

Vocabulary Thresholds for Reading and Writing: Targets for English Language Learners



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Tuesday January 21, 2020
TESL NB Webinar (via Zoom)



THE UNIVERSITY OF BRITISH COLUMBIA
Okanagan School of Education

The Okanagan



https://students.ok.ubc.ca/efp/__shared/assets/ubco-aerial29104.jpg



Essential Question of the Day

What lexical thresholds support novice post-secondary reading and writing, and how do we get there?

| | | | |
|---------------------------------------|-----------------------------|--------------------|--------------------------------|
| Counting Vocabulary | Lexical Frequency Principle | The First 2,000 | Stages of Language Acquisition |
| Reading Thresholds | | Writing Thresholds | |
| Principles for Vocabulary Instruction | | Sample Activities | |

... she had ... **an apt and varied vocabulary**, she was never at a loss for ... the vivid phrase.

W. Somerset Maugham (1930)
Cakes and Ale

...vocabulary knowledge clearly **underpins all language proficiency** and is the foundation upon which any acquisition of syntax, pragmatics, and other aspects of language crucially depends.”

(Horst, 2013, p. 172)

Example of a word family

educate
educating
educates
educated
educative
miseducated
educator
educators

uneducated
education
educationist
educationists
educational
educationally
educationalist
educationalists

Knowing a word

Breadth vs. Depth

Passive (receptive) vs. Active (productive)

-reading

-writing

How many words...

How many word families does the average university bound 18 year old grade-level student know?

18,000 Word Families

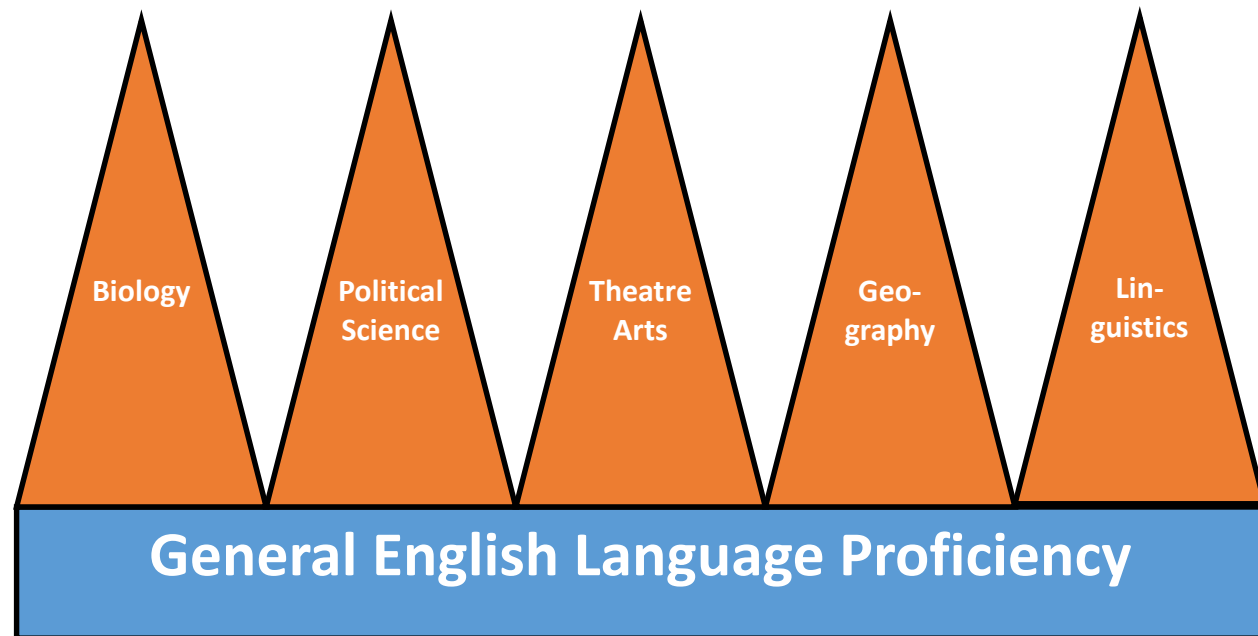
(Nation, 2001)

How many words...

