



Assessing Different Aspects of Vocabulary Knowledge

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Overview of Presentation

- Instruments
 - Test of Academic Vocabulary in English
 - Assessment of Multiword Units
 - Word Associates Test of Academic Vocabulary in English
 - Test of Homonym Knowledge
 - Test of Connectives

Overview of Presentation

- Background
- Description of each instrument:
 - Rationale
 - Assessment Example
 - Assessment Development
- Tailoring the assessment to your context

Background: Test Development

- The measures were developed, tested in a series of cognitive labs, and revised prior to administration.
- The measures were administered to 1,450 English learners (ELs), former ELs, and native-English speaking students in Grades 3-8 in a large urban district in the Southwest (100 ELs and 100 native-English speaking students at each level).

Background

- All of the measures utilized corpus-based techniques in order to identify words or phrases that are likely to appear in grade-level text and are thus meaningful for school-aged children to know in order to comprehend text they will encounter in school.

Leveled Word Meanings

Name	Description
Living Word Vocabulary (LWV) (Dale & O'Rourke, 1981)	<i>The LWV</i> is a corpus of approximately 44,000 word meanings tested at different grade levels in a cloze format with three multiple choice items. A p-value or percentage of native English speakers who know the meanings of particular words at each grade level is shown for each word meaning in addition to the grade level for each meaning, grades 4-12.
Words Worth Teaching (Biemiller, 2006)	The <i>Words Worth Teaching</i> corpus shows meanings in terms of tiers of difficulty. The difficulty estimates are based on the LWV levels. A definition and sentence is provided with each meaning.

Word Frequencies

Name	Description
Educator's Word Frequency Guide (Zeno, Millard, Ivans, & Duuvari, 1995)	The <i>Educator's Word Frequency Guide</i> indicates the frequency of words that appear in written text in grades 1-13 in the United States. (Grade 13 is an indicator for college level texts.) Six thousand texts spanning kindergarten through college were used for the development of the corpus.
Academic Word List (Coxhead, 2000)	The <i>Academic Word List</i> consists of 570 word families which occur frequently over a range of (mainly expository) academic texts, at the secondary level, from different curriculum areas. This list does not include the most frequent 2,000 words of English and is not limited to text in the United States. You can find more information at http://www.victoria.ac.nz/lals/resources/academicwordlist/ and http://www.nottingham.ac.uk/~alzsh3/acvocab/ .
Word Zones (Hiebert, 2005)	<i>Word Zones</i> is a corpus of zones of words in the <i>Educator's Word Frequency Guide</i> ordered in relation to frequency. You can find more information on the corpus at textproject.org .
The First 4,000 Words (Sales & Graves, 2009)	<i>The First 4,000 Words</i> consists of the most frequent words from The Educator's Word Frequency Guide (Zeno et al., 1995) and Word Zones (Hiebert, 2005). You can find more information at www.sewardreadingresources.com .
MRC Psycholinguistic Database (Wilson, 1988)	The <i>MRC Psycholinguistic Database</i> contains 150,837 words with linguistic attributes for each word. You can find more information at http://websites.psychology.uwa.edu.au/school/MRCDatabase/uwa_mrc.htm .



Test of Academic Vocabulary in English (TAVE)

Description of Assessment

- Consists of four mini-tests each composed of three units
- Each unit contains
 - 4 items
 - Word bank with nine words: four target words and five distractors
- Participants are instructed to select a word from the word bank that matches a definition and completes a cloze sentence associated with the item.

Example Unit

A. bold	B. chance	C. defeated
D. generous	E. important	F. jammed
G. skilled	H. solid	I. swift

1. _____; has great meaning or value

The picture is _____ to me because my dad drew it.

2. _____; something that is stuck

The printer won't work because the paper is _____ in the printer.

3. _____; something that is not hollow

The _____ iron bar is very heavy.

4. _____; large in size

Tommy loves ice cream and cake. Tommy asks for _____ servings.

Dictionaries Utilized

- Wordsmyth Lexipedia
(<http://www.wordsmyth.net/>)
- Cobuild Dictionary: Print and online version
- Longman Dictionary: Print and online version
- Scholastic Children's Dictionary
- Macmillan Children's Dictionary

Make Your Own: TAVE

- Review the instructions and sample items.
- Work with a partner to develop items for one unit that might be used at your grade level.
 - Even though the words may be challenging the item stems should be adjusted for students at different grade levels.
- Discussion: Thoughts about how you might use this assessment in your classroom, school, or district.
- Questions and comments



Test of Multiword Units (MWUs)

Rationale

- Common Core standards for vocabulary development state that it is important for students to “understand words and *phrases*, their relationships... particularly general academic and domain-specific words and *phrases*.”
- Research on multiword units has focused on post-secondary academic language and MWUs drawn from:
 - College classroom conversations
 - College textbooks

Description of Assessment

- Twenty cloze items; each contains a four-word MWU (Biber, Conrad, & Cortes, 2004)
- Three or four blanks per sentence
- Students must select one word per column
- Distractors included one other frequent MWU and within column, semantically and grammatically similar words
- Students instructed to select the common expression that completes the sentence

Example Item

Directions: For each sentence in this activity you must find a common expression made up of three or four words. Read each sentence and think about a common expression that could complete the sentence. The words below each line will help you do this activity. There are three words under each line. Choose one word under each line to make the common expression. Then, fill in the bubble next to these words to complete the sentence. Read the sentence to yourself again to make sure you have chosen the words that make the common expression.

