly

e.g. Egypt, Egyptian, ancient
**STRATEGY** - read the word by parts

- e.g. valu able, fer tile, ge o graph y, min er al,

"what part - what part - what word" is the prompt from the teacher
- don’t need to look up each word and put them into perfect syllables - but it is important to break off common prefixes and suffixes so kids get better at reading longer words
- very helpful at middle and high school for very unusual content area words

**Example of a Program to Teach Polysyllabic Word Reading: REWARDS**

- one of the major challenges in reading upper grade materials - kids don’t have a strategy for reading longer polysyllabic words
  - studies find many special ed and at risk kids plateau at 2.5 - 3.0 reading level and do not have strategies for advanced polysyllabic word decoding
  - yet decoding is often not taught beyond 2nd grade - many kids don’t infer efficient and effective strategies for reading longer words
- what doesn’t work? memorizing rules of syllabication - no linkage to ability to read long words... syllable slashing does not help?
  * What does work? (see REWARDS - program from Sopris West, Archer/Gleason/Vashon: www.sopriswest.com)
    1) 80% of long words have an affix - prefix or suffix
    - so need to teach kids to peel these off
    2) vowel sounds in each decodable chunk - so need to know your vowel sounds
    3) bridge from decoding pronunciation to actual using oral language
  * Overt Strategy:
    1 - circle the word parts (prefix/suffix)
    2 - underline letters representing vowel sounds in rest of word
    3 - say the parts of the word
    4 - say the parts fast
    5 - make it a real word
  * as kids get it - remove the scaffold - make it Covert
    1 - look for word parts at the beginning & end of word - and vowel sounds in rest of the word
    2 - say the parts of the word
    3 - say the parts fast
    4 - make it a real word
  * teach morphology of high frequency word parts/affixes:
    e.g. dis discover away, apart, negative
    mis mistaken wrong
    re return again, back, really
    ad advertise to, towards, against
VOCABULARY for CONTENT AREA READING

* see National Reading Panel report for excellent summary of vocabulary among other issues: go to www.scoe.org/reading for more on vocabulary or visit www.nationalreadingpanel.org to order a free copy for yourself

Why teach vocabulary?
1. related to reading comprehension
2. related to overall school achievement - single best predictor of college/grad school
3. central to content area reading/learning

What kind of vocabulary instruction is helpful?
1. Less is more - choose high priority critical words/concepts
2. Stress strategies that students can use independently to determine the meaning of a word: (brainstorm options in addition to looking up in a dictionary)

* Anita modeled the "monitor with an overhead to capture group insights in an efficient manner and still honor individuals by using their name on the overhead)

- context clues: sentences/pictures/charts & graphs * this is our #1 strategy!
  WHY? - they are right there!       - don't have to stop reading momentum
  - define the word situationally, how it is used in this text
  Text? - is this most likely to work in expository or narrative?
  * much more likely in expository, so less useful in narrative

- glossary or dictionary: glossary is much better than a dictionary...
  WHY? - right there, don't have to get up and move
  - defines it as it is used in the material - no sorting through meanings
  - shorter - more likely to be accessed
  - more likely to be written closer to students readability level

- thesaurus - not very useful except for writing but can very useful for EL kids

- word parts: roots & stems - Latin/Greek roots
  - use knowledge of known words - strategy of analogy
  - most kids don't do this unless Teachers intentionally prompt kids

  e.g. new word is BIOSPHERE - we can use our knowledge of other words to help here
  - turn to your partner and find a word you know using BIO
  * biology - science of living things
  * biography - story of someones life - bio - living/life - graph - write
  - turn to partner and find a word using sphere
  * hemisphere - hemi = half, sphere is round - ball/earth

  ** take the opportunity to teach kids through analogy...

  - ask someone! - this is a valid strategy - adults use it far more than a dictionary
  - most adults have someone higher on the life "vocabulary ladder" - folks we ask for our various vocabulary needs!

  ** Bottom Line - teach kids “how to fish” - a STRATEGY - is the key here....

For more on REWARDS see: http://www.rewardsreading.com/
3. Introduce the definition of a word & illustrate the word’s use
4. Go beyond definitional knowledge
5. Integrate to prior knowledge - form connections

* must go beyond simple definitional knowledge - it is about CONNECTIONS - to prior knowledge & learning words relationship to each other... we store words in semantic webs or networks (demo - "paper is... white, grass is ....green, cows drink.... milk! )
6. Provide multiple exposures to the word

** SELECTION OF WORDS - PRIORITIZATION IS KEY **

1. Choose "BIG IDEA" words essential to comprehending the gist - key concepts, etc.

2. Academic tool kit words - (e.g. the Coxhead list) - words students likely to encounter across the disciplines and will need to discuss and write about the topic (e.g. absurd, compare, subsequently, observation, analysis) - no one is consistently teaching these - EVERYONE at a school site needs to be actively teaching these.