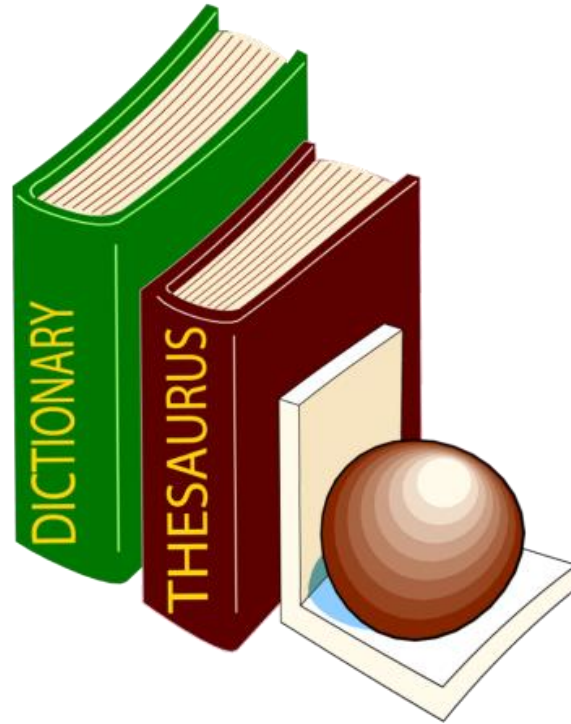
How many word families do grade-level undergraduates learn at university?

+/- 5,000 word families

(Zechmeister et al, 1995)



Exploring Lexical Thresholds



With the frequency principle

Lexical frequency principle

- Certain words occur more frequently than others
- Students will encounter them more often
 - Sister vs. Sibling
- Invest time in learning vocabulary according to frequency
- Bigger return on investment for higher frequency words

A first threshold...



... 2,000 High Frequency Word Families

The first 2,000 word families

- Key threshold for learning an additional language
- Core vocabulary of a language
- Feasible learning goal with big benefits
- 80% to 85% (with proper nouns) coverage (more in oral)
- Lack of 2K creates considerable barriers

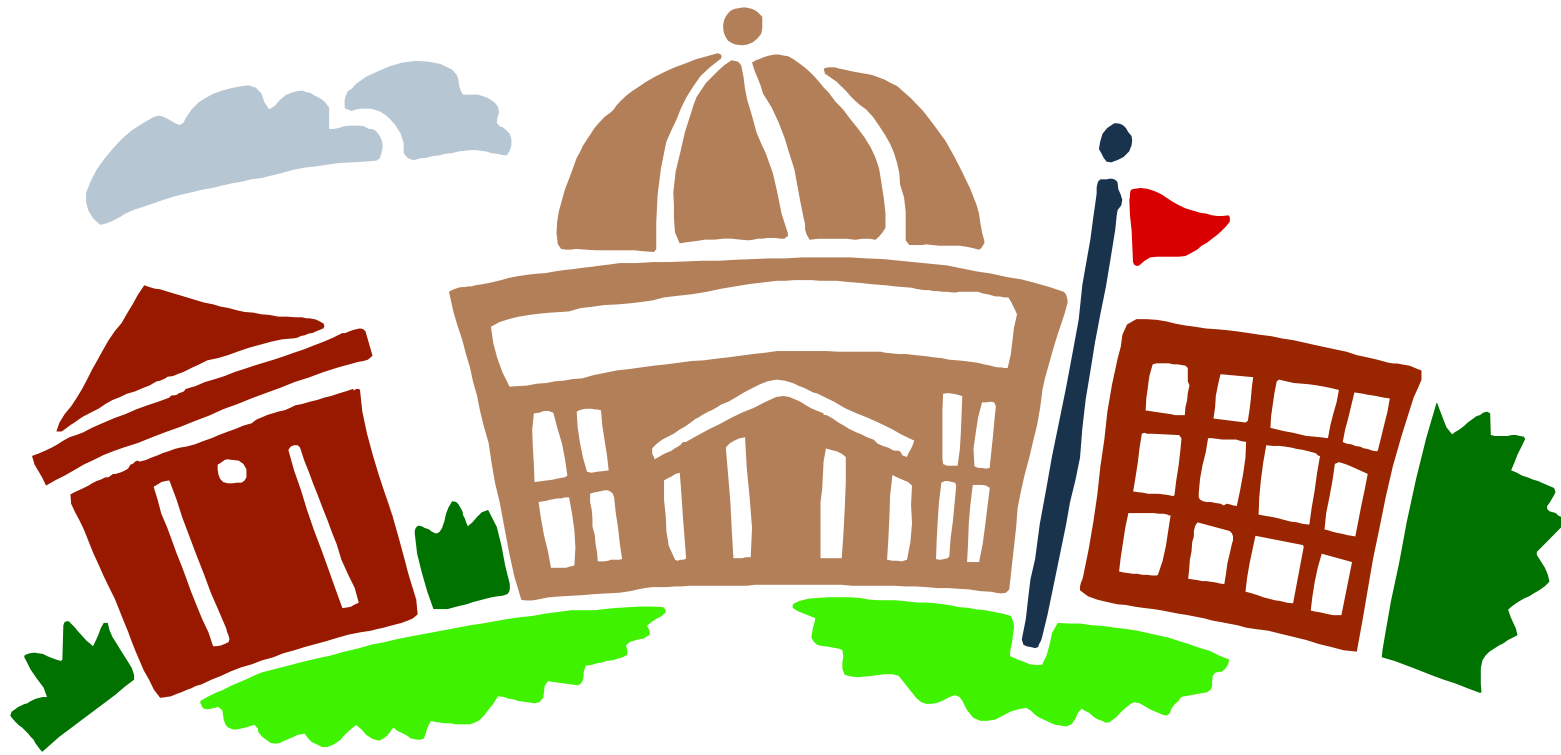
(Horst, 2013)

