Selecting and Teaching Vocabulary to Enhance Students' Comprehension of Complex Text

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Text Complexity

The Declining Complexity of Texts

Text Complexity

Determining Text Complexity

•Quantitative Measures of Text Complexity

•Qualitative Measures of Text Complexity

•Reader and Task Considerations

Text Complexity
(CCSS, Appendix A)

Quantitative Measures of Text Complexity

- Dale-Chall Readability Formula
- Flesch Kincaid Grade Level
- Lexile Framework for Reading
- Coh-Metrix

Text Complexity
(CCSS, Appendix A)

Qualitative Measures of Text Complexity

•Levels of Meaning (literary texts) or Purpose (informational texts)

•Structure

•Language Conventionality and Clarity

•Knowledge Demands

Text Complexity
(CCSS, Appendix A)

Reader and Task Considerations

Explicit Vocabulary Instruction

Improving Adolescent Literacy: Effective Classroom and Intervention Practices

Recommendation 1: Provide explicit vocabulary instruction

Level of Evidence: Strong

How to Carry Out this Recommendation

1. Dedicate a portion of regular classroom lessons to explicit vocabulary instruction.

2. Provide repeated exposure to new words in multiple contexts, and allow sufficient practice sessions in vocabulary instruction.

How to Carry Out this Recommendation

3. Give sufficient opportunities to use new vocabulary in a variety of contexts through activities such as discussion, writing, and extended reading.

Adolescent Literacy Practice Guide

This practice guide is available on the IES Web site at:

http://ies.ed.gov/ncee/

Time Spent on Explicit Vocabulary Instruction

- Durkin (1978-1979) reported fourth-grade teachers spent .43% of their reading instruction on word meanings.

- .09% spent on word meaning review

- 2.10% spent on word meaning application

Time Spent on Explicit Vocabulary Instruction

Blachowitz (1989)

- 14-19% of the time was spent on vocabulary instruction

Barr & Sadow (1989)

- 0-13 minutes spent on vocabulary instruction

Explicit Vocabulary Instruction

Gersten et al (2010)

A. Explicitness of Instruction	Treatment (N = 39)	Control (N = 42)
Teacher,		
1. Provides an explanation, a definition, and/or an example.	5.17	3.63
2. Elaborates using multiple examples.	.885	.470
3. Elaborates using contrasting non-example(s) to pinpoint definition.	.949	.131
4. Uses visuals, gestures, facial expressions, pictures, or demonstrations to teach word meanings. (gestures are related to word meaning)	4.82	2.05
B. Student Practice		
Teacher,		
1. Asks students to answer questions or participate in activities that require knowledge of words. – e.g., define words; make sentences; find words based on clues; show me how you would look if you were cross; raise your hand if I say something that is enormous.	17.51	8.45

Time Spent on Explicit Vocabulary Instruction
(Wanzek, in press)

# of Teachers	Minutes of Reading Instruction	Minutes of Direct Vocabulary Instruction	% of Time Spent on Direct Vocabulary Instruction
10	2,657.17	214.48	8.07%

Focus Research Concept

Explicit Vocabulary Instruction
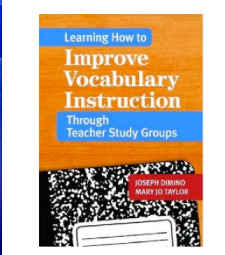
Dimino, J., & Taylor, M.J. (2009). Learning How to Improve Vocabulary Instruction through Teacher Study Groups. Baltimore, MD: Brookes Publishing.)

Focus Research Concept

Categories of Natural Context

Four Categories of Natural Contexts

Handouts pp. 1 & 4

Misdirective

The context leads the reader toward the incorrect meaning of the word.

Nondirective

The context does not assist the reader in determining the meaning of the word.

Four Categories of Natural Contexts

Handouts pp. 1 & 4

Directive
There is enough information to lead students to the correct meaning of the word or the word is explicitly defined/explained in the text.

General
The context provides readers with adequate information to give them a general idea of the word's meaning.

There are many similarities and differences between mammals and birds. The bone structure of a bird's wing bears an uncanny resemblance to the bone structure of the human arm. The *hallux*, or big toe, of most mammals aligns with the other toes; in birds, the comparable digit usually turns backward.