3. Disciplinary tool kit words - select words from your discipline that are vital beyond the lesson or unit today - they will used over and over in the course (e.g. metaphor, economic, species,

** The High Frequency Academic Words (Beck’s “Tier 2”) are almost never bolded or italicized or otherwise called out for pre-teaching - we need to preread the chapter or text and pull out a few of these for all challenging expository texts. 

** usually 6-10 is all you can realistically pre-teach - the number will vary depending on students prior knowledge and their relatedness to one another (ease of connecting and storing together)- the other words just tell them the meaning as you come to them

1. limit the number of words to 6-0
2. break the passage into segments and pre-teach only the vocabulary relevant to the segment
3. balance “academic tool kit” vocabulary w/subject specific vocabulary

** Useful to teach other common forms of words - build associative networks and connect to other words they may know and/or will run into... many struggling readers (and others too) will not make the morphological link - since the pronunciation often changes, they miss the connection unless we make it explicit - if it has a Latin cognate, making this explicit for ELLs is also helpful

 compete - competition - competitive
 aristocrat - aristocratic
 reform - reformation - reformer

Dr. Anita Archer  ContentLiteracy: What Every Teacher Must Know & Be Able to Do
e.g. We are going to preview the 7th grade chapter and learn some critical vocabulary:
  - write “delta” in the first square under vocabulary on your vocabulary graphic organizer
  - scan the first paragraph - find the delta and put your finger on it - check w/partner
  - read it chorally - have kids raise their hands when you mention part of the definition that is a critical attribute (key definitional part)

<table>
<thead>
<tr>
<th>Term</th>
<th>Attributes</th>
<th>Example/Image/Pictures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delta</td>
<td>- land</td>
<td>sketch of delta</td>
</tr>
<tr>
<td></td>
<td>- deposits of silt, sand, stones</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- mouth of a river</td>
<td>(can’t assume they know mouth or deposit – explain briefly)</td>
</tr>
</tbody>
</table>

  - Add a quick image or graphic showing the meaning of delta
  - Check for understanding: provide a non-example – students must tell you why it’s not a delta
    ** key to not just have kids mindlessly copy a definition – this issue of having them listen as you read it and looking for critical attributes of the definition
  - not enough to just get a definition - must provide illustrations and have kids explain their understanding
    e.g. we have trees - are they considered a natural resource? 1’s tell your partners why trees are natural resources
  
** must go beyond definition and illustrate with examples & non-examples - get all kids involved by using partners to discuss the illustration

Elaborate by: creating a semantic web: first students add individually, the share with partner - add any good ones to your web
  - debrief with the whole class - encourage kids to add additional ones & put a √ by any that you and your partner had already generated

Reflect on what Anita did so far:
  * taught kids to use context clues - great for expository with teacher guidance
  * helped kids break it into critical attributes by listening to the definition and pulling out the critical elements
  * took the attributes and turned them into individual notes for each student
  * took the notes and turned it into a semantic web - elaborated by individual, partner and then whole class connections/additions/explanations
  - extend by doing the same thing for the words mineral and vegetation - partners each took one - and elaborated... don’t make it too complex – you will make it harder for kids!
  * mineral
    - natural substance
    - found through mining/digging
  * vegetation
    - plant life (don’t add a whole bunch of stuff – will elaborate via usage n memorization!!)
  * later can get kids to do this - look up words - and bullet out critical attributes - provide an example and non-example on their own.
Directly Teaching Vocabulary: Steps

1) **Introduce the word**
   - write it on the overhead or board
   - read the word and have students pronounce the word (do this by syllables if a longer word)
   - clarify the part of speech
   ** if important words – students need a note taking log or scaffold – a written record
     “One of our new words is meager, it is a describing word, please say the word with me – meager”

1) **Present a student friendly explanation**
   - use words the students already know
     “The word meager means that something is lacking in some way. For example, there may not be enough food for everyone…”
   ** can also connect to the text if used in context – but don’t just have them copy definitions
   - can be done totally mindlessly!
   ** if the word is well defined in the text – esp. expository: have kids break the definition into its critical attributes: e.g. Maria in astronomy (places on the moon, where molten material flowed years ago, which we see as dark spots on the Moon)

1) **Provide examples from the students experiential realm**
   “I looked at the choices for lunch, they were very ________”

1) **Rephrase additional examples** to illustrate asking students to complete the statement by providing the word: (could provide a picture or image if it works for the word)
   “If there was something lacking or there was not enough, you would say it was ________ - meager”

1) **Elaborate – Check for Understanding.**
   “Why might a person’s cash be meager?” – could be associative (e.g. evaluate my example or generative (e.g. come up with additional examples)
   * Provide examples and non-examples – kids have to decide if it is an example of the word and tell how they know…