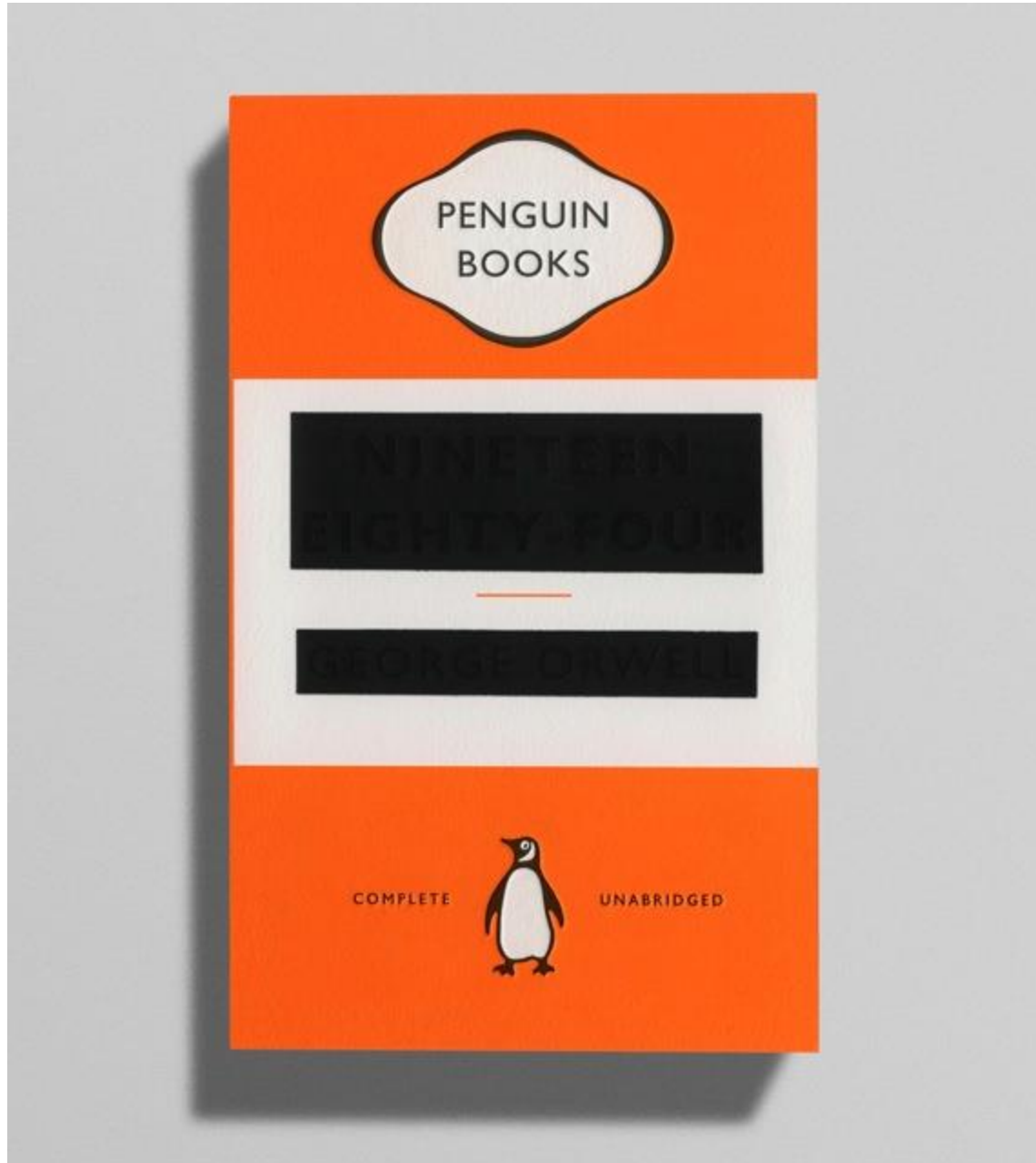


An excellent start ...