Dimino, J., & Taylor, M.J. (2009). *Learning How to Improve Vocabulary Instruction*

When they visited the desert retreat, Judy and her mother enjoyed swimming, playing tennis, and having spa treatments in the cactus gardens. Because of the effects of the *sere* weather, they had moisturizing facials every day. Even so, they were happy to return to their beachfront home.

Dimino, J., & Taylor, M.J. (2009). *Learning How to Improve Vocabulary Instruction through Teacher Study Groups.* Baltimore, MD: Brookes Publishing.)

We were having our annual staff luncheon at the local Italian restaurant, Giuseppe's Trattoria. The food was excellent and our large group was having a wonderful time. Gaetano, the owner, was *equanimous* when several of his relatives dropped in unexpectedly.

Winners of the pre-trial race were preparing for the final contest. As Roberta watched her husband take his starting position, her heart began to beat violently under her sweatshirt. She knew he had a good chance to win this one, and if he lost, she would be *elated.*

Focus Research Concept

Selecting Words to Teach

Selecting Words to Teach

When choosing words to teach, it is important to consider:

1. Text Factors
   (Misdirective, Nondirective, Directive, General)
2. Importance of the Word
3. Student Factors
4. Tier 1, Tier 2, Tier 3 Words

Selecting Words to Teach

Importance of the Word

Ask yourself:
Is the word critical (i.e., conceptually central) for understanding the selection?

Selecting Words to Teach

Student Factors

1. Students' knowledge of and exposure to the word.

   Consider: Grade of the students

   Ask yourself:

   Has the student had previous experience or exposure to this word?

Selecting Words to Teach

Student Factors

2. Importance for Future Learning

    Ask yourself:
    Is the word important for the students to
    know five years from now?

Tiers

Handouts pp. 1 & 5

Tier 1 are the most basic words (e.g., desk, run, house). **Students rarely need to be taught these words.**

Tier 2 are words that are of high frequency for mature language users found across a variety of subject areas (e.g., adequate, enormous, vociferous, satisfactory).

Tiers

Handouts pp. 1 & 5

Tier 3 words are used infrequently and are often limited to a specific subject areas (e.g., chlorophyll, archipelago, pi).

Activity

Tier 1, 2 or 3?
extraordinary
diode

Selecting Words to Teach
(Publisher Recommended Words)

Handouts
p. 1

Step 1: Determine if the word is in the misdirective or nondirective category. If yes, continue to Step 2. If not, choose another word.

(Adapted from: Dimino, J., & Taylor, M.J. (2009). *Learning How to Improve Vocabulary Instruction through Teacher Study Groups*. Baltimore, MD: Brookes Publishing.)

Selecting Words to Teach
(Publisher Recommended Words)

Handouts
p. 1

Step 2: Determine if the word is critical (i.e., conceptually central) for understanding the selection. If yes, continue to Step 3. If not, choose another word.

(Adapted from: Dimino, J., & Taylor, M.J. (2009). *Learning How to Improve Vocabulary Instruction through Teacher Study Groups*. Baltimore, MD: Brookes Publishing.)

**Selecting Words to Teach
(Publisher Recommended Words)**

Handouts
p. 1

Step 3: Determine if students have had sufficient previous experience with or exposure to the word. If not, continue to Step 4. If yes, choose another word.

(Adapted from: Dimino, J., & Taylor, M.J. (2009). *Learning How to Improve Vocabulary Instruction through Teacher Study Groups*. Baltimore, MD: Brookes Publishing.)

**Selecting Words to Teach
(Publisher Recommended Words)**

Handouts
p. 1

Step 4: Determine if the word is important for students to know 5 years from now. If yes, continue to Step 5. If not, choose another word.

(Adapted from: Dimino, J., & Taylor, M.J. (2009). *Learning How to Improve Vocabulary Instruction through Teacher Study Groups*. Baltimore, MD: Brookes Publishing.)

**Selecting Words to Teach
(Publisher Recommended Words)**

Handouts
pp. 1 & 2

Step 5: Classify the word as Tier 1, 2, or 3. Write the word in the appropriate column of the *Selecting Words to Teach Table.* Follow Steps 1-4 with the next word.