Useful to provide a chart or note taking scaffold for word taught – and to serve as a repository of new vocabulary in EACH course:

<table>
<thead>
<tr>
<th>Word</th>
<th>My Own Words</th>
<th>Image/Representation</th>
</tr>
</thead>
<tbody>
<tr>
<td>compulsory</td>
<td>gotta do it, taxes, death</td>
<td>figure skating, what my wife says, etc.</td>
</tr>
</tbody>
</table>
** to get into their expressive language – must create circumstances where students required to use the new language...

e.g. think for a minute of things that are *compulsory* in our school (list with a partner for 30 seconds, get as many as you can). pick one and rehearse with this stem, “One example of a *compulsory* activity in our school is ______________” – so students are using the word, too often the teacher is the only person using both the domain specific and academic tool kit words.

- one study asking middle school kids about boring practices - they voted round robin reading as #1 and vocabulary teaching (e.g. look it up and use it in a sentence - which, of course, is NOT teaching is is assigning an activity hoping it will teach them - evidence is it will not - esp for your neediest kids - we must TEACH them.

**Important Study: Stop, Review, Explain**— validated by Charles Hughes at Penn State
- compared traditional lecture to brief lecturette - stop - explain to your partner with summative review also guided by the teacher - found a 60% increase in learning!

Another example using a chart - Vocab Strategy: by Steve Stahl - **Four Square Vocabulary Chart**

<table>
<thead>
<tr>
<th>Word</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>soothing</td>
<td>* warm bath, relaxing music</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Definition</th>
<th>Non-examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>* releave pain or relax</td>
<td>* loud music (you don't like)</td>
</tr>
</tbody>
</table>

✓ *same interactive direct teaching practice* - teacher pronounces the word, students also say the word/clarify the part of speech, quick simple explanation and example - then pair students up to elaborate examples - stop provide a non-exmaple - students then elaborate in pairs - record summary on their 4-square chart.
One example:
Vocabulary for ________________

<table>
<thead>
<tr>
<th>Vocabulary</th>
<th>Definition (critical attributes)</th>
<th>Sentences/examples/picture</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Many other graphics - semantic feature analysis, whole to part, etc. - all designed to build connections, provide illustrations, get inside the words/concepts, etc.

**Various Charts and Word Cards** are great - BUT be sure they are coupled with robust vocabulary teaching...

- √ word cards great for manipulation in review: sorting into:
  - place in 3 categories - positive, negative, neutral feel and explain why
  - parts of speech
  - other category related to content (e.g. parts of gov’t or whatever)

Word Form Charts - to clarify other parts of speech - categories would be:
  - Noun
  - Adjective
  - Verb
  - Adverb

**Practice New Vocabulary: Can’t Integrate Without…**

1. Multiple exposures - and the exposures must involve
2. “Deep Processing”/Elaboration
3. Connect to Prior Knowledge

** Anita did a little ditty to help students memorize these key ideas: she did a little hand motion dance about “multiple exposures with deep processing connected to your prior knowledge”...**
✓ Deep Processing Questions – not just mimic the definitions or flash cards,
- questions that make you think, elaborate, extend – make new connections -
  not simply regurgitate a dictionary or text book definition...
✓ Completion Activities - teacher provides the definition or stem - and
  students have to elaborate by completing the stem: e.g "longevity - a long
duration, long life: Factors that could contribute to longevity
include__________________"
✓ Yes-No-Why? Provide a sentence using one or more words taught - students
must answer and explain why: “Is international security sustainable? _____
________________________.” (answer could be either yes or no but it
is the elaboration of the 2 new terms (security/sustainable) and connecting
to their prior knowledge.
✓ Meaningful sentence generation
✓ Semantic mapping
✓ Word Pair Analysis Chart:

<table>
<thead>
<tr>
<th>Word Pair</th>
<th>Same</th>
<th>Opposite</th>
<th>Go together</th>
<th>No relation</th>
</tr>
</thead>
<tbody>
<tr>
<td>desert/nomad</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>nomad/wanderer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>nomad/settler</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>desert/city</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>desert/arid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>biome/environment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** all of these practices require THINKING - students love to think - especially when we
create an honoring - respectful environment...

