## DYNAMIC VOCABULARY INSTRUCTION

Words, Words, Words

# /ILITERACY 

Anita L. Archer, PHD
Author, Consultant, Teacher archerteach@aol.com

## Vocabulary

-"Vocabulary knowledge is knowledge; the knowledge of a word not only implies a definition, but also implies how that word fits into the world." Steve Stanl, 2005

## Topics

- Importance of Vocabulary Instruction
- Explicit Vocabulary Instruction
- Word-Learning Strategies

The content of this presentation is expanded in Chapter 3 of the following book:
Archer, A., \& Hughes, C. (2011). Explicit Instruction: Effective and Efficient Teaching. NY: Guilford Publications.

## IMPORTANCE OF VOCABULARY INSTRUCTION

## Vocabulary Gap

Linguistically "poor" first graders knew 5,000 words; linguistically "rich" first graders knew 20,000 words. (Moats, 2001)

By first grade, higher SES groups are likely to know about twice as many words as lower SES children. (Gaves, 2006)

## Vocabulary Gap

- Gap in word knowledge persists though the elementary years. (White, Graves, \& Slater, 1990)
- The vocabulary gap between struggling readers and proficient readers grows each year. (stanovich, 1986)


## Vocabulary Gap

- After the primary grades, the "achievement gap" between socioeconomic groups is a language gap. (Hirsh, 2002)
- For English Language Learners, the "achievement gap" is primarily a vocabulary gap. (Carlo, et al., 2004)


## Why - Vocabulary Instruction

## Vocabulary is related to reading comprehension.

"Indeed, one of the most enduring findings in reading research is the extent to which students' vocabulary knowledge relates to their reading comprehension.
(Osborn \& Hiebert, 2004)

## Why - Vocabulary Instruction

"direct vocabulary instruction has an impressive track record of improving students' background knowledge and comprehension of academic content"

Marzano, 2001, p. 69

## EXPLICIT INSTRUCTION OF VOCABULARY

## Why - Explicit Vocabulary Instruction

- ...evidence suggests that as late as Grade 6, about 80\% of words are learned as a result of direct explanation, either as a result of the child's request or instruction, usually by a teacher.
(Biemiller, 1999, 2005)

Why - Explicit Vocabulary Instruction

Teaching word meanings significantly improved children's vocabulary knowledge as well as improving their comprehension of texts containing the taught words. (Effect size .97)
(Stahl and Fairbanks, 1986)

Additional studies (Beck, Perfetti, \& McKeown, 1982; McKeown, Beck, Omanson, \& Perfetti, 1983; McKeown, Beck, Omanson, \& Pople, 1985)

## Selection of Vocabulary

- Select a limited number of words for in-depth explicit vocabulary instruction.
- Three to five words per selection for in-depth instruction.
- Ten to fifteen words per week for in-depth instruction.
- Briefly tell students the meaning of other words that are needed for comprehension.


## Selection of Vocabulary

- Select words that are unknown.
- Select words that are critical to understanding.
- Select words that students are likely to encounter in the future and are generally useful. (stahl, 1986)
- Tier One - Conversational Words
- Most frequent words in language
- Students acquire on their own.
- Examples: chair, bed, happy, house


## Types of Words

- Tier Two - General Academic Vocabulary
- Less likely to be learned independently
- Used across domains
- Suitcase Words
- Examples:
- analyze, summarize, determine, demonstrate, compare, contrast
- absurd, fortunate, relieved, dignity, convenient, persistent


## Types of Words

## Tier Three - Domain Specific Academic Vocabulary

- Low frequency words
- Limited to a specific domain
- Critical for content area understanding and growth
- Examples by domain


## Types of Words

- Tier Three - Domain Specific Academic Vocabulary

| Language Arts |  |  |
| :--- | :--- | :--- |
| setting | characters | plot |
| events | problem | solution |
| paragraph | synonym | context clues |

## Types of Words

- Tier Three - Domain Specific Academic Vocabulary

| Math |  |  |
| :--- | :--- | :--- |
| square | rectangle | cylinder |
| greater than | less than | equal |
| parallel | array | addend |
| fraction | table | centimeter |

