

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”)?

Turn and Talk...

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

Why Vocabulary Matters

Word knowledge is the BEST predictor of reading comprehension.

First grade vocabulary predicts 11th grade reading comprehension.

(Cunningham & Stanovich, 1997)

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.

(Henry, 1997)

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 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 marker | 31% | movies |
| ed | in the past; quality/state | 20% | walked |
| ing | when you do something; quality, state | 14% | walking |
| ly | how something is | 7% | lovely |
| er, or | one who, what/that/which | 4% | teacher, tailor |
| tion, sion | state, quality; act | 4% | action; erosion |
| able, 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 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, hydroelectric |
| ject | throw | Latin | reject, deject, project, projectory |
| logos, logy | study | Greek | geology, astrology, biology, 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, 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

fingernail

weekend

mailbox

raincoat

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?

What Vocabulary 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

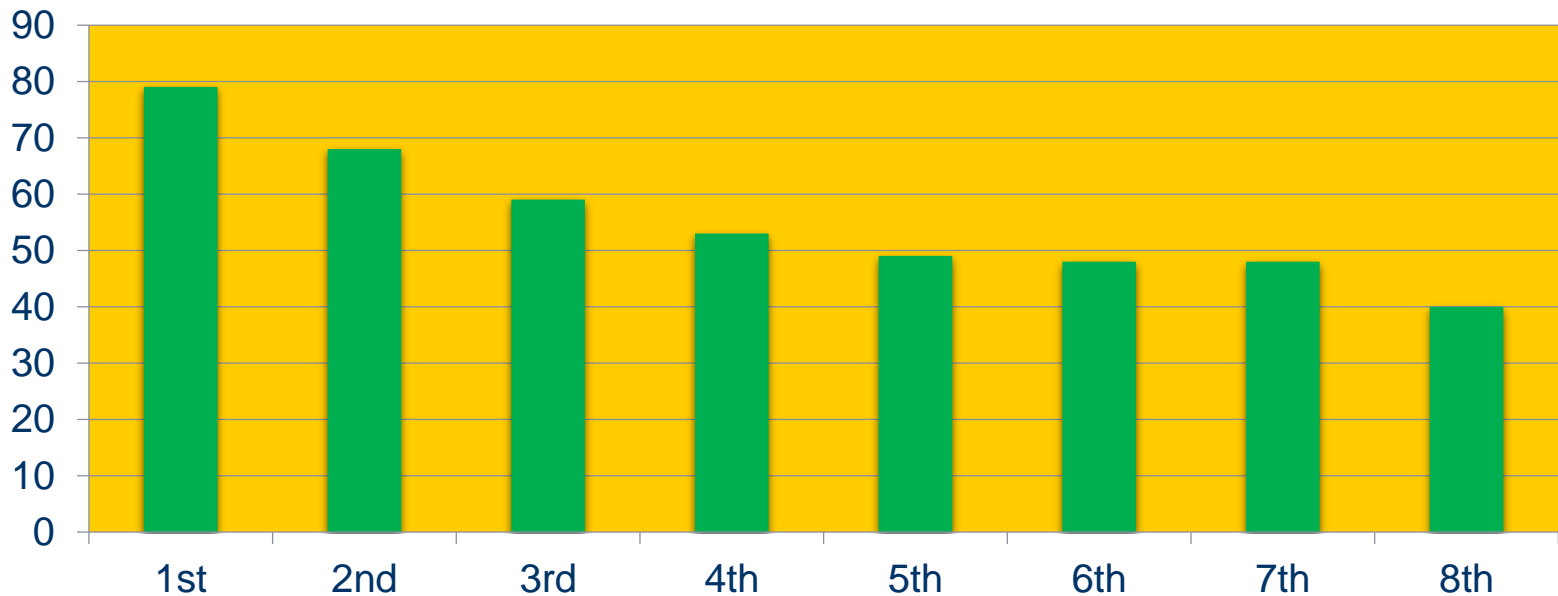
- **Create a word wall in your classroom**
 - Post a reminder of the context.
 - **Copy of the cover of the read-aloud book**
 - **Copy of the first page in the story**
 - **The topic in science or social studies**
 - Post the vocabulary words.
 - Incorporate the words into your classroom language.
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



Teach the Meaning of Critical, Unknown Vocabulary Words

Children's vocabulary in the early grades related to reading comprehension in the upper grades.

- Preschool - Children's vocabulary correlated with reading comprehension in upper elementary school. (Dickinson & Tabors, 2001)
- Kindergarten - Vocabulary size was an effective predictor of reading comprehension in middle elementary years. (Scarborough, 1998)
- First Grade - Orally tested vocabulary was a significant predictor of reading comprehension ten years later. (Cunningham & Stanovich, 1997)
- Third Grade - Children with restricted vocabulary have declining comprehension scores in the later elementary years. (Chall, Jacobs, & Baldwin, 1990)

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 8th Graders who scored below the 25th 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 6th 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, 6th Grade Learning Support, Tallahassee, FL

Vocabulary Instruction: How

Provide robust vocabulary instruction:

- oral language development in grades K-1
- both oral language and reading vocabulary in grades 2-3
- Promote dialogue in various contexts using robust words already taught
- Promote wide reading of a variety of texts for student reading vocabulary development.
- Read aloud everyday for oral language development
- Establish instructional routines for:
 - Before reading
 - During reading
 - After reading
- Establish instructional routines using graphic organizers to expand vocabulary development

Vocabulary Resource

TITLE:

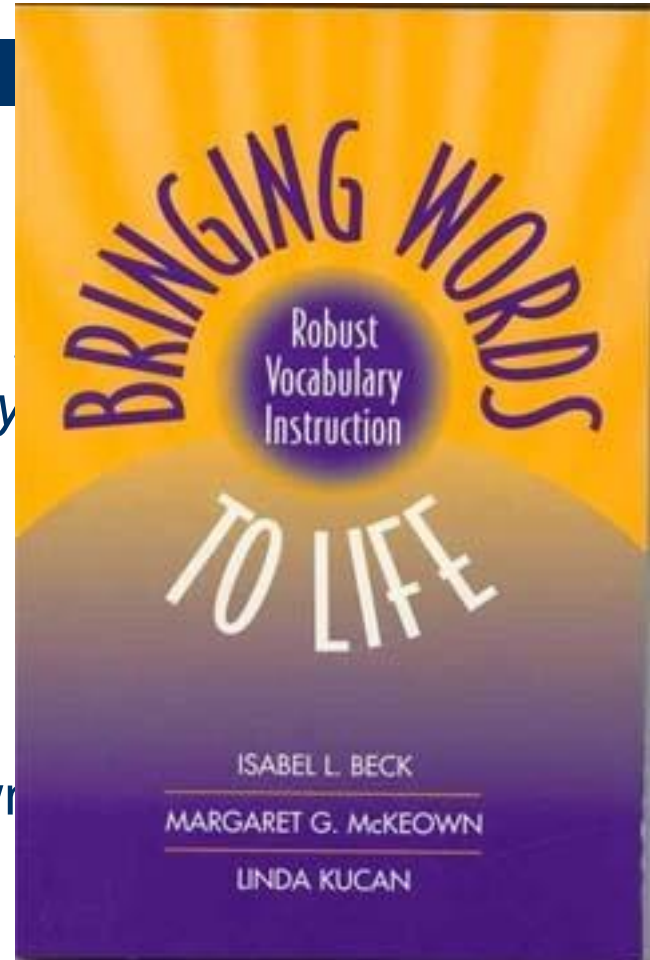
Bringing Words to Robust Vocabulary Instruction

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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 meaningful clusters

Teach the Meaning of Critical, Unknown Vocabulary Words

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?” _____

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 _____.”

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

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?***

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_____.”

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 _____.

If you didn’t like a food, you might say it is _____.

When a test is over, you often feel _____.

When you are asked to a party, you are _____.”

Other Informal Assessment Ideas

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

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.”

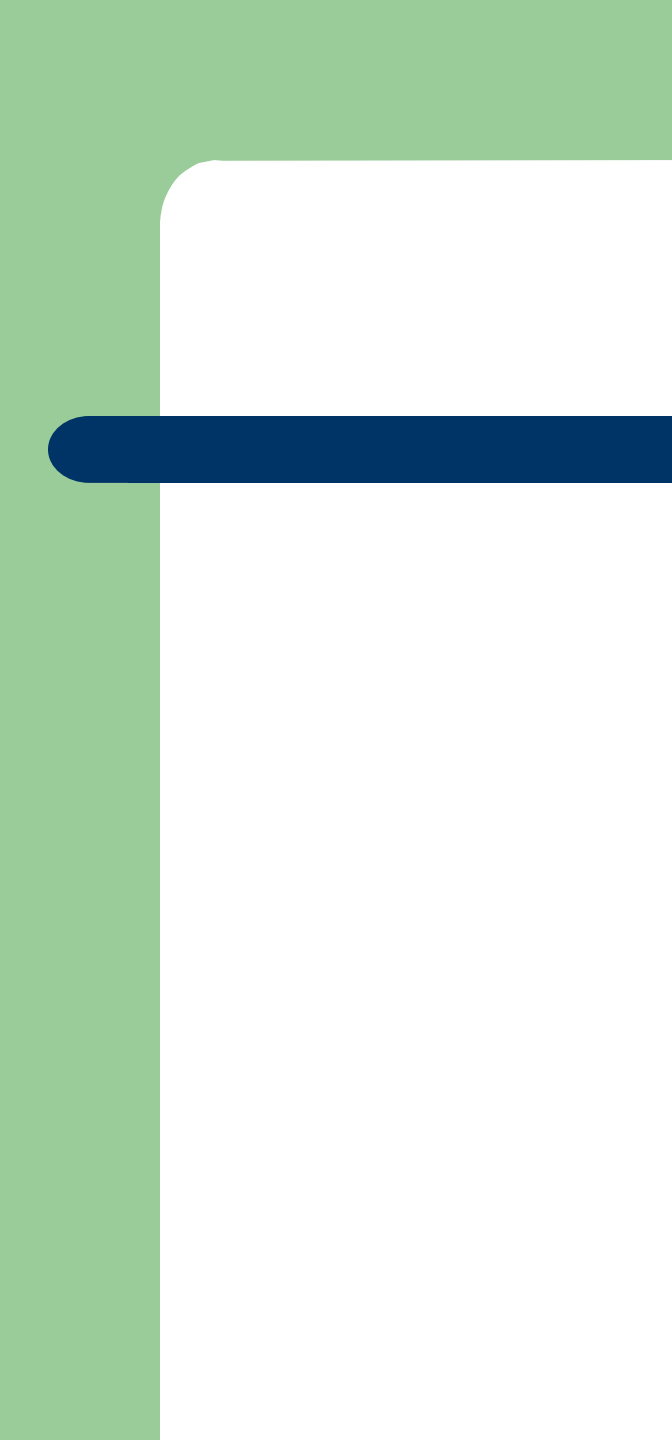
“Soon we were in stitches.”

“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



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 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.