1. It is too hot to go outside. I will stay inside for _____ the day.

- | | | |
|---------------------------|-----------------------------|----------------------------|
| <input type="radio"/> a | <input type="radio"/> first | <input type="radio"/> to |
| <input type="radio"/> the | <input type="radio"/> rest | <input type="radio"/> time |
| <input type="radio"/> one | <input type="radio"/> time | <input type="radio"/> of |

16. I want to go to _____ the street to buy some ice cream.

- | | | | |
|---------------------------|---------------------------------|----------------------------|----------------------------|
| <input type="radio"/> a | <input type="radio"/> other | <input type="radio"/> area | <input type="radio"/> in |
| <input type="radio"/> the | <input type="radio"/> first | <input type="radio"/> time | <input type="radio"/> with |
| <input type="radio"/> one | <input type="radio"/> different | <input type="radio"/> side | <input type="radio"/> of |

Make Your Own: MWU Assessment

- Review the instructions and sample items.
- Work with a partner to develop items that might be used at your grade level.
- Discussion: Thoughts about how you might use this assessment in your classroom, school, or district.
- Questions and comments



Word Associations Test of Academic Vocabulary in English (WATAVE)

Rationale

- Though depth of word knowledge has been shown to be as important as breadth of word knowledge in reading performance and comprehension (Shen, 2008), few assessments have been developed that measure depth in school-age English language learners (Schmitt, Ng, & Garras, 2011).
- The current measures that exist for school-aged children do not control for type of lexical association (e.g., Schoonen & Verhallen, 2008).

Description of Assessment

- Each item consists of a central word (the stimulus)
 - Each stimulus is a word form that has a frequency value between 10 and 999 per million at grades 3, 5, and 7 in the *Educator's Word Frequency Guide* (Zeno, Ivens, Millard, & Duvvuri, 1995).
 - These word forms were matched to grade-level meanings from the *Living Word Vocabulary* (Dale & O'Rourke, 1981).

Description of Assessment

- The stimulus is surrounded by six other words.
 - Three of the words are considered correct associations
 - Three of the words are considered incorrect associations

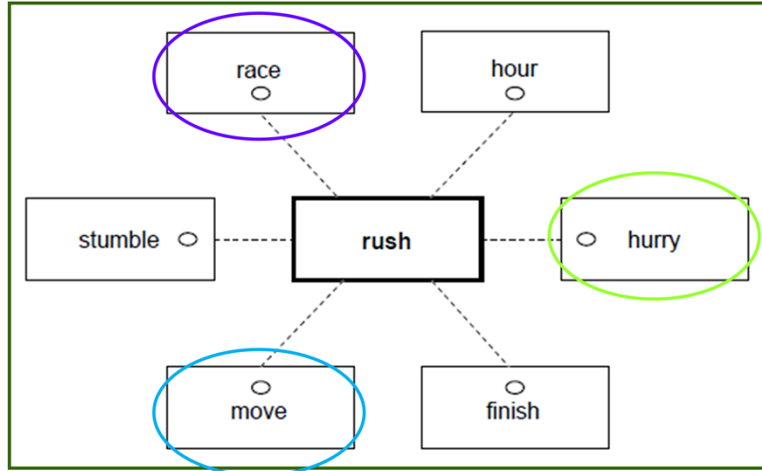
Description of Assessment

- The correct associations are associations within the lexical hierarchy.
 - Superordination
 - Fruit → Banana
 - Subordination
 - Banana → Fruit
 - Synonym
 - Rush → Hurry

Incorrect Associations

- Words that appear in the same context, but not inherently related to the stimulus were used as distractors and considered incorrect.
 - monkey → banana
 - slow → computer
 - good → movie
 - delicious → cake