Quick Words – Great for Science – w/tons of vocabulary

• quick matching of definition to vocabulary words in a one min. timing each day of unit

<table>
<thead>
<tr>
<th>DEFINITION</th>
<th>MATCH</th>
<th>VOCABULARY WORD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. matter needed by plants and animals so they can live</td>
<td>D</td>
<td>A. Bacteria</td>
</tr>
<tr>
<td>2. all things that exist, including our solar system and beyond</td>
<td>M</td>
<td>B. requirements</td>
</tr>
<tr>
<td>3. very tiny single - celled animals etc. for 15 words:</td>
<td>A</td>
<td>C. scientists</td>
</tr>
</tbody>
</table>

2 min. in class study - then kids took a quiz - randomized version, graphed the results
each day individually – kids liked it... and they learned tons!!
Completion Activity (Longo/Curtis - from FAME program - Boys Town)

* kind of a written version of Deep Processing Questions

1. **confine:** to hold or keep in; limit, restrict
   Things that can be confined are ____________________________________________________________________________

   **teacher begins this by clarifying what confine means, gives a few examples, and the students independently come up with more examples...**

2. **elusive:** hard to describe or understand; intangible; evasive.
   Concepts elusive to many people include______________________________________________
   ____________________________________________

3. **longevity:** a long duration; long life
   Factors that might contribute to longevity include________________________________________

   **great thing here - is it prompts individual learners to connect to their unique prior knowledge - e.g. in the group we did confine - folks came up with all kinds of fun and bizarre stuff (from flour in a jar to negative emotions!!)**

Yes - No - Why? (also Longo/Curtis)

1. Do territories that are possessions have autonomy?__________________________________________
   • students have to explain why to each other - using knowledge of the words, require deep processing and connecting between ideas and concepts taught...

WORD SORTING

1. Give students a list of related terms.
   (or have kids "harvest words from a text")
2. Have them sort words into categories
3. If a word goes into more than one category, have them select the best category, circle the word and be prepared to defend their selection.
4. If the meaning is unknown, have student’s look up the meaning (glossary/dict.)

** as always - use high engagement practices - e.g. do the sort individually, compare with partner, class debrief with teacher

** e.g. words: president, cabinet, judge, law, constitution, legality, senate, speaker, supreme court, trials, regulations, etc.

<table>
<thead>
<tr>
<th>Categories:</th>
<th>Executive Branch</th>
<th>Legislative Branch</th>
<th>Judicial Branch</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>✓ president</td>
<td>✓ speaker</td>
<td>✓ supreme court</td>
</tr>
<tr>
<td></td>
<td>✓ cabinet</td>
<td>✓ laws</td>
<td>✓ judge</td>
</tr>
</tbody>
</table>
WORD ASSOCIATION
- simpler version of word sorting - but same basic notion
  1. Present a number of words
     ex. virtuoso philanthropist accomplice novice
  2. Present a word. Have students select "associated" word.
     “what word goes with crook?”
** BIG idea - vocabulary can be useful/helpful to kids and FUN - if teachers:
  1) prioritize key vocabulary - don’t just have them do the 14 word list & look
     up/write the definitions!
  2) directly teach strategies kids can generalize (e.g. context clues)
  3) use practice procedures that get kids to think beyond the literal/definitional
     to build new connections and more deeply process the word(s)/concept(s)
** No matter what strategy used to teach the words - we must engage students in elaboration or
practice - to build their internal semantic networks - to the word from short term to long term
memory:

SEMANTIC MAPPING
  1. You provide the categories - kids come up with the details
  2. Students generate the categories
     e.g. 1) Select a word - pollution
          2) Have students generate a list of related words
          3) Guide students in categorizing the words

* you model to “salt the ole oats”

Pollution
individual list Teacher provides 1st category - e.g. something that
could be polluted
- dirty air - air
- EPA - soil
- superfund - water
- toxic - minds (a bit of this recently!!)

* then kids come up with next categories:

Deep Processing Questions: get kids to think more deeply/broadly about information
Ask students questions that require “deep processing” of the word’s meaning...
  e.g. if you had taught the meaning of fabulous, you might ask:
     “what would make a vacation fabulous?”
     “Is OK or great closer to the meaning of fabulous? why? explain?”
     if you had taught the definition of missionary you might ask:
        - a person, sent abroad, to do religious work
* provide brief thinking time first - model it yourself...
“what skills/talents would be useful to have if you were a missionary?  
“ why might a church send a missionary to another country”  
- this is a great strategy - BUT you must think about it first & come up with good questions that will push kids thinking beyond the literal definitions...

e.g. in High School taught the word “dissenter” - a person, who challenges dominant views, of church, gov’t or society”

* think on your own of good questions to get beyond “what is a dissenter?”
* 2’s then 1’s share your questions with a partner some questions were:
  “ who were some famous dissenters?” - totally dependent on kids prior knowledge
  “why would someone choose to be a dissenter?”
  “what are some of the costs/risks of being a dissenter?”

“ what are some of the benefits to a society of having dissenters?”
  “ what are some methods a dissenter might use to share ideas/views?”

