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.

Purposes

Demonstrate and rehearse evidence-based practices (EBP) and corresponding vocabulary interventions linked to state standards. Use strategies for tiered instruction/intervention-- general ed or special ed-- for PreK through 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 and special education.

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
- Speaking
- Reading
- 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 3rd 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

- Typical children begin first grade with a 6,000 word spoken vocabulary
- Learn 36,000 more words by 12th 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 at 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)

The Good News? You can never select the wrong words to teach.

Bringing Words to Life

- Presents 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
- Special education

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 unnecessary 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

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
Evidence-Based Practice for Vocabulary Intervention

Judy K. Montgomery, PhD  CCC-SLP
22nd Annual SLP Symposium Denver
January 26, 2008

Tier 1- Reinforce Core Curriculum

Tier 1

Which Interventions?

- Act It Out (BOV, 2007)
- Word Stories (Smith, 2004)
- Loop Writer (www.curriculumproject.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 ways-easy 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
Judy K. Montgomery
AGS/Pearson
www.agspearson.com
Strategy

By Age 3- Average children hear 33 million words

- Some hear less than 10 million words
- Have practiced 8 million
- Not dependent on parenting style or SES
- Amount of family talk is closely correlated with IQ scores at age 3 ($r = .77$)
- What’s important? TALK MORE TO BABIES.
Babies need to hear 30,000 words a day!

- How to do it?
- First business talk: Stop that come here open up hold still
- Chit chat: this is the rich stuff!
  Fun talk, running commentary, descriptive, conversational
  (Risley, 2006)

Babies and Toddlers ...

- Are awake 110 hours a week
- Hear 340 utterances per hour, 1440 words are addressed to them
- Respond 150 times
- Are affirmed 17 times
- Have 15,000 hours of learning time by age 3
  Fill it with language!!

Word Stories

- Many words have a story to explain their creation.
- Research and save 20 or more “word stories”.
- Interject them to build word consciousness and improve memory.
- *Herbivore’s Feast* by Smith (2004) is a good source.
- Ketchup
- Clue
- Money
- Sundae
- Frisbee
Loopwriter

- Also known as “Zip Around”
- Students must be able to recognize words in print
- However, they do not have to know all of the words initially
- It is a way to practice new vocabulary
- May use sight words, word families, subject area vocabulary, similar sounding words
- www.curriculumproject.com/loopwriter.htm

Tier 2- Targeted, Strategic

Tier 2

Which Interventions?

- Object Description Plan (Zimmerman, 2007)
- Head Shoulders Knees and Toes (FTP, 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)
- 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).
- Provide a definition and a lexical contrast to establish a more detailed understanding and longer retention of new words (Paul, 2001; Gillon, 2007)
- Twenty common prefixes account for 97% of all prefixed words in English (White, Sowell & Yangihara, 1989).
Object Description

1. What is it called? __________
2. What is the category? __________
3. What do you do with it? What does it do? ___
4. What does it look like? __________
5. What parts does it have? __________
6. What does it feel like? __________
7. Where can I find it? _______________

Next, Build a Definition

A _____(#1)______ is a(n) _____ (# 2)_________ that _____(#3)_______. It _____(#4, 5, 6 or 7)_________ and _____(#4, 5, 6 or 7)_________.
A vestibule is an area or space that comes before a more important area. It is small, may hold supplies, and you can find it near the main door of some homes and buildings.

Words…Syllables…Sounds

- Children learn words first (meaning-based)
- Then syllables because many words are single syllables
- Finally, sounds because they have little or no meaning.

Funnel Toward Phonics

- 53 activities for individuals or groups
- All research-based
- Matched to state standards (go to www.superduperinc.com and type in state)
- Meets NCLB and IDEA criteria for students at risk or identified with special needs (Tiers 1,2)
Head Shoulders Knees and Toes

- Words are composed of syllables
- Students retain words when they can manipulate syllables.
- One method to recall words that students know only marginally is to recall syllables.
- Clapping not effective for many students.
- A visual/motor technique is more compelling.
- Head (1 syllable)
- Head and shoulders (2 syllables)
- Head shoulders, knees (3 syllables)
- Head shoulders, etc.

Affixes and Antonyms

(Montgomery, 2007. The Bridge of Vocabulary)

- 20 prefixes account for 97% of all the prefixed words in English.
- To be highly effective and highly efficient teach the Golden 20.
- Samples of intervention activities.

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Number of words with Prefix</th>
</tr>
</thead>
<tbody>
<tr>
<td>re</td>
<td>482</td>
</tr>
<tr>
<td>en</td>
<td>353</td>
</tr>
<tr>
<td>em</td>
<td>284</td>
</tr>
<tr>
<td>ex</td>
<td>198</td>
</tr>
<tr>
<td>is</td>
<td>136</td>
</tr>
<tr>
<td>in</td>
<td>90</td>
</tr>
<tr>
<td>at</td>
<td>66</td>
</tr>
<tr>
<td>on</td>
<td>28</td>
</tr>
<tr>
<td>up</td>
<td>24</td>
</tr>
<tr>
<td>ex</td>
<td>10</td>
</tr>
<tr>
<td>ed</td>
<td>5</td>
</tr>
<tr>
<td>ed</td>
<td>4</td>
</tr>
<tr>
<td>ed</td>
<td>3</td>
</tr>
<tr>
<td>ed</td>
<td>3</td>
</tr>
<tr>
<td>ed</td>
<td>2</td>
</tr>
</tbody>
</table>

Samples from trevor.w, head.english, etc.
Evidence-Based Practice for Vocabulary Intervention

Judy K. Montgomery, PhD  CCC-SLP
22nd Annual SLP Symposium Denver
January 26, 2008

Prefix Picker (back 1)
Prefix Practice Sheet

un-  dis-  in-
im-

proper  stable
honest  popular
reasonable  equal
natural  visible
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 correct way.”
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

Tier 3- Intensive

Tier 3
Which interventions?

- Line Up Like a Sentence (Funnel To Phonics, 2003)
- LanguageLinks (Wilson & Fox, 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).
**Line Up Like a Sentence**  
(Montgomery, 2004)

- Students who struggle with phonological awareness, reading, and decoding often do not recognize word boundaries.
- A visual display of word bounds can help.
- Select a group of 5 students.
- Say a 5 word sentence.
- “Line up like the sentence and say the word you represent”.
- Increase/decrease the number of words in sentence. Need more or less “players”.

**Language Links**  
(Wilson & Fox, Leaute Learning Co. 2007)

- Software program that develops semantics and syntax.
- From early 2-word stage to mastery.
- For children with language impairments -or- immature syntactic structures
- Students view pictures and animated scenes, then choose one to match the target sentence.
- Progress monitoring with student report after each session
- Intensive, individualized sessions, 15 min per day, daily for 12 weeks.

**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 = WHITE SALE**.

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
Associated Vocabulary

- Lists of words that are commonly found together - triggers memory and retention
- “slippery” “slippery slope”
- “bad” “bad weather”
- Phrased verbs: “burned down” “put up”
- Promotes authentic phrasing for English learners
- [http://view.byu.edu](http://view.byu.edu)
- VIEW - Variation in English Words and Phrases by Mark Davies, PhD at Brigham Young University

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)

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.

**Students increase their vocabulary if they have:**

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

**References**