## Types of Words

- Tier Three - Domain Specific Academic Vocabulary

| Social Studies |  |  |
| :--- | :--- | :--- |
| town | city | suburb |
| transportation | communication | family |
| relatives | generation | ancestors |

## Types of Words

- Tier Three - Domain Specific Academic Vocabulary


## Science

cycle water cycle precipitation
evaporation condensation climate

## Selection of vocabulary

Select words that have word relatives.
invent
inventing
invented invention inventor
wild
wilderness
reform
reformation

## Selection of Vocabulary

Select words that contain "meaningful parts" (prefix, suffix, root) that would generalize to other vocabulary terms.
-autobiography

- auto - self
-other words
- automobile
- autocrat
- autoimmune system


## Selection of vocabulary

Select words that are more difficult to obtain.

- Words having an abstract versus a concrete reference
- Words with no known synonym
- Words not clearly defined in passage


## Selection of Vocabulary - Summary

: Select a limited number of words.
:Select words that are unknown.
-Select words critical to passage or unit understanding.
Select words that can be used in the future.
: Select words that have word relatives.
"Select words that contain "meaningful parts" (prefix, suffix, root).
Select difficult words that need interpretation.

## Selection of Words for Explicit Vocabulary Instruction (Narative Text)

## Enemy Pie by Derek Munson Second Grade Read-Aloud

| perfect | disgusting | nervous |
| :--- | :--- | :--- |
| trampoline | earthworms | invited |
| enemy | ingredients | relieved |
| recipe | horrible | boomerang |

# Selection of Words for Explicit Vocabulary Instruction (Narrative Text) 

The Family Under the Bridge by Natalie Savage Carlson Fifth Graders reading Chapter 1

| monsieur | hyacinths | fastidious |
| :--- | :--- | :--- |
| cathedral | fragile | loitering |
| cowered | oleanders | roguish |
| hidey-hole | gratitude | adventure |

# Selection of Words for Explicit Vocabulary Instruction (nfiormational Text) 

## Tornadoes by Gail Gibbons Second Graders

| tornado | updraft | devastation |
| :--- | :--- | :--- |
| humid | downdraft | violent |
| thunderhead | damage | meteorologist |
| condensation | well- <br> constructed |  |

## Student-Friendly Explanation

- Present a student-friendly explanation:
- Definition language is understandable
- Aligns with the meaning of the word used in context
- Options
- Use a student-friendly explanation in sentence form
- Break the definition into the critical attributes


## Student-Friendly Explanations

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

Use a student-friendly explanation in sentence form
If you give someone or something your attention, you look at them, listen to them, or think about them carefully.

## On-line Dictionaries with Student-friendly Explanations

Collins Cobuild Dictionary of American English http://www.collinslanguage.com/free-online-cobuild-ESL-dictionary dictionary.reverso.net/english/cobuild

Longman's
http://www.Idoceonline.com
(Longman's Dictionary of Contemporary English Online)
Heinle's
http://www.nhd.heinle17e.com/home.aspx
(Heinle's Newbury Dictionary for American English)
Merriam Webster's
http://www.learnersdictionary.com
(Pronunciation assistance: www.howjsay.com)

## Meaning - Critical Attributes

Definition: Suffrage is the right to vote in political elections

Break the definition into the critical attributes.
Suffrage

- the right
- to vote
- in political elections


## Vocabulary Instructional Routine

Step 1: Introduce the word's pronunciation.
Step 2: Introduce the word's meaning.

Step 3: Illustrate the word with examples. (and non-examples when helpful)
Step 4: Check students' understanding.

## Teach the meaning of critical, unknown vocabulary words. Instructional Routine

Step 1. Introduce the word's pronunciation.
a) Write the word on the board or display the word on the screen.
b) Read the word and have the students repeat the word.
c) To ensure the correction pronunciation of the word, have students repeat the word a number of times OR have students tap and say the oral syllables in the word.

