# VOCABULARY INTERVENTIONS FOR RTI: 

 TIERS 1, 2, 3Judy K. Montgomery, Ph.D. CCC-SLP
Chapman University Orange, CA
Email: montgome@chapman.edu
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## Abstract

Limited vocabulary is a hallmark of language learning disability and a serious obstacle to critical literacy skills. Since vocabulary is learned first indirectly, then directly, students may have a small number of words at their disposal due to a disability- or due to a lack of instruction. RTI is used to make that determination.

## Abstract



This session will demonstrate how evidence-based practices (EBP) in vocabulary development, linked to state standards, can be used for tiered instruction and intervention for PreK-high school.

## Overview of session

I. Importance of vocabulary
II. How children learn vocabulary
III. Given these conditions- many schools are providing vocabulary interventions within RTI models.
IV. Samples of EBP for vocabulary in the three tiers

## Vocabulary is

- the words we use to communicate
- "ready access to lexical items" (Gallagher, 2004)
- gained from experience with extended discourse
- transferred from oral to written language


## Vocabulary development



- Begins early in life
- Is a marker of intellect as well as language skills
- Launches turn-taking, or the language "dance"
(Risley, 2006)


## Vocabulary also...

- Plays a critical part in learning to read
- Helps students make sense of the words they see by comparing them to the words they have heard
- Is one of the 5 building blocks of reading
- Can be divided into four types


## Four types of vocabulary

## Listening <br> Speaking <br> [1] Reading <br> [1] Writing



## Teaching Students to Read

- Phonemic awareness
- Phonics
- Fluency
- Vocabulary
- Text comprehension

National Reading Panel, 2001


## Vocabulary Demands on Students are Daunting

- 450,000 words in

English- largest
vocabulary of
languages in use today

- Students must learn 3,000 words per year by 3 rd grade.
- Only 400 words a year are directly taught by teachers.
- Academic demands are high
- However, everyday speech consists of only 5,000-7,000 words.
- Conversation cannot make up the difference
(Frey \& Fisher, 2007).


## Vocabulary

- Children begin first grade with a 6,000 word spoken vocabulary
- Learn 36,000 more words by 12 th grade
- Learn 5 words a day
- Still need 55,000 words for printed school English (Chall, 87; Gunning, 04)


## State Standards in Vocabulary

- SLPs must tie their semantic (vocabulary) interventions to academic performance and core curriculum (state standards)
-There are standards in vocabulary acquisition in every grade level in every state.
-Vocabulary is a good choice for school-based interventions.


## The Myth of Age or Grade Level Vocabulary

- Students do not learn vocabulary words based on their age or their grade.
- They learn words based on their experiences.

(Beck, et al, 2002)


## Bringing Words to Life

- Book by Beck, McKeown, and Kucan (2002).
- Outlines 3 types of vocabulary (tiers).
- 1- basic vocabulary
- 2- highly functional
- 3- subject related


## What does research tell us?

- Most vocabulary is learned indirectly
- Some vocabulary must be taught directly
- Poor vocabulary is a hallmark of language, literacy, and cognitive disabilities



## How Children Learn Vocabulary

- First indirectly:
- Conversations with adults
- Listening to stories read by adults
- Reading extensively on their own
- We call it "picking up words" (Pence \& Justice, 2008)


## How Children Learn Vocabulary

- Next, directly:
- Word consciousness
- Word learning strategies
- Repetition and review
- Direct instruction


## Students may fail to expand their vocabulary because:

- Poor retention (memory) skills
- Less instruction overall
- Little enthusiasm for word consciousness
- Difficulty applying word learning strategies
Why...
- Language/learning disabilities?
- Poor instruction?


# Given these conditions, schools provide intervention within RTI 

- Tier 1- SBRR in core curriculum
- Tier 2- SBRR in strategic interventions
- Tier 3- SBRR in intensive, explicit interventions


## According to NCLB (2001) and IDEA (2004)

- SLPs may provide assistance to students in all three tiers, PLUS their more conventional role within special education.
- The purpose of RTI is to prevent un-necessary identification of special education.
- Vocabulary impairments may be due to learners' specific language disabilities OR due to lack of instruction.


