## Vocabulary and Content Knowledge

Essential \#7 -
Intentional and ambitious efforts to build vocabulary and content knowledge.

## Today's Presentation

- Why should we address vocabulary with young children in K-3?
- What vocabulary instruction is typically happening in schools and why should we do more?
- What should we be doing? (AKA "the essential practices")?


## Vocabulary Learning Goal \& Scale

4.0 I explicitly teach vocabulary through read alouds, give students multiple opportunities to interact with the word and its parts, and encourage students to engage in using new words in meaningful context.
$3.0 \quad$ I explicitly teach vocabulary through read alouds and encourage students to engage in using new words in meaningful context.
2.0 I teach vocabulary words and encourage students to use them in meaningful ways.
1.0 I occasionally teach vocabulary words with minimal student interaction.
0.0 I do not consistently teach vocabulary.

## Turn and Talk...

- Talk to a partner about the vocabulary instruction that you experienced in school when you were a student.


## Anita Archer - $\mathbf{2}^{\text {nd }}$ Grade Vocabulary Video

## Teaching Vocabulary An Effective Use of Instructional Time

Time—measured in just minutes—spent on vocabulary instruction correlates with growth in reading comprehension.
For children to learn a new vocabulary word, they need multiple opportunities to hear and use a word.
Children need a lot of information about the word to be able to use it in multiple contexts.

## A Complete Vocabulary Program (Graves, 2000, 2006)

Intentional Vocabulary Instruction
Specific Word Instruction
Vocabulary Strategies
Structural Analysis
Dictionary Use
Context Clues
Cognates (ELL)

Incidental Vocabulary
Acquisition
Wide Independent Reading
Read Alouds
Daily Oral Language
Multimedia
Audio Books
Songs

## Best Practice

The greatest benefit from instructional time spent on word study can be gained from exploring roots, prefixes, suffixes, and networks of related words.

## From the essentials:

The teacher teaches morphology (i.e., meaning of word parts), including common word roots, inflections, prefixes and suffixes.

Meaningful word parts
Do not need to wait until kids can read/spell multi-syllabic words to work on morphology in oral language - tricycle, triangle, tripod nonfiction, nonliving

## The Most Common Prefixes in English

| Prefix | Meaning | $\%$ of prefixed <br> words | Examples |
| :--- | :--- | :--- | :--- |
| un | not; reversal of | $26 \%$ | uncover |
| re | again, back, really | $14 \%$ | rewrite |
| in/im | in, into, not | $11 \%$ | incorrect, insert |
| dis | away, apart, negative | $7 \%$ | discover, discontent |
| en/em | in; within; on | $4 \%$ | entail |
| mis | wrong | $3 \%$ | mistaken |
| pre | before | $3 \%$ | prevent |
| pro | in favor of; before | $1 \%$ | protect |
| a | not; in, on, without | $1 \%$ | atypical |

## The Most Common Suffixes in English

| Suffix | Meaning | \% of prefixed words | Examples |
| :--- | :--- | :--- | :--- |
| s, es | more than one; verb <br> marker | $31 \%$ | movies |
| ed | in the past; quality/state | $20 \%$ | walked |
| ing | when you do something; <br> quality, state | $14 \%$ | walking |
| ly | how something is | $7 \%$ | lovely |
| er, or | one who, what/that/which | $4 \%$ | teacher, tailor |
| tion, <br> sion | state, quality; act | $4 \%$ | action; erosion |
| able, <br> ible | able to be | $2 \%$ | comfortable |
| al, ial | related to, like | $1 \%$ | fatal |

## Common Latin and Greek Roots

| aqua | water | Greek | aquarium, aquaduct |
| :--- | :--- | :--- | :--- |
| aud | hearing | Latin | audio, audition |
| auto | self | Greek | autograph, autobiography |
| astro | star | Greek | astronomy, astrophysics, astrology |
| biblio | book | Greek | bibliography, bibliophobia |
| bio | life | Greek | biography, biology |
| chron <br> o | time | Greek | synchronize, chronology |
| corp | body | Latin | corpse, corporation, corps |
| demo | the people | Greek | democracy, demography |
| dict | speak, tell | Latin | dictate, predict, |
| dorm | sleep | Latin | dormant, dormitory |
| geo | earth | Greek | geology, geography |