This word is relieved. What word? relieved Tap and say the syllables in relieved. re lieved Again. re lieved What word? relieved

## Teach the meaning of critical, unknown vocabulary words. Instructional Routine (continued)

Step 2. Introduce the word's meaning. Option 1: Present a student-friendly explanation.
a) Tell students the explanation. OR
b) Have them 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 $\qquad$ . relieved

## Teach the meaning of critical, unknown vocabulary words.

 Instructional RoutineStep 2. Introduce the word's meaning.
Option 2: Break the definition into critical attributes.
Definition in text: A plain is a landform that is a large area of flat land with few trees.

## plain

- landform
- large area
- of flat land
- with few trees


## Teach the meaning of critical, unknown vocabulary words.

 Instructional RoutineStep 3. Illustrate the word with examples.
a) Concrete examples
b) Visual examples
c) Verbal examples

## Teach the meaning of critical, unknown vocabulary words.

 Instructional Routine
## Step 3. Illustrate the word with examples. a) Concrete examples <br> Object Actions or gestures

Watch me show relieved. (Teacher demonstrates relieved.) Show me how you would feel if you were relieved. (Students demonstrate relieved.)

## Teach the meaning of critical, unknown vocabulary words.

 Instructional Routine
## Step 3. Illustrate the word with examples. b) Visual representations

## Displayed on screen



Marcus was relieved when the job interview was over. He felt relieved

## Teach the meaning of critical, unknown vocabulary words. Instrucional Routine

 Step 3. Illustrate the word with examples. c) Verbal examples- When a difficult spelling test is over, you feel
$\qquad$ . relieved
- When you have finished giving the speech that you dreaded, you feel $\qquad$ relieved


## Teach the meaning of critical, unknown vocabulary words. Instructional Routine

## Step 4. Check students' understanding. Option \#1. Ask deep processing questions.

When Maria was told that the soccer game had been cancelled, she said, "I am so relieved." Why might Maria feel relieved? (Provide thinking time.)

Ones, tell your partner why Maria might feel relieved. Begin by saying: Maria might be relieved because.....

## Teach the meaning of critical, unknown vocabulary words.

 Instructional RoutineStep 4. Check students' understanding.
Option \#2. Have students discern between examples and non-examples.

If you were nervous singing in front of an audience,
would you feel relieved when the concert was over
(Provide thinking time.) yes Why?
If you loved singing in front of an audience, would
you feel relieved when the concert was over
(Provide thinking time.) no Why not?

## Teach the meaning of critical, unknown vocabulary words.

Step 4.
Option \#3

Check students' understanding. Have students generate their own examples.

Think of a time when you felt relieved because something difficult was over or never happened.

First ones - then twos, tell your partner a time when you were relieved. Begin by saying:

One time when I was relieved was $\qquad$ .

## Vocabulary Instructional Routine

Step 1: Introduce the word.

Step 2: Introduce the word's meaning.

Step 3: Illustrate the word with examples. (and non-examples when helpful)

Step 4: Check students' understanding.

## Explicit Instruction of Vocabulary Secondary Example (Tier 3 - Domain Specific)

Step 1. Introduce the word's pronunciation.
a) Show the word on the screen.
b) Read the word and have the students repeat the word. If the word is difficult to pronounce or unfamiliar have the students repeat the word a number of times or say the parts of the word as they tap.

Introduce the word with me.
This word is suffrage. What word? suffrage
Tap and say the parts of the word. suf frage
Read the word by parts. suf frage
What word? suffrage
Suffrage is a noun.

## Explicit Instruction of Vocabulary

## Step 2. Introduce meaning of word.

Have students locate the definition in the glossary or text and break the definition into the critical attributes. OR
Present the definition using critical attributes.

Glossary: Suffrage - the right to vote
suffrage

- the right
- to vote


## Explicit Instruction of Vocabulary

Step 3. Illustrate the word with examples.
a. Concrete examples

- objects
- acting out
a. Visual examples
b. Verbal examples


## Explicit Instruction of Vocabulary

Suffrage Examples
When the United States was founded only white men with property had suffrage.

At the time of the American Civil War, most white men had been granted suffrage.

