New Directions in Vocabulary Assessment

Stuart Webb
Victoria University of Wellington
stuart.webb@vuw.ac.nz

Post-RELC Seminar, Bangkok, Thailand,
22 March, 2013
• We have tests that provide some indication of:

– vocabulary knowledge at different levels of frequency
– knowledge of the Academic Word List (AWL)
– L2 vocabulary size
– How well words are known
• No established tests have been designed to measure students’ vocabulary learning competence

• Test development has been relatively slow
Vocabulary Levels Test

• Vocabulary Levels Test (Nation, 1983, 1990; Schmitt, Schmitt, & Clapham, 2001)

• Measures knowledge of sets of 1000 word families at 4 levels: 2000, 3000, 5000, 10000

• and Coxhead’s (2000) 570 item Academic Word List
Vocabulary Levels Test

- matching test
- 30 items per level
- Bilingual versions may have 1000 level

1. choice
2. crop ______ heat
3. flesh ______ meat
4. salary ______ money paid regularly for doing a job
5. secret
6. temperature

1. choice
2. crop ______ 溫度
3. flesh ______ 肉
4. salary ______ 薪水
5. secret
6. temperature
Positive features of VLT

• Indicates which words teachers should focus on in their courses

• Indicates vocabulary learning progress from year to year

• Indicates the level of difficulty that students may have with different texts
Positive features of VLT

• easy to administer and grade
• hard copy versions are freely available at: http://www.victoria.ac.nz/lals/about/staff/paul-nation
• bilingual versions have been created in Japanese, Korean, Russian, Chinese, Vietnamese, Thai, Tongan, Samoan, and Tagalog
Limitations of VLT

• No 1000 word level
  – 1K level accounts for 84.3% and 75.6% of words in conversation and newspapers, respectively (Nation, 2001)

• Word lists used to create the levels are rather old
  – 2K level based on West (1953)
  – 3K, 5K, and 10K levels based on Thorndike and Lorge (1944) and Kucera and Francis (1967)
Words at the 2000 level of West’s (1953) GSL include: scold, coward, conquest, scorn, omit, rival, voyage, hollow, punctual, tremble, solemn, veil, coarse, cape, applause, oar, quarrel, scent, tame, tribe, procession, barber, vain, razor, ceremony, rake, hinder, obedient, cultivate, donkey, limb, wax, shilling, sow, haste, remedy, telegraph, thread, clay, axe, carriage, and cork
<table>
<thead>
<tr>
<th>BNC word list</th>
<th>2000 tokens</th>
<th>2000 %</th>
<th>3000 tokens</th>
<th>3000 %</th>
<th>5000 tokens</th>
<th>5000 %</th>
<th>10000 tokens</th>
<th>10000 %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000</td>
<td>17</td>
<td>28.33</td>
<td>5</td>
<td>8.33</td>
<td>2</td>
<td>3.33</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2000</td>
<td>28</td>
<td>46.67</td>
<td>15</td>
<td>25.00</td>
<td>5</td>
<td>8.33</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3000</td>
<td>12</td>
<td>20.00</td>
<td>14</td>
<td>23.33</td>
<td>18</td>
<td>30.00</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>4000</td>
<td>2</td>
<td>3.33</td>
<td>15</td>
<td>25.00</td>
<td>10</td>
<td>16.67</td>
<td>1</td>
<td>1.67</td>
</tr>
<tr>
<td>5000</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>8.33</td>
<td>12</td>
<td>20.00</td>
<td>4</td>
<td>6.67</td>
</tr>
<tr>
<td>6000</td>
<td>1</td>
<td>1.67</td>
<td>4</td>
<td>6.67</td>
<td>8</td>
<td>13.33</td>
<td>9</td>
<td>15.00</td>
</tr>
<tr>
<td>7000</td>
<td>1</td>
<td>1.67</td>
<td></td>
<td></td>
<td>0</td>
<td>6</td>
<td>10.00</td>
<td></td>
</tr>
<tr>
<td>8000</td>
<td></td>
<td></td>
<td>2</td>
<td>3.33</td>
<td>6</td>
<td></td>
<td>10.00</td>
<td></td>
</tr>
<tr>
<td>9000</td>
<td>1</td>
<td>1.67</td>
<td>1</td>
<td>1.67</td>
<td>5</td>
<td>8.33</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10000</td>
<td>1</td>
<td>1.67</td>
<td>6</td>
<td></td>
<td>10.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11000</td>
<td>1</td>
<td>1.67</td>
<td>10</td>
<td></td>
<td>16.67</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12000</td>
<td></td>
<td></td>
<td>3</td>
<td>5.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13000</td>
<td></td>
<td></td>
<td>3</td>
<td>5.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14000</td>
<td>6</td>
<td></td>
<td></td>
<td>10.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outside 14K</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>1.67</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
• A new Vocabulary Levels Test (NVLT) is being developed to address these limitations