- 2K unlock much of the vocabulary needed for communicative language proficiency
- Lexical thresholds beyond the first 2K

Rie's Story





Source: <http://also.kottke.org/misc/images/penguin-1984.jpg>

Were there always these [redacted] of [redacted] ^{通景} of [redacted] ^{腐敗} nineteenth-century houses, their sides [redacted] ^{支柱} up ^{交元} with [redacted] ^{壁紙} of [redacted] ^{木材}, their windows patched with ^{厚紙} [redacted] and their roofs with [redacted] ^{薄紙} iron, their ^{狂草} [redacted] garden walls [redacted] ^{破片} in all directions? And the bombed sites where the [redacted] ^{破片} dust [redacted] ^{破片} in the air and the [redacted] ^{破片} [redacted] ^{破片} over the [redacted] ^{破片} of [redacted]; and the places where the bombs had cleared a larger path and there had sprung up [redacted] ^{殖民地} [redacted] of wooden [redacted] ^{殖民地} like chicken houses? But it was no use, he could not remember: nothing ^{絵画} remained of his childhood except a series of bright-lit [redacted], occurring against no background and mostly [redacted]. ^{理解(字)}



Rie's story

- Japanese university student might know 2,000 words after 800-1,200 hours of instruction (Laufer, 2000 in Horst, 2013)
- Likely not the 2,000 most frequent word families (Horst, 2013)
- 2,000 most frequent word families \approx 81% of *1984* excerpt
 - Frustration
 - Unable to make meaning
 - Conscious and belaboured reading

Rie's story: "What should I do?"

Felt that my advice rang hollow:

- Avoid translating word for word
- Use this flow chart when encountering new vocabulary
- Guess the meaning from context
- Skip unimportant words (adjectives & adverbs)
- Read for gist
- Try to guess what is coming next
- Connect to your own experiences
- Use a monolingual English dictionary
- Come back to unknown words later

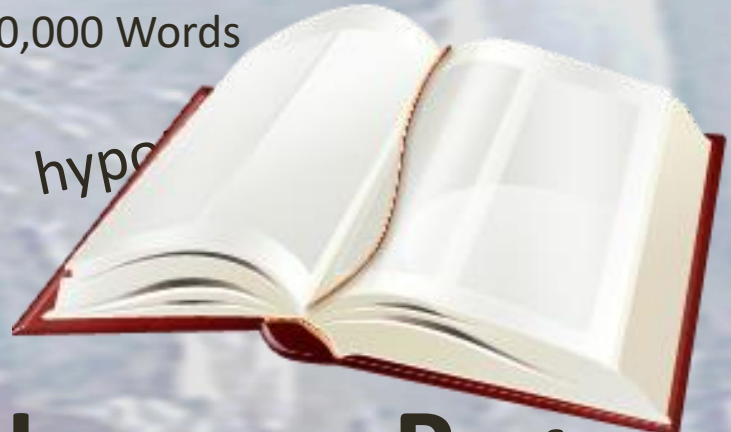
Started thinking ...