## RTI will help to determine...

- If students respond to intervention
- High Responders (due to lack of instruction) Solution: Provide more instruction
- Low Responders (due to a disability). Solution: Provide special ed services


## Children learn word meanings

 indirectly in three ways:

- Daily conversations and oral language experience with adults and other children
- Listening to adults read to them
- Reading extensively on their own


## Students with special needs, or at risk, often do not learn words indirectly because:

- They don't engage in conversation as often

- They don't alert to new or interesting words
- They often don't listen carefully when read to
- They usually don't read on their own


## Who has difficulty with vocabulary?

- Students with communication disorders
- Students with cognitive challenges
- Students with hearing loss
- Students in special education classrooms
- English learners



## All of these students need direct instruction in vocabulary

- Direct instruction/intervention includes:
- Specific word instruction
- Word learning strategies
- Intensive work
- Repetitions
- Active engagement


Examples of Evidence-based Practice in Vocabulary Intervention in the 3 Tiers, including Special Education


## Students increase their vocabulary if they have:



- wide ranging experiences
- sufficient number of exposures
- active engagement
- consistent direct instruction
- useful word learning strategies


## These interventions will:

- Include all four vocabulary types
- Combine print and speech supports
- Need to be modified for grades and ages
- Require many repetitions to be successful



## Tier 1- Reinforce Core Curriculum

## Tier 1

## Which

Interventions?

- Act It Out (BOV, 2007)
- LENA (Gilkerson \& Richards, 2007)
- Word Stories (Smith, 2004)
- Loop Writer (www.curriculumproje ct.com/loopwriter.htm)


## Tier 1- EBP Statements

- Semantic development requires 3 significant tasks for the learner- acquiring a 60,000 word mental lexicon from infancy to adulthood; learning new words rapidly; organizing this into an efficient
semantic network (Pence \& Justice, 2008).
- Word understandings are facilitated in three wayseasy or hard concepts; common or rare sound sequences; degree of contextual information (Pence \& Justice, 2008).
- Parents of advanced children have heard an average of 30,000 words a day by the age of 3 (Hart \& Risley, 1995).



# The Bridge of Vocabulary <br> Judy K. Montgomery 

AGS/Pearson
www.agspearson.com

## Act It Out <br> Guided Practice Activity

## Time Required:

## Group Size:



## Materials Needed:

Blocks or other small, stackable objects

## Related Activities:

 PS 1.1, 1.3-1.5Objective: The student will demonstrate an understanding of adverbs by acting out simple directions.

Evidence Base: Extended instruction that promotes active engagement with vocabulary improves word learning (National Reading Panel, 2000).

## Directions:

1) Introduce the activity. Say, "This is a moving game. Listen carefully to what I say and then try to do it."
2) Read the instructions below one at a time. See if the student can follow the instructions just as you say them. Correct any incorrect responses.
3) Keep score by building a tower of blocks. If the student follows an instruction correctly, add a block to the tower. If the student does not follow an instruction correctly, take a block off the tower. In place of blocks, you may use any other small, stackable objects (e.g., colored chips, pennies).
Group Modification: Ask students to take turns acting out the instructions.

## Instructions

Wave your hand slowly.
Wave your hand quickly.
Smile happily.
Stand proudly.
Count to three loudly.
Look at me sadly.
Hop on one foot slowly.
Hop on one foot quickly.
Touch my hand softly.

## Tier 2- Targeted, Strategic

## Tier 2

Which
Interventions?

- Sample Interventions
- Object Description Plan (Zimmerman, 2007)
- Head Shoulders Knees and Toes (BOV, 2007)
- Golden 20 Prefixes (BOV, 2007)
- Antonyms (BOV, 2007)


## Tier 2- EBP Statements

- Maximize the number of responses in a limited amount of time to get vocabulary growth (Paul, 2001; Gillon, 2007)
- Provide a definition and a lexical contrast to establish a more detailed understanding and longer retention of new words (Paul, 2001; Gillon, 2007)
- Struggling learners may need as many as 25 trials to acquire novel words compared to 9-11 trials for typical learners (Pence \& Justice, 2008; Gray, 2003).
- Twenty common prefixes account for $97 \%$ of all prefixed words in English (White, Sowell \& Yanigahara, 1989).