• 5 levels: 1K, 2K, 3K, 4K, 5K
• Word frequency lists derived from BNC and COCA (Nation, 2012)
• 1K and 2K lists derived from a higher proportion of spoken discourse
Advantages of NVLT

• Made up of the frequency levels of greatest value to teachers
• Difference between levels is the same so may clarify vocabulary development
• Lists represent current English
Disadvantages of NVLT

• No 10,000 word level
  – Little need for this level
  – VST is available to provide a measure of vocabulary size

• No AWL level
1000 level

1 idea _______ white drink
2 milk _______ things
3 oil _______ moving air
4 party
5 stuff
6 wind

2000 level

1 capital _______ choice
2 career _______ test
3 committee _______ job
4 exam
5 fence
6 option
### 3000 level

| 1 | accommodation | _____ end |
| 2 | author         | _____ leader of a city government |
| 3 | candidate      | _____ person who wrote a book |
| 4 | conclusion     | |
| 5 | division       | |
| 6 | mayor          | |

### 4000 level

| 1 | ambassador    | _____ place to go out |
| 2 | exit          | _____ shape with three corners |
| 3 | miracle       | _____ surprising occurrence |
| 4 | relevance     | |
| 5 | specimen      | |
| 6 | triangle      | |
5000 level

1 antibiotic _____ disaster
2 balcony _____ kind of medicine
3 catastrophe _____ thing used to protect against rain
4 referee
5 shark
6 umbrella
Academic Word Levels Test

- AWL test in VLT provides a useful measure of knowledge of the AWL as a whole

- Teaching the 570 word AWL in one course may be challenging

- Teaching several sublists of the AWL may be more likely to occur
• AWL sublists were created according to frequency in academic text

• Sublist 1 of greatest value

• Sublist 10 of least value

• more useful to measure knowledge of sublists than the AWL as a whole
Relative value of the AWL sublists

<table>
<thead>
<tr>
<th>Sublist</th>
<th>Items</th>
<th>Coverage</th>
<th>Interval between encounters in academic text</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>60</td>
<td>3.6%</td>
<td>4.3 pages</td>
</tr>
<tr>
<td>2</td>
<td>60</td>
<td>1.8%</td>
<td>8.4 pages</td>
</tr>
<tr>
<td>3</td>
<td>60</td>
<td>1.2%</td>
<td>12.3 pages</td>
</tr>
<tr>
<td>4</td>
<td>60</td>
<td>0.9%</td>
<td>15.9 pages</td>
</tr>
<tr>
<td>5</td>
<td>60</td>
<td>0.8%</td>
<td>19.4 pages</td>
</tr>
<tr>
<td>6</td>
<td>60</td>
<td>0.6%</td>
<td>24.0 pages</td>
</tr>
<tr>
<td>7</td>
<td>60</td>
<td>0.5%</td>
<td>30.8 pages</td>
</tr>
<tr>
<td>8</td>
<td>60</td>
<td>0.3%</td>
<td>49.4 pages</td>
</tr>
<tr>
<td>9</td>
<td>60</td>
<td>0.2%</td>
<td>67.3 pages</td>
</tr>
<tr>
<td>10</td>
<td>30</td>
<td>0.1%</td>
<td>82.5 pages</td>
</tr>
</tbody>
</table>

Adapted from Coxhead (2000)
AWLT

• AWLT has 5 levels
  – Sublists 1 and 2
  – Sublists 3 and 4
  – Sublists 5 and 6
  – Sublists 7 and 8
  – Sublists 9 and 10

• Format based on VLT
### Sublists 1 and 2

1. benefit
2. focus
3. policy
4. process
5. reliance
6. response

____ way something happens  
____ answer or reply  
____ official plan or method

### Sublists 3 and 4

1. attitude
2. code
3. ministry
4. project
5. sequence
6. sum

____ total amount  
____ feeling toward something  
____ set of rules or laws
**Sublists 5 and 6**

1. aggregate
2. decade
3. enforcement
4. expansion
5. image
6. psychology

**Sublists 7 and 8**

1. advocate
2. device
3. grade
4. manipulation
5. phenomenon
6. topic
1 controversy, public disagreement
2 duration, group of people working for a common goal
3 ideology, system of rules
4 inclination
5 protocol
6 team
Tests of Vocabulary Learning Competence

• measures of aptitude for learning words
• greatest value in assessment of most frequently used methods of learning
  – guessing from context
  – word parts
  – using dictionaries
  – learning with word cards
The Guessing from Context Test

Yosuke Sasao
Toyohashi University of Technology
Japan

Downloadable from:
http://ysasaojp.info/testen.html
Guessing from context

• Most frequently used strategy for dealing with unknown words (de Bot, Paribakht, & Wesche, 1997; Fraser, 1999)

• Teachable (Fukkink & de Glopper, 1998; Kuhn & Stahl, 1998; Walters, 2006)
Why create a guessing test?