(Adapted from: Dimino, J., & Taylor, M.J. (2009). *Learning How to Improve Vocabulary Instruction through Teacher Study Groups*. Baltimore, MD: Brookes Publishing.)

Selecting Words to Teach Table (Handouts p. 2)

Selection:_____

Tier 1	Tier 2	Tier 3

Brief Instruction	Elaborate Instruction

Note: Remember, no more than 10 words per selection should be taught.

(Adapted from: Dimino, J., & Taylor, M.J. (2009). *Learning How to Improve Vocabulary Instruction through Teacher Study Groups.* Baltimore, MD: Brookes Publishing.)

Selecting Words to Teach
(Publisher Recommended Words)

Handouts pp. 1 & 2

Step 6: After the words have been analyzed, circle the Tier 1, 2, and 3 words that are most critical for understanding the selection.

(Adapted from: Dimino, J., & Taylor, M.J. (2009). *Learning How to Improve Vocabulary Instruction through Teacher Study Groups*. Baltimore, MD: Brookes Publishing.)

Selecting Words to Teach
(Publisher Recommended Words)

Handouts pp. 1 & 2

Step 7: Decide whether the circled words require brief or elaborate instruction. Enter those words in the appropriate column of the *Selecting Words to Teach Table.*

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Selecting Words to Teach Table (Handouts p. 2)

Selection:_____

Tier 1	Tier 2	Tier 3

Brief Instruction	Elaborate Instruction
Develop:	Develop:
1. Student Friendly Definitions	1. Student Friendly Definitions
2. Examples	2. Examples
3. Non-examples	3. Non-examples
4. Concrete Representations	5. Concrete Representations
	AND
	5. Activities to Promote Word Learning

Selecting Words to Teach
(Publisher Recommended Words)

Handouts pp. 1 & 2

Step 8: Develop student friendly definitions, examples, nonexamples and concrete representations for words in the *Brief Instruction* column.

Adapted from: Dimino, J. & Taylor, M.J. (2009). *Learning How to Improve Vocabulary Instruction through Teacher Study Groups*. Baltimore, MD: Brookes Publishing.

Selecting Words to Teach
(Publisher Recommended Words)

Handouts pp. 1 & 2

Step 9: Develop student friendly definitions, examples, nonexamples, concrete representations **and activities** for words in the *Elaborate Instruction* column.

Adapted from: Dimino, J. & Taylor, M.J. (2009). *Learning How to Improve Vocabulary Instruction through Teacher Study Groups*. Baltimore, MD: Brookes Publishing.

**Selecting Words to Teach
(Publisher Recommended Words)**

Handouts
p. 1

If fewer than 5 of the words recommended by the publisher make it to the brief or elaborate columns, follow the steps for Teacher Selected Words until at least 5 words are chosen. No more than 10 words per selection should be taught.

(Adapted from: Dimino, J., & Taylor, M.J. (2009). *Learning How to Improve Vocabulary Instruction through Teacher Study Groups*. Baltimore, MD: Brookes Publishing.)

**Activity
Publisher Recommended Words**

Handouts
pp. 1, 3, 4

Steps 1-7
Selection: Utopian Communities/Social Reforms at Work
Target Word: cause

**Activity
Publisher Recommended Words**

Handouts
pp. 1-4

Steps 1-7
Selection: Utopian Communities/Social Reforms at Work

Activity
Publisher Recommended Words

Handouts
p. 2

Steps 1-7
Selection: : Utopian Communities/Social
Reforms at Work
Debrief

Focus Research Concept

Developing Student Friendly
Definitions

Dictionary Definitions

- Definitions alone tell little about how a word is actually used.

- Definitions do not effectively convey new concepts.

- Denotation vs. Connotation

Dictionary Definitions

- ally: one associated with another (denotation)

- ally: Someone who helps you at what you are trying to do, especially when there are other people who are against you. (connotation)

Student Friendly Definitions

Student friendly definitions contain two important elements.

1. Characterize the Word:
Student friendly definitions describe the word by focusing on specific aspects of its meaning rather than on a general description.

Characterize the word by asking yourself:

Why do we have this word particularly?
Why do we have such a word?

Student Friendly Definitions

2. Explain the Meaning in Everyday Language:
The definition is crafted using words that are part of the students' vocabulary and convey the connotation of the word.