## Explicit Instruction of Vocabulary

Suffrage Examples

In 1920, women were granted suffrage. The passage of the Nineteenth Amendment granted women the right to vote in all United States elections.


## Explicit Instruction of Vocabulary

Suffrage Examples

The Voting Rights Act of 1965 outlawed discriminatory voting practices that denied suffrage to many African Americans in the United
 States.

## Explicit Instruction of Vocabulary

Step 4. Check students' understanding.
Option \#1. Ask deep processing questions.

Check students' understanding with me.
Why is suffrage a critical aspect of a democracy?

Begin by saying or writing:
Suffrage is a critical aspect of democracy for the following reasons. First, $\qquad$

## Explicit Instruction of Vocabulary

Step 4. Check students' understanding.
Option \#2. Have students discern between examples and non-examples.

Check students ' understanding with me.
Tell me suffrage or not suffrage.
The right to run for elected office. not suffrage Why not?
The right to vote. suffrage Why?
The right to develop ads for a candidate. not suffrage Why not?

## Explicit Instruction of Vocabulary

Step 4. Check students' understanding. Option \#3. Have students generate their own examples.

Check students ' understanding with me.
Make a list of ways that suffrage could be limited or compromised.

## Explicit Instruction of Vocabulary

## Step 4. Check students' understanding. Option \#4. Compare and contrast.

Check students ' understanding with me.

Think of how the words suffrage and legislation are similar and different.

## Explicit Instruction of Vocabulary

| Suffrage | noun |
| :--- | :--- |
| Suffragist | noun |



In 1917, all women in the United States did not have suffrage, the right to vote. Suffragists in New York City collected more than a million signatures of women demanding voting rights. They then paraded down Fifth Avenue with the signature placards.

## Suffrage - Knowledge Network



## Explicit Instruction of Vocabulary Secondary Example (Tier 2 - General Academic Vocabulary)

## Step 1. Introduce the word's pronunciation.

a) Show the word on the screen.
b) Read the word and have the students repeat the word.

If the word is difficult to pronounce or unfamiliar have the students repeat the word a number of times or say the parts of the word as they tap.

Introduce the word with me.
This word is complication. What word? complication
Tap and say the parts of the word. com pli ca tion
Read the word by parts. (loop under the parts of the word) complication
What word? complication
Complication is a noun.

## Explicit Instruction of Vocabulary

## Step 2: Introduce the word's meaning.

Tell students the explanation. OR Have them read the explanation with you.

A complication is something that makes a situation harder to deal with or more difficult to do.

## Step 3: Illustrate the word with examples.

## Construction of Panama Canal 1881-1914

complications
-hot temperatures
-jungle environment

- mosquitos
-disease
-deaths
-engineering challenges
-and many MORE


## Step 3: Illustrate the word with examples.

## Situation

## Complication

You left your book at school. That is a ...

> You are going to wash the family's clothes.

The washing machine is broken. That is a ...

You are going to a friend's birthday party.

You are fixing spaghetti for a family dinner.

You don't know the friend's address and you don't have a present. Those are ...
There is no pasta in the cupboard. That is a ...

## Step 4: Check students' understanding.

## Everyday complications

| Situation |
| :---: |
| You are hoping to run a marathon. |
| You have to walk one mile to school. |
| You are babysitting two children, ages 3 and 5. |
| You are planning a trip to Florida in the winter. |

Complication
One complication is ...

One complication is ...

One complication is ...

Some complications include ...

## Vocabulary Instruction - Extensions

1. Introduce the part of speech.
2. Introduce synonyms (same) and/or antonyms (opposite).
3. Tell students when and where the word is often used.

## Vocabulary Instruction - Extensions

4. When appropriate, introduce the history or origin of the word.
5. Introduce other words in the same word family.

## Vocabulary Instruction

Remember: After a word has been taught, introduce students to the word relatives.
conform
conforms
conformed
conforming
conformity
conformist
non-conformist
non-conforming
non-conformity

## Vocabulary Logs

-What can be recorded on a vocabulary log?