• Diagnostic information on learners’ weaknesses in guessing

• No standardised tests => inconclusive effects of teaching
What’s involved in guessing from context?

A) Identify the part of speech of an unknown word
B) Look for the contextual clues
C) Guess the meaning

The guessing from context test (GCT)

- 20 passages: 3 questions per passage
- The first question looks at the part of speech of the unknown word
- The second question measures whether you can derive information from the context
- The last question measures whether you can derive the meaning of the unknown word
Selecting target words

• Randomly chosen from low-frequency words between the 11\textsuperscript{th} and 14\textsuperscript{th} 1000 word families in the BNC word lists (Nation, 2006)

• \((\text{noun}):(\text{verb}):(\text{adjective}):(\text{adverb}) = 9:6:3:2\)

• Replaced by nonsense words with the same inflectional and derivational suffixes and roughly the same length as the target words

• e.g., ostensibly => secomantly
Creating reading passages

• Selected from the BNC
• Includes one contextual clue
• Simplified (most frequent 1,000 word families)
• 50-60 running words
## Contextual clues

<table>
<thead>
<tr>
<th>Type of Clue</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>direct description</td>
<td>restatement</td>
</tr>
<tr>
<td>indirect description</td>
<td>cause/effect</td>
</tr>
<tr>
<td>contrast/comparison</td>
<td>words in series</td>
</tr>
<tr>
<td>synonym</td>
<td>reference</td>
</tr>
<tr>
<td>appositive</td>
<td>association</td>
</tr>
<tr>
<td>modification</td>
<td>example</td>
</tr>
</tbody>
</table>

Q1: Part of speech

What is the part of speech of the word ‘candintock’?

Like a wine **candintock** who only has to smell the wine to know how good it is, a cat can learn all it wants to know without actually eating the food.

(1) noun (2) verb (3) adjective (4) adverb
What word or phrase helps you to work out the meaning of the word ‘candintock’? Choose one item that applies best.

(1) walk away without even trying it
(2) who only has to smell the wine to know how good it is
(3) a cat can learn all it wants to know without actually eating the food
Q3: Meaning

What is the closest meaning of the word ‘candintock’? Choose one item that applies best.

Cats have a good nose for food. Many cats smell food and then walk away without even trying it. Like a wine **candintock** who only has to smell the wine to know how good it is, a cat can learn all it wants to know without actually eating the food.

(1) consumer  
(2) specialist  
(3) seller  

The original word = connoisseur
One more example
Q1: Part of speech

What is the part of speech of the word ‘nogable’?

It is likely that the published works themselves are **nogable**: they might now look different.

(1) noun (2) verb (3) adjective (4) adverb
Q2: Contextual clue

What word or phrase helps you to work out the meaning of the word ‘nogable’? Choose one item that applies best.

It is likely that the published works themselves are **nogable**: they might now look different. If the writers received a prize, their works might be highly respected and have an increased value. If you read a book ten years after you read it for the first time, you might feel differently about the book.

(1) published works
(2) look different
(3) highly respected and have an increased value
Q3: Meaning

What is the closest meaning of the word ‘nogable’? Choose one item that applies best.

It is likely that the published works themselves are \textbf{nogable}: they might now look different. If the writers received a prize, their works might be highly respected and have an increased value. If you read a book ten years after you read it for the first time, you might feel differently about the book.

(1) changeable
(2) readable
(3) valuable

The original word = mutable
Validation

• Validation followed two pilot studies
• 428 Japanese learners of English
• October and November 2010
• Rasch analysis => 11 misfit items (49 acceptable items)
Feedback (Learner A)

Lv 4 = above 1 logits
Lv 3 = 1~0 logits
Lv 2 = 0~1 logits
Lv 1 = below -1 logits
Feedback

• You might be able to improve the skill of guessing from context by using information about the part of speech more effectively

• For example,…
The Word Part Levels Test

Downloadable from:
http://ysasaojp.info/testen.html
Important features

• Three different levels (Easy, Middle, & Hard)