Example Definition from an Eighth Grade Social Studies Book

Escalate- build up

If a bad situation escalates or if someone or something escalates, it becomes greater in size, seriousness or intensity.

Activity

Friendly

Unfriendly

Friendly or Unfriendly?

Reluctant - unwilling; with hesitation

Reluctant - If you are reluctant to do something, you do not want to do it and hesitate before doing it, or do it slowly and without enthusiasm.

Student Friendly Definitions Online

Handouts p. 3

Longman's Dictionary of Contemporary English Online
http://www.ldoceonline.com

Merriam Webster Learners Dictionary
http://www.learnersdictionary.com

Collins Cobuild
http://www.collinslanguage.com

Focus Research Concept

Developing Examples,
Nonexamples and Concrete
Representations of Words

Examples

Examples **within** the context of the selection help clarify and pinpoint the word's meaning.

Examples **beyond** the context of the selection help students formulate a deeper understanding of the word that is logical and unambiguous.

They also help students who may be inclined to limit the word's connotation to the circumstances the teacher described when introducing the word.

Nonexamples

Nonexamples or contrasting examples help further pinpoint the meaning of the word by providing instances where the definition does not apply.

Contrasting examples help to solidify meanings and prevent misconceptions by explicitly telling students the attributes that are not part of the word's connotation.

Concrete Representations

Concrete representations of words include pictures, diagrams, gestures, facial expressions, demonstrations, objects, etc.

When students are given concrete representations of words, their brains are able to make connections between language, which is abstract, and something tangible.

Every night, television, news programs showed America the horrors of the Vietnam War. They watched villages burn and saw wounded soldiers, children and old people. The number of people killed on both sides was announced each day. Antiwar **protests** occurred on college campuses and in Washington, DC. Protesters believed that American lives and money were being wasted on an unjust war.

Student Friendly Definition

Protest-If you protest against something or about something, you say or show publicly that you object to it.

Examples

Examples **within** the context of the selection:

•Some Americans protested because they were against the war in Vietnam.

Examples

Examples **beyond** the context of the selection:

•The citizens protested against a nuclear power plant that was going to be built in their city.

•The members of the Occupy Movement protested because they objected to the economic inequality in the U.S. and around the world

• The child began to protest when he was told that his cell phone was being taken away until his grades improved.

Nonexamples

Nonexamples:

• Campaigning for a candidate you want to win the election.

• Campaigning for or against the passage of a ballot measure or a law.

Concrete Representations

Anti-War Protest

Concrete Representations

Occupy Movement

Focus Research Concept

Developing Activities to Promote Word Learning

Levels of Processing Vocabulary for Multiple Meaningful Exposures

Associational Level

- Students connect a definition to a word.

- Examples: matching exercises, crossword puzzles

Levels of Processing Vocabulary for Multiple Meaningful Exposures

Comprehension Level

- Students use definitional information to complete activities such as to classifying words into categories or to complete graphic organizers

- Examples: Semantic map, semantic feature analysis, Frayer Model, Concept Diagram, Venn Diagram

Levels of Processing Vocabulary for Multiple Meaningful Exposures

Generative Level

- Students produce novel responses to the word.

- Examples: responding to questions, making choices, creating examples

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Idea Completion

Given a scenario, students provide a rationale to demonstrate their understanding of a word's meaning.

The small child was forbidden to play with the matches because….

Variation:
Would you want a frail person on your football team? Why? Why not?

(Adapted Beck, McKeown, & Kucan, 2002)

Questions, Reasons and Examples

Students interact with target words by responding to questions and giving examples.

1. Why is it good to contemplate the possible consequences for your behavior?

(Adapted from Beck, McKeown, & Kucan, 2002)

Relating Words

Students justify their responses to questions about target words.

Using Two Words

Would you dread something appetizing? Why? Why not?

(Adapted from Beck, McKeown, & Kucan, 2002)

Describing/Explaining

Place these phrases on the word line Little Endurance to a Great Deal of Endurance. Explain your placement.

How much endurance does it take to…..
1. **participate** in a decathlon?
2. undergo an **appendectomy**?
3. tolerate a child who is having a **tantrum**?
4. **listen to a engaging speaker for over an hour?**

Little Endurance……………Great Deal of Endurance

(Adapted form Beck, McKeown,& Kucan, 2002)

Word Associations

Requires students to associate known words with newly learned words and provides cumulative review.