## Common Latin and Greek Roots

| graph | to write, to draw | Greek | autograph, biography |
| :--- | :--- | :--- | :--- |
| hydro | water | Greek | hydroplane, dehydrate, <br> hydroelectric |
| ject | throw | Latin | reject, deject, project, projectory |
| logos, logy | study | Greek | geology, astrology, biology, <br> numerology |
| luna | moon | Latin, | lunar, lunacy |
| meter | measure | Greek | thermometer, diameter |
| mega | great, large, big | Greek | megaphone, megatons |
| min | small, little | Latin | minimal, minimize, minimum |
| mit, mis | send | Latin | mission, transmit, remit, missile |
| path | feeling, suffering | Greek | pathetic, pathology |
| philia | love, friendship | Greek | philanthropist |

## Common Latin and Greek Roots

| phono | sound | Greek | phonograph, microphone, <br> symphony |
| :--- | :--- | :--- | :--- |
| photo | light | Greek | photograph, photosynthesis |
| port | carry | Latin | transport, portable |
| spect | see | Latin | respect, inspection, spectator |
| scope | look at | Greek | microscope, telescope |
| sol | sound | Latin | solar, solstice |
| struct | build, form | Latin | instruction, construction, destruct |
| tele | distant | Greek | telephone, television |
| terra | land | Latin | territory, terrestrial |

## Word-Learning Strategies Compound Words

- Teach students that the meaning of compound words can often be derived from the meaning of the two smaller words.

| birdhouse | waiting-room |
| :--- | :--- |
| starfish |  |
| weekend |  |
| fingernail |  |
| raincoat | mailbox |
| daydream |  |

- But not always!
butterfly
hotdogs


## Effective Vocabulary Instruction

Includes both Implicit and Explicit Instruction

Implicit/Supportive Language Environment Clarify word meanings during conversations, think aloud, extend the topic, narrate what children are doing.

## From the essentials:

The teacher encourages talk among children, particularly during content-area learning and during discussions of print or digital texts.

## Smaller Dividends

- Infrequently occurring words that are unique but not essential to understanding the text
- Bassoon, quarterdeck, curmudgeon
- Synonyms for known concepts
- Big: large, huge, mammoth, gigantic, enormous, colossal
- Teach them quickly; shades of meaning; use them often


## Larger Dividends

- Is it frequently used across domains?

Academic?

- Finish, minute, sudden, section, complete, form, govern
- Is it unknown by most students?
- Is it widely related (large root family)?
- Wise, unwise, wisely, unwisely, wisdom, words of wisdom, pearls of wisdom, the voice of wisdom, etc.


## Turn and talk...

What type of vocabulary instruction do you see in classrooms in your school or district?

# Instruction is Currently Happening in Elementary Schools? 

The answer...

Recent studies demonstrate that there is very little vocabulary or content area instruction occurring in elementary school classrooms.

## Observational Study in Michigan

- 4 observations in half-day kindergartens
- 55 classrooms
- Stayed the whole time
- Over 660 hours of observation
- Visits were planned with teachers
- No vocabulary lessons


## Vocabulary Logs

- Have students maintain a log of vocabulary to facilitate study and review.
- What can be recorded on a vocabulary log?
- Word
- Student-friendly explanation
- Any of these options
- A sentence to illustrate the word's meaning
- Examples and non-examples
- An illustration
- In lower grades, create a group log on a flip chart.


## Word Walls

- Create a word wall in your classroom
- Post a reminder of the context.
- Copy of the cover of the read-aloud book
- Copy of the first page in the story
- The topic in science or social studies
- Post the vocabulary words.
- Incorporate the words into your classroom language.
- Encourage students to us the words when speaking and writing.


## Practice Activities

- Be engaging.
- Provide multiple exposures to the words.
- Encourage deep processing of the word's meaning. .
- When possible, connect the word's meaning to prior knowledge.
- Provide practice over time.