=> Teachers may quickly examine whether their students need to work on easy or difficult word parts

• Three different sections (Form, Meaning, & Use)

=> Teachers may find out which aspects of word part knowledge need to be learned
The Word Part Levels Test (WPLT)

- Word part = affix
- un- (unhappy, unlucky)
- Affixes that appear more than once in the first 10,000 word families of the BNC word lists (Nation, 2006)
- 118 affixes (42 prefixs and 76 suffixs) were identified
Word parts levels

- Three forms with different difficulty levels
  (difficulty = Rasch item difficulty)

<table>
<thead>
<tr>
<th>Form</th>
<th>Word part level</th>
<th>No. of word parts</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>easy</td>
<td>40</td>
</tr>
<tr>
<td>B</td>
<td>middle</td>
<td>39</td>
</tr>
<tr>
<td>C</td>
<td>hard</td>
<td>39</td>
</tr>
</tbody>
</table>
## Word parts (example)

<table>
<thead>
<tr>
<th>Easy</th>
<th>Middle</th>
<th>Hard</th>
</tr>
</thead>
<tbody>
<tr>
<td>mis-</td>
<td>-wise</td>
<td>-let</td>
</tr>
<tr>
<td>micro-</td>
<td>-some</td>
<td>arch-</td>
</tr>
<tr>
<td>re-</td>
<td>-hood</td>
<td>-atory</td>
</tr>
<tr>
<td>mid-</td>
<td>ab-</td>
<td>-i</td>
</tr>
<tr>
<td>multi-</td>
<td>-ible</td>
<td>-ette</td>
</tr>
</tbody>
</table>
Sections

3 sections: Form, Meaning, and Use

Nation (2001:275-278)

• (1) Learners need to be able to recognise word parts

• (2) Learners need to be able to recognise what the affixes mean

• (3) Learners need to be able to recognise what the affixes do
Form section format

(1) po- (2) bu- (3) wa- (4) en-

• Test takers must select the affix
• Same number of letters
• Incorrect answers are a string of letters that occur in English words but are not affixes which change the meaning or the part of speech of a word
Form section

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>sal-</td>
<td></td>
<td></td>
<td>dis-</td>
</tr>
<tr>
<td>2.</td>
<td>yogh-</td>
<td>shee-</td>
<td></td>
<td>fore-</td>
</tr>
<tr>
<td>3.</td>
<td>micro-</td>
<td>cerem-</td>
<td>sheph-</td>
<td>pecul-</td>
</tr>
<tr>
<td>4.</td>
<td>-rse</td>
<td>-ack</td>
<td>-ful</td>
<td>-uin</td>
</tr>
<tr>
<td>5.</td>
<td>-onse</td>
<td>-inge</td>
<td>-ound</td>
<td>-ness</td>
</tr>
<tr>
<td>6.</td>
<td>-ly</td>
<td>-ma</td>
<td>-ra</td>
<td>-na</td>
</tr>
</tbody>
</table>

Note. Prefixes and suffixes are typically separated into two subsections
Meaning section

7 mono- (monotone; monoculture)
   (1) person/thing
   (2) not
   (3) one
   (4) into another state/place

8 dis- (disappear; disorder)
   (1) not
   (2) person
   (3) new
   (4) main

9 -ess (actress; princess)
   (1) female
   (2) small
   (3) not
   (4) many

10 -able (acceptable; predictable)
   (1) person
   (2) not
   (3) can be
   (4) one
Use section

• Some affixes have the function of changing the part of speech of a word. For example, some word parts change a noun to a verb.

• For each item, a word part is presented with two example words. (The word part may also appear in other words.)
Use section examples

1. -ment (development; management)
   (1) Noun
   (2) Verb
   (3) Adjective
   (4) Adverb

2. -ness (awareness; illness)
   (1) Noun
   (2) Verb
   (3) Adjective
   (4) Adverb

3. -ly (clearly; finally)
   (1) Noun
   (2) Verb
   (3) Adjective
   (4) Adverb

4. -y (lucky; healthy)
   (1) Noun
   (2) Verb
   (3) Adjective
   (4) Adverb
Validation

• Study 1
  – To identify and rewrite bad items
  – 440 Japanese learners of English

• Study 2
  – 1,348 participants with 30+ different L1s from 100+ different countries
  – A wide range of proficiency levels
  – Web-based format
Score example

- Form: 90%
- Meaning Section: 90%
- Use: 60%

=> Focus on use
Conclusion

• Vocabulary tests provide value to teachers, learners, and researchers
• We need to continue to update and develop new tests
• NVLT, AWLT, GCT, and WPLT are a small part of this process
References

References

Thank you!