- Word
- Meaning in their own words OR
- Critical attributes
- Any of these options
- A sentence to illustrate the word' s meaning
- Examples and non-examples
- An illustration (quick draw)
- In lower grades, create a group log on a flip chart.


## WORD LEARNING STRATEGIES

## Word-Learning Strategies

- Use of context clues.
- Use of meaningful parts of the word.
- Compound words
- Prefixes
- Suffixes
- Word families
- Use of dictionary, glossary, or other resource.


## Word Learning Strategies Use of context clues

## Strategy - Context Clues

1. INSIDE - Find parts of the word that give you hints about the meaning of the word.
2. OUTSIDE - Read the sentence. Find hints as to the word's meaning.
3. OUTSIDE - Read the surrounding sentences. Find hints as to the word's meaning.
4. Ask yourself, "What might the word mean?"
5. Try the possible meaning in the sentence.
6. Ask yourself, "Does it make sense?"

## Context Clues - I do it.

A hippo can submerge in the water to stay cool under the hot African sunshine. Sometimes you can't even see the hippo in the watering hole.

## Context Clues - We do it.

The hippo lives on the African savannah, a dry, hot grassland. A small number of shrubs and trees are scattered across the savannah.

## Context Clues - We do it.

During the day, hippos remain cool by staying in the water or mud. At dusk, they emerge out of the water to graze on grasses.

## Context Clues - You do it.

While hippos rest near each other in the water, grazing is a solitary activity. The hippos spread out to eat on the Savannah.

## 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


## Word Learning Strategies - <br> Prefixes

Elements attached to beginning of English words that alter meaning.
Prefixes are useful because they are

- used in many words,
- consistently spelled,
- easy to identify,
- clear in meaning. (Graves, 2004)

Teach very common prefixes. Un, re, in, and dis found in $58 \%$ of prefixed words.

## 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 | $1 \%$ | atypical |
| a | not; in, on, without | $1 \%$ |  |

## Word Learning Strategies - <br> Prefixes

1. Introduce prefix.
"Re means again. What does re mean?"
2. Determine meaning of a word with a prefix.
"Read the word." rewrite
"If you rewrite your paper, you write it $\qquad$ . "again
"Read the word." rebuild
"If you rebuild a house, you build it ___. " again (Repeat with retell, redo, repaint, remake.)

But not always! real, rent, reign

## Word Learning Strategies Suffixes

Elements attached to ending of English words.

- Can change the part of the speech or the meaning.
- Focus on common derivational suffixes.
- able, ful, less, ness, or
- Introduce the suffix and use to determine the meaning of a number of words (ful -helpful, truthful, mouthful, joyful).
- But not always! grateful


## The Most Common Suffixes in English

| Suffix | Meaning | \%of prefixed <br> words | Examples |
| :--- | :--- | :--- | :--- |
| s, es | more than one; verb 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 | state, quality; act | $4 \%$ | teacher, tailor |
| tion, sion | able to be | $4 \%$ | action;erosion |
| able, ible | related to, like | $2 \%$ | fatal |
| al, ial |  | $1 \%$ |  |

## Word Learning Strategies Roots (Greek and Latin Roots)

When teaching a word with a Greek or Latin root, use it as an opportunity to introduce the meaning of the root. Introduce the root within the target word and then expand to other words.

Example: hydroelectricity
"This word is hydroelectricity."
"The first part of the word is hydro. Hydro is a root that means water.
So in this chapter the word hydroelectricity refers to electricity produced by the movement of water. "
"Let's look at some other words that include hydro."
dehydration
hydroplane
hydrophone
hydraulic
hydroelectric
hydrophobia