## Tier 3- Intensive

## Tier 3

Which
interventions?

- Line Up Like a Sentence (Funnel To Phonics, 2003)
- LanguageLinks (Wilson, 2007).
- Colorful Letter Scramble (BOV, 2007)
- Associated Vocabulary (Davies, 2007)


## Tier 3- EBP Statements

- A representation of a word consists of phonological, semantic and syntactic features (Wilson, 2007).
- Language areas critical for later reading development are stimulated through semantic and syntactic
interventions (Gillon, Moran \& Page, 2007)
- Word learning depends on the other sounds and words the child already knows. Relating a new word to existing words (neighborhood density) positively influences the speed of learning (Hoover \& Storkel, 2005).


## Over-arching EBP Statement

- Encouraging students to play with words creates an interest in knowing more about them-- often referred to as word consciousness-- which is essential to vocabulary growth (Stahl, 1999).


## State Standards in Vocabulary

- Use simple strategies to determine meaning and increase vocabulary for reading including the use of prefixes, suffixes, root words, multiple meanings... (Florida's Sunshine State Standards Language Arts)
- Analyze idioms ... to infer the literal and figurative meanings of phrases... (Indiana's Academic Standards-- English Language Arts)
- Identify and sort common words into conceptual categories (Massachusetts English Language Arts Curriculum Framework)


# Why Vocabulary Problems Actually Increase As Students Grow Older 

- They also have word finding problems
- They often use low information words
- This has a negative impact on discourse skills
- They rarely expand the meanings of the words they do know
- They read less than their peers

"Given the critical role that reading plays in vocabulary development, poor readers' deficits in word knowledge may be compounded with time, leaving them with a smaller data base from which to select words for speaking and writing."
(Nippold, ‘92, p. 5)

| Prefixes | Number of words with Prefix |
| :--- | :--- |
| un (not) | 782 |
| re (again) | 401 |
| in, im, ir, il, (all mean " not") | 313 |
| dis (opposite) | 216 |
| en, em (make) | 132 |
| non (not) | 126 |
| in, im (all mean "into") | 105 |
| over (too much) | 98 |
| mis | 83 |
| sub | 80 |
| pre | 79 |
| inter | 77 |
| fore | 76 |
| de | 71 |
| trans | 47 |
| super | 43 |
| semi | 39 |
| anti | 33 |
| mid | 33 |
| under | 25 |
| Total | 2,859 Words |

Adapted from: Graves, 2006; Wh ite, Sowell \& Yanag ihara, 1989.

## Prefix Picker (Part 1) <br> Guided Practice Activity

## Time Required:

## Group Size: <br> 

## Materials Needed:

Word cards 2
Prefix cards 8
Scissors
IPW 0

## Related Activities:

UE 6.2-6.6

Objective: Given a target vocabulary word, the student will form an antonym by choosing the appropriate prefix and adding it to the target word.

Evidence Base: Knowing common affixes, base words, and root words helps students learn the meaning of many new words (National Reading Panel, 2000).

## Directions:

1) Before the lesson, print out the word cards and prefix cards (dis-, im- in-, and un-) provided on the CD-ROM and cut them out.
2) Lay out the cards in front of the student. Explain that one of the prefixes, when added to a target word, will form a word that means the opposite of the target word.
3) Read one target word definition from the list below. Ask the student to find the word card, then to form the antonym by choosing the right prefix card.
4) Reinforce correct responses. If the student does not know or responds incorrectly, provide the correct response.
5) Keep track of the words the student has difficulty with and return to these at the end of the lesson for further practice.