## Variance in Comprehension Accounted for by Word Recognition Ability

Proportion of variance in comprehension accounted for by decoding skill


## What Do These Data Mean?

- ...decoding skill is necessary but not sufficient for learning to read, write, and spell
- ...as time goes on, vocabulary and language proficiency account for more and more of the variance in reading comprehension


## Teach the Meaning of Critical, Unknown Vocabulary Words

- BIG IDEA: If students understand the meaning of critical vocabulary in the passage, their comprehension will be enhanced.



## Why the Vocabulary Gap?

Children enter school with different levels of vocabulary. (Hart \& Risley, 1995)

- Cumulative Vocabulary (Age 4)
- Children from professional families 1100 words
- Children from working class families 700 words
- Children from welfare families 500 words

Linguistically "poor" first graders knew 5,000 words; linguistically "rich" first graders knew 20,000 words.

- The National Assessment of Educational Progress (NAEP) found that: $68 \%$ of $8^{\text {th }}$ Graders who scored below the $25^{\text {th }}$ percentile on vocabulary were eligible for free and reduced lunch.
Students who scored poorly on vocabulary also scored poorly on reading comprehension.


## The Matthew Effect and Vocabulary

If children have limited vocabularies when they get to elementary school...

- Even if they can sound words out, they won't know what those words mean.
- They won't be able to understand books.
- They won't enjoy reading or read frequently.
- Over time they will struggle to gain new knowledge and new vocabulary from reading.


## An Anecdote From a Teacher

"While teaching a learning support lesson to my $6^{\text {th }}$ grade struggling readers, the word carpenter was used. I asked my students to tell me what a carpenter did. They said, 'A person who lays carpet.' This happened in more than one class."
"These same students are being ask to learn primogeniture, degenerate, and omnipotent in their regular 6th grade Language Arts class. Wow! This is a tough situation. I work with my students to learn these required words so that they can pass their language arts class but what a waste of good learning time. When I returned today, not one of the students in my second period class remembered what a carpenter did. I got the correct answer in my third period class. Hurray! How long do you think they will remember their regular language arts words?"

Noreen Beattie, $6^{\text {th }}$ Grade Learning Support, Tallahassee, FL

## Vocabulary Resource

TITLE:
Bringing Words to Robust Vocabulary Instruction

## AUTHORS:



## Beck's Word Tiers

- Tier One - Basic Words
(clock, radio, bed, happy)
- Tier Two - Descriptive Words that are Used Frequently (fortunate, absurd, facilitate)
- Tier Three - Low Frequency Words
(arachnid, lathe, tundra)


## Turn and talk...

- How would you categorize each of these words (Tier 1, Tier 2, Tier 3)?


## Egg

Mammal
Front
Photosynthesis

## Tiers are Just One Way to Select Words

- Words that are important for engaging in content area learning (see content area standards and curricula)
- Words that matter for understanding the key elements of the narrative in literature (setting, characters, goal, problem, plot/action, resolution).
- Words that occur frequently in grade level texts
- Words in meaninaful clusters


## Teach the Meaning of Critical, Unknown Vocabulary Words <br> Instructional Routine

- Step 1: Introduce the Word
A. Write the word on the board.
B. Read the word. Students repeat.
C. Repeat for unfamiliar words.
"This word is relieved. What word?"


## Teach the Meaning of Critical, Unknown Vocabulary Words <br> Instructional Routine

## Step 2: Present a Student-Friendly Definition

A. Tell students an explanation, or
B. Have the students read the explanation with you.
"When something that is difficult is over or never happened at all, you feel relieved. So if something that is difficult is over, you would feel $\qquad$ .

Teach the Meaning of Critical, Unknown Vocabulary Words

## Instructional Routine

- Step 3: Illustrate the Word with Examples
- Concrete Examples
- Visual representations
- Verbal examples
"When the spelling test is over, you feel relieved."
"When you have finished giving the speech that you dreaded, you feel relieved."

Teach the Meaning of Critical, Unknown Vocabulary Words

## Instructional Routine

Step 4: Check Students’ Understanding

- Option 1: Deep Processing Questions
- Option 2: Examples and Non-Examples
- Option 3: Students Generate Examples
- Option 4: Sentence Starter


## Teach the Meaning of Critical, Unknown Vocabulary Words <br> Instructional Routine

- Option 1: Ask deep processing questions.