## Common Latin and Greek Roots

| aqua | water | Greek | aquarium, aqueduct, aquaculture, aquamarine, aquaplane, aquatic |
| :--- | :--- | :--- | :--- |
| aud | hearing | Latin | audio, audition, audiovisual, auditorium, audiotape, inaudible |
| auto | self | Greek | autograph, autobiography, automobile, autocrat, autonomy |
| astro | star | Greek | astronomy, astrophysics, astrology, astronaut, astronomer, asterisk |
| biblio | book | Greek | Bible, bibliography, bibliophobia, bibliophile, biblioklept |
| bio | life | Greek | biography, biology,autobiography, bionic, biotic, antibiotic, biome, <br> bioshere, biometrics |
| chrono | time | Greek | synchronize, chronology,chronic, chronicle, anachronism |
| corp | body | Latin | corpse, corporation, corps,incorporate, corporeal, corpulence |
| demo | the people | Greek | democracy, demography,epidemic, demotic, endemic, pandemic |
| dic, dict | speak, tell | Latin | dictate, dictation, diction, dictator, verdict, predict, contradict, <br> benediction, jurisdiction, predict, indict, edict |
| dorm | sleep | Latin | dormant, dormitory, dormer, dormouse, dormition, dormitive |
| geo | earth | Greek | geology, geologist, geometry, geography, geographer, geopolitical, <br> geothermal, geocentric |

## Common Latin and Greek Roots

| graph | to write, to draw | Greek | autograph, biography, photograph, telegraph, lithograph |
| :--- | :--- | :--- | :--- |
| hydro | water | Greek | hydroplane, dehydrate, hydroelectric, hydrogen, hydrophone |
| ject | throw | Latin | reject, deject, project, inject, injection, projection |
| logos, logy | study | Greek | geology, astrology, biology, numerology, zoology, technology, <br> psychology, anthropology, mythology |
| luna | moon | Latin | lunar, lunacy, lunatic, interlunar |
| meter | measure | Greek | meter, thermometer, diameter, geometry, optometry, <br> barometer, centimeter, symmetry, voltammeter |
| mega | great, large, big | Greek | megaphone,megalith, megalomania, megatons, megalopolis |
| min | small, little | Latin | minimal, minimize, minimum, mini, miniature, minuscule, <br> minute, minority |
| mit, mis | send | Latin | mission, transmit, transmission, remit, missile,submission, <br> permit, emit, emissary |
| path | feeling, <br> suffering | Greek | pathetic, pathology, apathy, antipathy, sympathy, telepathy, <br> empathy, sociopath |
| ped | foot | Latin | pedestrian, pedal, peddle, peddler, pedicure, pedometer |
| philia | love, friendship | Greek | philosopher, Philadelphia, philanthropist, philharmonic, Philip |

## Common Latin and Greek Roots

| phono | sound | Greek | phonograph, microphone, symphony, telephone, phonogram, <br> megaphone, phony, euphony, xylophone, phony, |
| :--- | :--- | :--- | :--- |
| photo | light | Greek | photograph, photosynthesis, telephoto, photometer, photophilia |
| port | carry | Latin | port, transport, transportation, portable, portage, report |
| spect | see | Latin | respect, inspection, inspector, spectator, spectacles,prospect |
| scope | look at | Greek | microscope, telescope, periscope, kaleidoscope, episcopal |
| sol | sun | Latin | solar, solar system, solstice, solarium, parasol |
| struct | build, <br> form | Latin | instruct, instruction, construction, reconstruction, destruct, destruction, <br> infrastructure, construe, instrument, instrumental |
| tele | distant | Greek | telephone, television,telegraph, telephoto, telescope, telepathy, telethon, <br> telegenic |
| terra | land | Latin | territory, terrestrial, terrace, terrarium, extraterrestrial, Mediterranean <br> Sea, terra cotta, subterranean |

# Word Learning Strategies Use of glossary/dictionary 

Strategy - Glossary/Dictionary

1. Locate the unknown word in the glossary or the dictionary.
2. Read each definition and select the meaning that best fits the sentence.
3. Try the possible meaning in the sentence.
4. Ask yourself, "Does it make sense?"

## Word Learning StrategiesWord Families

- A group of words related in meaning. (Nagy \& Anderson, 1984)
- If you know the meaning of one family member, you can infer the meaning of related words.

enthusiasm<br>enthusiastic<br>enthusiastically

| collect | educate |
| :--- | :--- |
| collecting | educated |
| collection | education |
| collector | educator |

wild
wilderness

## Conclusion

# "Words are all we have." 

Samuel Beckett