Words: murmur, benevolent, fragrant, vociferous

Which word goes with flowers? Why?

Which word goes with whisper Why?

Which word goes with helping? Why?

Which word goes with loud? Why?

(Adapted from Beck, McKeown, & Kucan, 2002)

Multiple Meanings

Students apply different meanings to the same word.

1. What does the word **crescent** mean to:
   a baker? an astronomer? an mapmaker?

2. What does the word **scent** mean to
   a chef? a bloodhound?

Activities to Promote Word Learning
(Protest)

Activities to Promote Word Learning

Describe a **protest** you participated in or heard about.

Jeremy decided to take part in the **protest** because….

Joan decided not to take part in the **protest** because….

Activities to Promote Word Learning

If any of the following would make people protest, say, "protest."

A proposed increase in sales tax

Providing meals for the homeless

Building a new animal shelter

Closing shopping malls on holidays

**Selecting Words to Teach
(Teacher Selected Words)**

Handouts
p. 5

**Selecting Words to Teach
(Teacher Selected Words)**

Handouts
p. 5

Step 1: As you read the selection, generate a list of words.

Step 2: Nominate up to 10 words from the list.

Step 3: Determine if the word is in the misdirective or nondirective category. If yes, continue to Step 4. If not, choose another word.

(Adapted from: Dimino, J., & Taylor, M.J. (2009). *Learning How to Improve Vocabulary Instruction through Teacher Study Groups*. Baltimore, MD: Brookes Publishing.)

Selecting Words to Teach
(Teacher Selected Words)

Handouts
p. 5

Step 4: Determine if the word is critical (i.e., conceptually central) for understanding the selection. If yes, continue to Step 5. If not, choose another word.

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Selecting Words to Teach
(Teacher Selected Words)

Handouts
p. 5

Step 5: Determine if students have had sufficient previous experience with or exposure to the word. If not, continue to Step 6. If yes, choose another word.

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Selecting Words to Teach
(Teacher Selected Words)

Handouts
p. 5

Step 6: Determine if the word is important for students to know 5 years from now. If yes, continue to Step 7. If not, choose another word.

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Selecting Words to Teach
(Teacher Selected Words)

Handouts p. 5

Step 7: Classify the word as Tier 1, 2, or 3. Write the word in the appropriate column of the *Selecting Words to Teach Table.* Follow Steps 3-7 with the next word on your list.

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Selecting Words to Teach Table   (Handouts p. 2)

Selection:_____

Tier 1	Tier 2	Tier 3

Brief Instruction	Elaborate Instruction

Note: Remember, no more than 10 words per selection should be taught.

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Selecting Words to Teach
(Teacher Selected Words)

Handouts p. 5

Step 8: After the words have been analyzed, circle the Tier 1, 2, and 3 words that are most critical for understanding the selection.

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**Selecting Words to Teach
(Teacher Selected Words)**

Handouts
pp. 2 & 5

Step 9: Decide whether the circled words require brief or elaborate instruction. Enter those words in the appropriate column of the *Selecting Words to Teach Table.*

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**Selecting Words to Teach
(Teacher Selected Words)**

Handouts
pp. 2 & 5

Step 10: Develop student friendly definitions, examples, nonexamples and concrete representations for words in the *Brief Instruction* column.

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**Selecting Words to Teach
(Teacher Selected Words)**

Handouts
pp. 2 & 5

Step 11: Develop student friendly definitions, examples, nonexamples, concrete representations **and activities** for words in the *Elaborate Instruction* column.

Adapted from: Dimino, J. & Taylor, M.J. (2009). *Learning How to Improve Vocabulary Instruction through Teacher Study Groups*. Baltimore, MD: Brookes Publishing.

Selecting Words to Teach
(Teacher Selected Words)

Handouts p. 5

If fewer than 5 of the 10 nominated words make it to the brief or elaborate columns, repeat the Steps 2-11 until at least 5 words are selected. No more than 10 words per selection should be taught.

(Adapted from: Dimino, J., & Taylor, M.J. (2009). *Learning How to Improve Vocabulary Instruction through Teacher Study Groups*. Baltimore, MD: Brookes Publishing.)