## Target Word Definitions and Antonyms

1. Reasonable means something is fair and sensible because there are good reasons for it. What is the opposite of reasonable? [unreasonable]
2. Stable means that something is flued in one position and will not move. What is the opposite of stable? [unstable]
3. Honest means telling the truth and not hiding anything. What is the opposite of honest? [dishonest]
4. Popular means that lots of people like and admire something. What is the opposite of popular? [unpopular]
5. Proper means that everything is correct and just the way it should be. What is the opposite of proper? [improper]
6. Equal means that something is the same in size, number, or amount as another thing. What is the opposite of equal? [unequal]
7. Natural means that something is found in nature and the physical world around us, not made or caused by people. What is the opposite of natural? [unnatural]
8. Visible means that something can be seen. What is the opposite of visible? [invisible]

## Standards Link

Uses simple strategies to determine meaning and increase vocabulary for reading, including the use of prefixes, suffixes, root words, multiple meanings, antonyms, synonyms, and word relationships. - Florida's Sunshine State Standards-Language Arts



## Vocabulary Strategy

- Evidence-based statement
- Grade level standards link
- Upper elementary
- Students have small cards with 5 most common prefixes
- SLP reads word, definition, asks for opposite
- "Proper- Proper means that everything is correct and just the way it should be. What is the opposite of proper?"
- Student holds up card. Says word. "Improper"
- "What does improper mean?"
- "It's not the right way."


## Prefix Picker (Part 1) <br> Independent Practice Worksheet

Add a prefix to each of the following words to create its antonym. The first one has been done for you.

1. Honest means telling the truth and not hiding anything.

What is the opposite of honest? dishonest
2. Reasonable means something is fair and sensible because there are good reasons for it. What is the opposite of reasonable?
3. Natural means that something is found in nature and the physical world around us,
not made or caused by people.
What is the opposite of natural?
4. Stable means that something is fixed in one position and will not move.

What is the opposite of stable?
5. Equal means that something is the same in size, number, or amount as another thing. What is the opposite of equal?
6. Proper means that everything is correct and just the way it should be.

What is the opposite of proper?
7. Visible means that something can be seen.

What is the opposite of visible?
8. Popular means that lots of people like and admire something.

What is the opposite of popular?

dis- | Prefixes |  |  |  |
| :--- | :--- | :--- | :---: |
| im- | un- |  |  |

## Score:

## Prefix Picker (Part 1) <br> Independent Practice Worksheet-KEY

Add a prefix to each of the following words to create its antonym. The first one has been done for you.

1. Honest means telling the truth and not hiding anything.

What is the opposite of honest?
dishonest
2. Reasonable means something is fair and sensible because there are good reasons for it. What is the opposite of reasonable?
unreasonable
3. Natural means that something is found in nature and the physical world around us,
not made or caused by people.
What is the opposite of natural?
unnatural
4. Stable means that something is fixed in one position and will not move.

What is the opposite of stable? unstable
5. Equal means that something is the same in size, number, or amount as another thing. What is the opposite of equal? unequal
6. Proper means that everything is correct and just the way it should be.

What is the opposite of proper? improper
7. Visible means that something can be seen.

What is the opposite of visible? invisible
8. Popular means that lots of people like and admire something.

What is the opposite of popular? unpopular

| Prefixes |  |  |  | un- |
| :--- | :--- | :--- | :---: | :---: |
| dis- | im- |  |  |  |

## Uses EB Strategies



- Active engagement
- Repetitions of small number of words
- Oral to written language
- Give definition in student friendly terms
- Ask for antonym
- Repeat


## Colorful Letter Scramble

The first word in each expression below is a color. The second word, when unscrambled, completes a common term associated with the color. Discuss the meaning of each expression.

For example, WHITE + ESLA $=$ WIHITF $\mathrm{C} \Delta I F$

1. BLUE + DOBOL
2. ORANGE + WOBL
3. BLACK + TREAMK
4. GRAY + TAMTER
5. PURPLE + THREA
6. WHITE + GASPE
7. RED + TARCEP
8. YELLOW + REFEV
9. GREEN + BMUTH
10.BROWN + SOEN

## EBP Vocabulary Research shows:



Words are used to think. The more words we know, the finer our understanding of the world

(Stahl, 1999).



# Take home message 

You can provide explicit, systematic, intensive language and reading vocabulary intervention at all 3 tiers of RtI and in special education SLP services.

## Vocabulary is increased:

- Indirectly by encouraging

conversation, oral language practice, reading to students, and having them read often

Directly by teaching words explicitly, word learning strategies, and becoming word conscious.

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