* kids of ALL abilities like to think - IF given the support /structure to get better at it

* can do this as a grade level or subject matter - agree on priority vocab - bullet out the critical attributes - come up with good ex/non-ex - and come up with related deep processing questions

Look at: Who, What, When, Where, Why, How kinds of questions to improve your sentence...
  - what - a basketball tournament
  - where - school gym -
    " We played in a basketball tournament in the school gym.
  - why
    “ We played in a basketball tournament in the school gym to determine the best team.”

** key - these activities for elaboration -review - are far best done in class - builds language, multiple perspective, etc. - NOT nearly as powerful if we do these as silent homework activities

MEANINGFUL SENTENCE GENERATION
  • especially good for language arts
    1) Students generate words that include the target word.
    2) Sentence must be contextually rich - few other words could work here.
    3) Provide examples - non-examples
    4) Must answer at least 3 of these questions:

Who, What, When, Where, Why, How (why and how are especially good)

Non-example - It was meager.

Meaningful sentence generation:
What - Our dinner was meager
When - Our dinner at the end of the month was meager.
Why - Our dinner at the end of the month was meager because we had little $ left.
** not only was this useful for vocabulary elaboration - but could use as a strategy for extending writing in many other contexts...
- one teacher put these 5 questions the form they were using - kids crossed them off as they went along...

**WORD GAMES - I AM THINKING OF A WORD**

"Get out word list from last week...
Teacher: I am thinking about a word that goes with river - put your finger on the word... the word is? tributary... check with your partner..
- Everyone - what word? yes, tributary

**TEACH WORD PARTS** - is also helpful - especially prefixes...

**TEACH LATIN/GREEK ROOTS** - and associated words
- especially in Science - Anita provided a Scientific prefix/suffix list

**spent all morning on Vocabulary - WHY?** It is the single most important thing we could do to improve comprehension and boost literacy - when done as desribed in this seminar - very active language rich participiapition...

**CHALLENGE OF LOW PRIOR KNOWLEDGE - Must Build It!!**

* Two excellent strategies w/good research to support them: Anticipation Guides and Previewing

1) **Anticipation Guide: Goals: Curiosity/Interest & Activate Prior Knowledge**
- construct 4-8 sentences linked to some of the big ideas in the chapter/text - some of them true and some of them false...
- students with teacher mediation, answer each question before reading to peak interest and clue students to key elements to look for in the lesson/reading
- after reading go back and make all the sentences accurate - good simple summary of the chapter or text
- this works great - downside is it takes time to prep - great thing for content teachers to share (each do 3 chapters or whatever) - must actually read the chapter!

**Helpful to then go back over the Anticipation Guide and make the statements true after the reading/study of the information...

But How About - **KWL (Know - Want to know - Learned)??** Only works IF Students Know Something About the Topic (e.g. could use it for Fossils but not for The Renaissance)
- problem - many topics students know very little/nothing - don’t ask an adolescent what you want to know! answer will be ... zip! Activating prior knowledge about cellular respiration is not a good idea - can’t activate what is not present!
- when in doubt - TEACH essential prior knowledge...

**need to model curiosity - many kids are very passive from too much TV and other passive forms - so model (even if not literally true), “oh I wonder why, that’s amazing I wonder what _____. oh this will be fascinating I’ve always been curious about ____”.

Dr. Anita Archer  ContentLiteracy: What Every Teacher Must Know & Be Able to Do
I want to know about..." - we all need to model this intellectual curiosity
- all familiar with this one - big problem is for many topics students have no or limited prior knowlege...
- e.g. asked students "What do you know about WW2 - ?" high school kids - and it was basically, "it was a war, involved the whole world , it was the second one..."

**Alternative to KWL**
** Far better to provide student with the framework for the topic if possible - for example - ask them, "we will be studying WW2 - before we do - lets being by thinking about wars - any war and what we are likely to find out...etc." - may provide them a general framework - they come up with particulars... This intentionally builds a "Schema" of map for thinking/learning about the topic

**Causes:** - What kinds of things cause wars? (do a Think/Write - Pair - Share)
- past conflicts that let to this
- land/resource dispute
- power desire of a government
- conflicting religions or cultures

**Outcomes**
- casualites
- cultural effects
- long term effects
- scientific innovations

**Who:**
- leaders
- allies
- people who were important

**How**
- strategies
- weapons
- etc.

**Where**
- location of battles
- countries involved
- this provides a geneal schema even when they know none of the specifics - great thing to do to provide a map or schema for learning...

**Other examples:**
Gr. 5 - Study Mars -no little - but asked - what would we likely learn about any planet?
- kids did well: distance from sun, size, life forms, geopgraphy
Egypt - what could we learn about any country
Jamestown - what would learn about any colony
States - what would we learn about any state
Geog of Calif - know little - but brainstorm all forms we know...
** Key Idea – may know nothing about the specific topic – but you can recall the basic structure of a topic that students DO know something about

2) PreReading – or Preview: this is one of the foundational pre-reading strategies to teach students - it begins as very teacher directed/mediated - and eventually becomes something all students must be held accountable for being able to do...