When the students lined up for morning recess, Jason said, "I am so relieved that this morning is over." Why might Jason be relieved?

When Maria was told that the soccer game had been cancelled, she said, "I am relieved." Why might Maria be relieved?

## Teach the Meaning of Critical, Unknown Vocabulary Words <br> Instructional Routine

- Option 2: Have students discern between examples and nonexamples.
"If you were nervous singing in front of others, would you feel relieved when the concert was over?"
Yes "Why?"
"If you loved singing to audiences, would you feel relieved when the concert was over?"
No "Why not?" It was not difficult for you.

Teach the Meaning of Critical, Unknown Vocabulary Words

## Instructional Routine

- Option 3: Have students generate their own examples.
"Tell your partner a time when you were relieved."

Teach the Meaning of Critical, Unknown Vocabulary Words

## Instructional Routine

- Option 4: Provide students with a story starter. Have them say a complete sentence.

Sometimes your mother is relieved. Tell your partner when your mother is relieved. Start your sentence by saying, "My mother is relieved when_ $\qquad$ .

## Vocabulary Review

- After teaching the group of vocabulary words, review the words using a "word association" activity.
- Words written on board or overhead:
enemy, disgusting, invited, relieved
"Tell me the word that I am thinking about. Someone that hates you might be called an $\qquad$ . If you didn't like a food, you might say it is $\qquad$ . When a test is over, you often feel $\qquad$ . When you are asked to a party, you are $\qquad$ ."


## Other Informal Assessment Ideas

- Observational Checklists - Word Wizard
- Picture Sorts (ask why)
- Journals/Artifacts
- Charades
- Informal discussions
- Word Maps and Webs
- Illustrations/Cartoons
- Graphic Organizers


## Vocabulary Recognition Task

- Give the kids a list of words. List includes words you have learned (e.g., related to insects) and words you have not learned (e.g., unrelated to insects).
- Have them circle the ones that are related to what you are learning (e.g., circle the ones that you are sure have something to do with insects). (Stahl \& Bravo, 2010)
- Could use for pre and post assessments

Teach the Meaning of Critical, Unknown Vocabulary Words

- BIG IDEA: Vocabulary can be improved if repetition, multiple exposures to rich context, and active engagement are used.



# Teach the Meaning of Critical, Unknown Vocabulary Words Select Words for Vocabulary Instruction 



- Select a limited number of words for robust, explicit vocabulary instruction.
- Three to ten words per story or section in a chapter would be appropriate.
- Briefly tell students the meaning of other words that are needed for comprehension.


## Teach the Meaning of Critical, Unknown Vocabulary Words Select Words for Vocabulary Instruction



- General Guidelines:
- Select words that are unknown.
- Select words that are critical to passage understanding.
- Select words that students are likely to encounter in the future and are generally useful. (Stahl, 1986)
- Focus on Tier Two words (Beck \& Mckeown, 2003)
- Academic Vocabulary


## Teach the Meaning of Critical, Unknown Vocabulary Words Prepare Student-Friendly Definitions

- Student-Friendly Definition Example
- Dictionary Definition
- Attention - a. the act or state of attending through applying the mind to an object of sense or thought b. a condition of readiness for such attention involving a selective narrowing of consciousness and receptivity
- Explanation from Dictionary for English Language

Learners (Elementary Learner's Dictionary published by Oxford)

- Attention - looking or listening carefully and with interest


## Teach the Meaning of Critical, Unknown Vocabulary Words Select Words for Vocabulary Instruction

- Also, teach idioms (A phrase or expression in which the entire meaning is different from the usual meaning of the individual words.)
"The car rolling down the hill caught my eye." "Soon we were in stitches."
"The painting cost me an arm and a leg."
"The teacher was under the weather."


## Summary

- Vocabulary is critical for reading comprehension
- We need to teach more vocabulary in the early elementary years
- Vocabulary can be integrated across the curriculum and integrated with content area learning