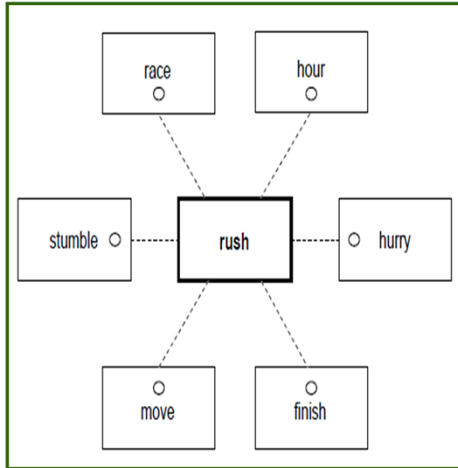
WATAVE



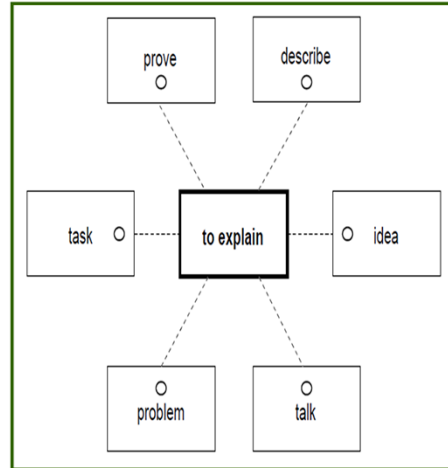
superordinate subordinate synonym

Example

Noun



Verb



Make Your Own: WATAVE

- Review the instructions and sample items.
- Work with a partner to develop items that might be used at your grade level.
- Discussion: Thoughts about how you might use this assessment in your classroom, school, or district.
- Questions and comments



Test of Homonym Knowledge (THK)

Rationale

- Homonyms are words that look and sound alike, but that bear no relation to each other.

Trunk



Rationale

- It is unknown how homonym knowledge develops in school-aged children.
 - Few attempts have been made to measure students' incremental acquisition of vocabulary.
 - Homonyms are frequent in English and are potentially confusing to ELLs.

Description of the THK

- Stimuli word forms:
 - Ten
 - Should be recognized by students at all grade levels.
 - Have a frequency value between 10 and 999 at Grades 3, 5, and 7 in the *Educator's Word Frequency Guide* (Zeno, Ivens, Millard, & Duvvuri, 1995)

Description

- Correct answers (3 per item)
 - Meanings commonly acquired in Grades 4, 6, and 8
 - Taken from the *Living Word Vocabulary* (Dale & O'Rourke, 1981)
- Incorrect answers (3 per item)
 - Matched for sentence structure and length
 - Equal number of options for each part of speech

Example

1. bag

- hang loosely ← Grade 8 meaning
- fold over
- capture something ← Grade 6 meaning
- small hat
- bold action
- sack ← Grade 4 meaning

Construction of Distractors

- Distractors must be plausible but not possible meanings for stimuli
 - Distractors were constructed to match correct answers in terms of content.
 - Each distractor was vaguely related to one of the correct answers by collocation or theme.

BAG		
Keys	Theme	Distractors
(4) sack	<i>something you can carry</i>	small hat
(6) capture something	<i>adventurous</i>	bold action
(8) hang loosely	<i>descriptive of what an object does</i>	fold over

Construction of Distractors

- Distractors must match sentence structure and length of correct answers
- Distractors must be composed of words that all students can understand (Grade 4 LWW words)

Construction of Distractors

1. bag	
<input type="radio"/> hang loosely	← verbal
<input type="radio"/> fold over	← verbal
<input type="radio"/> capture something	← verbal
<input type="radio"/> small hat	← nominal
<input type="radio"/> bold action	← nominal
<input type="radio"/> sack	← nominal

Make Your Own: THK Assessment

- Review the instructions and sample items.
- Work with a partner to develop items that might be used at your grade level.
- Discussion: Thoughts about how you might use this assessment in your classroom, school, or district.
- Questions and comments



Test of Connectives

Rationale

- English learners in fourth grade have been found to have substantially greater difficulty than their English proficient peers when it comes to comprehension of discourse markers of coherence relations (Crosson, Lesaux, & Martiniello, 2008).
- Often called "connectives," these words include conjunctions and selected adverbs, and are considered essential for comprehending connected text.

Description

- We used the Text Cohesion Task (TCT) developed by Droop & Verhoeven (2003) and Crosson (2005) as a starting point.
- Following the criteria outlined in Crosson (2005) we selected one class of coherence relations for each item with classes consisting of contrastive, additive, causal, adversative, and temporal and matched target words to distractors based on level in the *Living Word Vocabulary*.

Description of TOC

1. Some people like the mountains _____ other people prefer the ocean.

- so
- while
- besides
- for example

2. Pedro loves to play with blocks. _____, he likes to paint.

- Therefore
- Also
- Either
- Because

Make Your Own: TOC

- Review the instructions and sample items.
- Work with a partner to develop items that might be used at your grade level.
- Discussion: Thoughts about how you might use this assessment in your classroom, school, or district.
- Questions and comments

About CREATE

CREATE is a National Research and Development Center funded through the National Center for Education Research (NCER), Institute of Education Sciences (IES), U.S. Department of Education. It addresses specific challenges in the education of English language learners in the middle grades (Grades 4-8)

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