---

** Warm Up PreReading Strategy **

**Beginning:** read title and intro if there is one - or beginning paragraph if appropriate:

Based on the title this chapter will be about: ______________________

**Middle: headings and subheadings**

List the headings / subheadings - pose key questions as you go/turn the headings into a question - so it’s not just repeating the headings but tied to a question to get kids to think about the heading (e.g. the heading was “United Villages” - you might ask as they copy it into their notes - “why do you suppose the villages might have united?”

* can add any pictures and/or charts and graphs IF they appear useful

**End: Summary & Questions**

Read the summary or last paragraph, look at chapter questions (if they exist)

Based on the summary - what are two things you will learn about in this chapter?

- Can eventually shift this process from teacher directed to student self directed moving from teacher directed, to peer mediated (do w/a partner), to students doing it on their own.

- can also add an accountability piece whereby students turn in a preview outline that it written including all of the elements you have taught them... (clearly, this only works AFTER students have been well taught how to do previewing - not simply assign it.

** Conclusion:** BEFORE reading strategies or “Instructional Frontloading” is the single most important domain teachers can affect to improve comprehension. The pre-teaching of key vocabulary, both academic tool kit words and discipline or domain specific words together with providing either an anticipation guide or previewing will make a HUGE difference in student achievement in the mixed ability classroom

Reflect on the strategies so far and pick out 3-4 you plan to use... and why?
**DURING PASSAGE READING**

* Support the basic reading of the passage (assist lowest readers but engage all):
- Some kids in most classes can’t independently read the material... often have at least a 3-5 grade level span in typical classes or more...

**Common Options:**
1) teacher reads - but only the teacher improves in reading!
2) round robin reading - major problems: lowest kids embarrassed, higher kids reading ahead to practice - no attention...

**Better Options:**
1) Choral reading - prompt kids “keep your voice w/mine”

2) Cloze reading (leave out a word every now and then - leave out only meaningful usually at the end of the phrase or sentence to preserve prosody/flow - kids supply the word chorally)

* often follow the initial cloze reading for access - with a silent rereading of the passage with a specific comprehension task (e.g. answer a question, pull out key details, etc.)

3) Silent reading - small chunks, read to answer a question - keep kids reading till you say stop - if you finish before I say stop, read it again,

- problem - we have many “silent reading fakers” - so we need to add tactics to increasze the odds that students are actually reading silently...

Options to increase focus/accountability during silent reading: based on the ole addage of - “inspect what you expect”

- √ pose a question the students are reading to answer: use brief partner responses after silent reading section (odds are 1 in 2 you are called on, as opposed to 1 in 30 in typical discussions)
- √ as I circulate and put my hand on your back - you whisper read
- also an opportunity for you to do informal assessment of kids ability to read - especially important for secondary teachers who rarely hear kids read...
- can be done in SSR - any content area

- can keep a simple informal log to track accuracy/fluency/expression of your kids

4) Partner reading - may read first part as a class - then read the rest by partners - usually by the paragraph, taking turns coupled with some quick comprehension task (e.g. paragraph shrinking) - can’t fake partner reading!!

** Can’t continue to simply “assign and bless” - we need practices that increase the odds that students will actively read/think/speak/listen - no one is clairvoyent!! We need to have observable behaviors (what they write - and what they say...)
Looking at the Structure of Expository or Informational Texts
- all of the strategies that have good evidence to support them for reading informational texts - all are based on some version of dealing with this architecture ...

Overview: of Key Strategies
1) Verval Rehearsal - e.g. read a paragraph - and say topic & details to themselves or a partner...
2) Written Notes - some kind of note taking based on the topic -details etc. - like indentation notes, also good do mapping or clustering or webbing
3) Graphic Organizer - focus summarization of key information and relationships between ideas in the text

* Teach then assist the students in using a strategy during passage reading
(most of these strategies are linked to text structure of expository materials)

Q: what are the common elements of expository texts?
- introductions - major headings - questions at the end - title
- summaries - tables/charts - subheadings - vocabulary highlighted
- paragraphs (each with topic/details)

* many paragraphs will not have a main idea - but all will have topics & details
(not clear that any one idea is more important than another, but all have topics)

Many strategies based on this structure:
- verbal rehearsal
- take notes (indentation notes - not Roman Numeral style - can be confusing & get kids off task: worrying about is it a big B or small I)
- mapping/webbing/clustering
- fill in a graphic organizer provided by the teacher

* thus one BIG pattern - many strategies that use this one critical pattern
- so there are a number of strategies that build off of this basic fact of text structure
  e.g. Warm Up Active Reading Indentation Notes Mapping Topical Graphic Organizer Graphic Organizer

** Verbal Rehearsal Strategies **

** Paragraph Shrinking: Fuchs & Fuchs **

<table>
<thead>
<tr>
<th>Read a Paragraph then:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Name the who or what (person/place/animal/thing)</td>
</tr>
<tr>
<td>2. Tell the most important details about the who/what</td>
</tr>
<tr>
<td>3. Say the main idea (gist) in 10 words or less (may make it 15 if many ELLs or very dense text)</td>
</tr>
</tbody>
</table>

** Key is teacher mediation - modeling - provide extra scaffolding if less prepared kids...
may need to read it once in cloze form or choral and only identify the topic - then reread it silently to answer the second two questions
  • Most helpful to use partners to debrief each step - 1’s tell 2’s the who/what, 2’s tell 1’s the key details, 1’s tell 2’s the paragraph
  • Can also have students work together to perform each step the first few times as they get comfortable with the process
  • As with any new strategy - use an easier reading the first few times you practice Paragraph Shrinking - when the process demands are high (new strategy) keep the content demands low (easier reading - low knowledge demands) - THEN transfer to grade level or more demanding text

** Helpful for older students (gr. 8-12) to record the shrunken paragraph in their notes - have a coherent summary of the BIG ideas - works best in Social Studies, but can be helpful in other areas too... Science is often very concerned about many details, so mapping or note taking may work better if many important details...
Active Reading Strategy * see Schools for School Success - Advanced Level: Textbook Reading, Module 3, available from Curriculum Associates (800) 225-0248  www.curriculumassociates.com for the curriculum we used in this portion of the workshop

Active Reading Strategy:

R - READ
- read a paragraph, think about the topic & important details

C - COVER
- cover the paragraph with your hand

R - RECITE
- tell yourself what you have read
  * say the topic
  * say the important details
  * say it in your own words

C - CHECK
- lift your hand & check
- if you forget something that is important, begin again

* found kids who were taught to do active reading & practiced it scored 60% higher on chapter content tests
* could use this strategy 1) independently, 2) whole class, 3) partner (just rotate in terms of who tells what (topic/details/own words)

Taking Notes from a Text or Lecture

Notes Strategies
* See same basic pattern/format in written form:
  - read a paragraph (or listen to the lecture)
  - take a note
  - use your own words as much as possible
* big challenge - kids mindlessly copy what is in the book... so very helpful to teach kids to paraphrase...(again PALS teaches these same skills orally)
* useful strategies must be: 1) effective (useful for tests, quizzes, etc.)
  2) efficient
* same issue for kids - if it is not efficient as well as effective it will never generalize and kids will not use them long term on their own

Useful Hints for Note Taking From a Text:
1. Write your notes in your own words.
2. Make the notes brief.
3. Use abbreviations & symbols
4. Be sure you understand your notes.
5. Note page number in chapter for reference/return
Many students would take notes - but never looked back at them... there was a major disconnect here for many of the kids.. even though it is obvious to us - we must prompt them to do it and TEACH THEM HOW - many have no idea of how to study their notes...

** How about studying your notes - not much help if kids don't do something to study them.

1) orally retell - explain to someone else (like a partner)
- homework - take notes on pg. 42-44 & come in to class: 1st thing - explain to your partner while teacher monitors - record how well kids are doing
(3 for complete notes, 2 for partial, 1 or something, 0 for no notes)
2) also helpful to have kids generate questions from each paragraph of notes being taken - for self or partner study
- e.g.

  **Crust**
  - thin layer of solid rock
  - covered w/rock, soil, sand, oceans, seas

* then study on your own using RCRC (read - cover - recite - check)

* Mapping/Webbing/Clustering useful as one way to help kids go more deeply into a text
  - teach kids how to get the big picture of the chapter or unit ...
    - often helpful to provide partially completed map - or basic outline of key categories
  Process: Kids read a paragraph: note topic/details on the map or web same as active reading or note taking
  - web is based on circles around the key headings and/subheadings:

* see Schools for School Success - Advanced Level: Textbook Reading, Module 3, available from Curriculum Associates (800)  225-0248  www.curriculumassociates.com for the curriculum we used in this portion of the workshop

![Diagram of Marsupials with Kangaroos and Koalas](attachment:diagram.png)

- etc. taking notes from the chapter...

* this has the most research to support it in Science: lends itself to mapping which tends to be ordered via categories....
- same idea - but the visual array is keyed to categorical relationships - so it works very well in Science - since it is so categorical...
- works less well in History - much more linear, indentation notes work better here
**Graphic Organizers – very useful – especially helpful for ELLs**

1) **Topic Graphic Organizers**

Special features

- location
- natural resources
- climate
- animals
- bodies of water
- vegetation
- etc.

**BIG Idea here** - if doing many regions or many states or countries - whatever the common topic is - kids are learning a SCHEMA or mental map for the topic - even if they forget some of the incidental details - no big deal - but the SCHEMA can last for an intellectual lifetime... a way of thinking about that topic.

- other
- religion/beliefs
- customs
- communities
- PEOPLE
- jobs
- shelters
- food
- clothing

- They can be as complex or simple as you feel is appropriate for your students - but the big idea is the same - you provide the categories that are repeatable for changing topics within that domain (e.g. Tribes, People, States, Diseases, whatever...).
- Teacher mediation of the graphic organizer goes like this:
  4. Read a paragraph - looking for info on the topic/subtopic
  5. Stop - reflect - partner share - then fill out the graphic as a note taking guide.
  6. Use the organizer for verbal rehearsal, study, pre-writing, study, etc.
  7. Helps students learn what questions to ask - read/think
** What’s happening here – the kids are learning the SCHEMA for the topic – the conceptual architecture – far more important than every detail...

Think about in your discipline – when do you have serial topical information that you could use a topical graphic organizer:

e.g. 7th grade history – world civ – topic is: civilization
    Explorers – where did they go, what did they find, etc.
    Authors – bio, style, background, influence
    Art – use of color, realism, etc.
    Planets

**Compare & contrast map**

<table>
<thead>
<tr>
<th>AMPHIBIANS</th>
<th>REPTILES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HOW ALIKE?</strong></td>
<td></td>
</tr>
<tr>
<td>BOTH HATCHED FROM EGGS</td>
<td></td>
</tr>
<tr>
<td>BOTH ARE COLD BLOODED</td>
<td></td>
</tr>
<tr>
<td>BOTH ARE VERTEBRATES</td>
<td></td>
</tr>
<tr>
<td>BOTH HAVE LUNGS AS ADULTS</td>
<td></td>
</tr>
<tr>
<td><strong>HOW DIFFERENT?</strong></td>
<td></td>
</tr>
</tbody>
</table>

| WITH REGARD TO | | |
|----------------|----------------|
| **Gills** | | Reptiles never have gills |
| **Changing Form** | | Reptiles look like little adults at birth |
| **Skin** | | Reptiles have scales or tough leathery skin |
| **Habitat** | | Reptiles may live in either dry or damp areas |
| Immature amphibians have gills | | |
**Could have kids generate topics (with our help) - like we did with War earlier - and then turn it into a topical graphic organizer...**

2) **Graphic Organizers to Match Organization of the Knowledge - Thinking You Believe Will Be Most Helpful to Student Comprehension**
   1. Central idea
   2. Hierarchical: Animals - vertebrates - invertebrates - then under it char etc.
   3. Compare/Contrast - e.g. Venn Diagram
   - very helpful to add the categories being compared to focus attention, not just how the topics are similar/different
   - other graphics for compare & contrast spell this out better - so you list "how different with regard to______"

3) **Sequence graphic organizer - cycle graph, flow chart, etc.**

**For many more excellent graphic organizers very useful in secondary schools see the work of Dr. Ed Ellis - at: [http://www.graphicorganizers.com/](http://www.graphicorganizers.com/)

**Other useful resources for graphic organizers include:**

**Key idea - be sure to provide the teacher and peer mediation to insure active engagement and application of important academic language structures (key vocabulary, syntax, grammar) so students benefit maximally... simply passing out graphic organizers**

**AFTER READING STRATEGIES**

- Teach students strategies for studying content area material
  - Read Cover Recite Check
  - Memoroy devices

- Teach students strategies for completing common tasks
  - participating in discussion
  - answering questions in chapters etc.
  - writing summaries
    - POWER strategy
    - Think Sheets
    - Report Writing
**Bottom Lines?**

- We can’t simply assign readings ("read chapter 10) and "bless them" ("off you go - answer the questions on page 32...") we must rigorously and contiually teach students HOW to tackle difficult content area texts by:
  1) Preparing them to read (e.g. pre-teach vocabulary, pre-read, etc.)
  2) Mediate their reading of the text (e.g. paragraph shrinking, note taking, graphic organizers)
  3) Structure written/oral responses to the reading to consolidate, summarize, organize and otherwise extract and construct meaning from what has been read (e.g. written summaries).

**My summary of the BIG Picture:**

Teaching is NOT telling… teaching is the art / science of engaging students such that they create their own reconstructions/mental models of the information/text/etc… it doesn’t matter that we covered the standard or information - what matters is - did the students LEARN IT? Teaching behaviorally comes down fundamentally to two things : 1) explaning/modeling, and 2) monitoring/supporting as students are practicing…. or as Anita likes to say, “I do it, We do it, You do it”.