Stages of language acquisition

Cognitively Undemanding
Basic Interpersonal Communication Skills



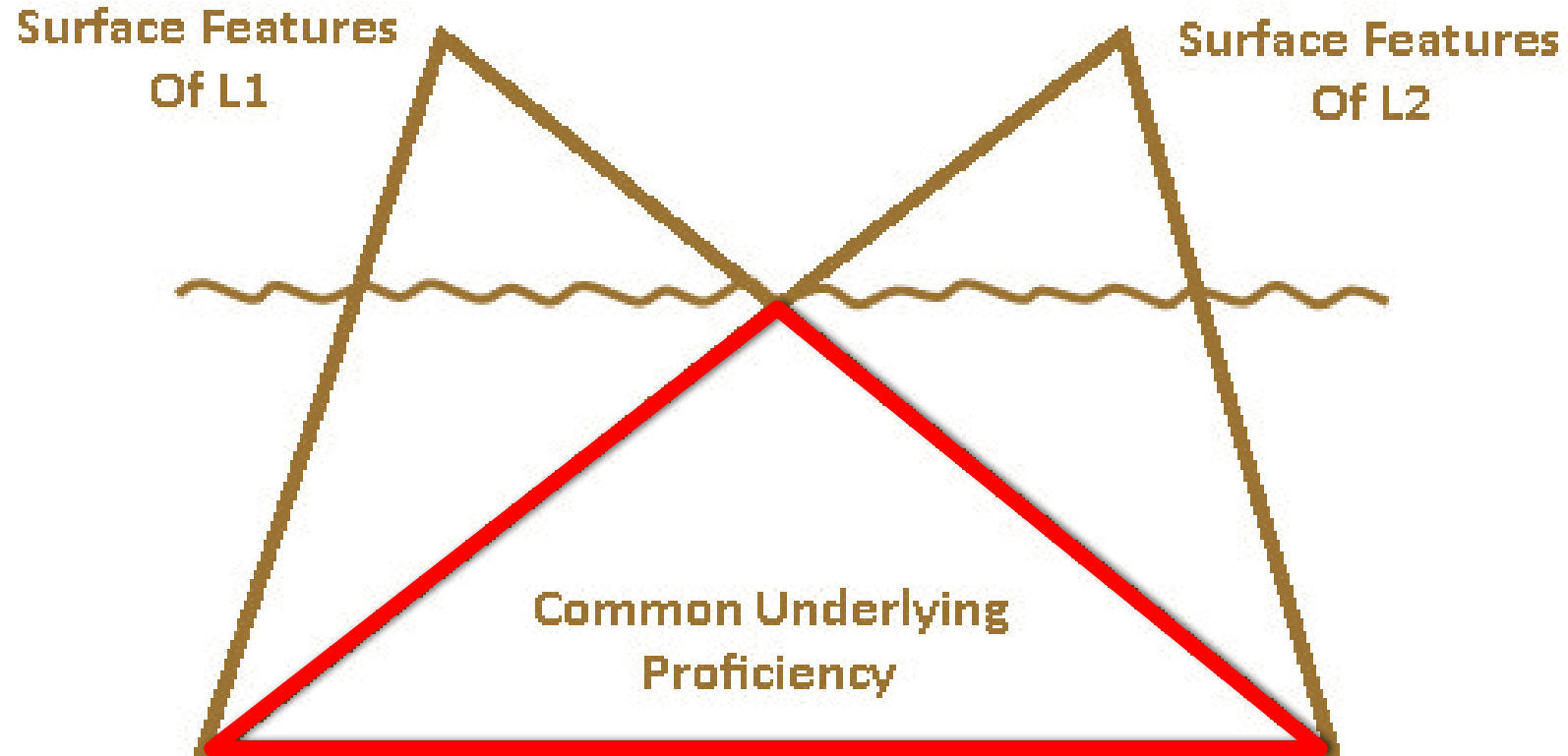
3. Scaffolded Thinking 8,000 Words
4. Educated Imagination 20,000 Words



Cognitive Academic Language Proficiency
Cognitively Demanding

Common Underlying Proficiency

Basic Interpersonal Communication Skills



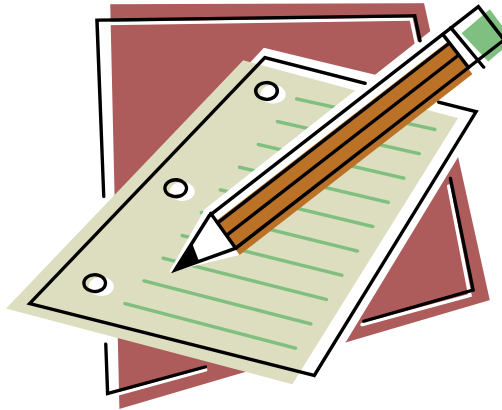
Cognitive Academic Language Proficiency

Common Underlying Proficiency Model of Bilingual Proficiency (Cummins, 1981, p. 24)

Word Tiers (Beck, McKeown, & Kucan, 2013)

- Tier 1 Vocabulary:
 - Every day language; basic language; typically don't require teaching; high frequency vocabulary
- Tier 2 Vocabulary:
 - Academic language that crosses disciplines; important for reading and writing; general academic words; require teaching; AWL
- Tier 3 Vocabulary:
 - Specialized academic language; low frequency vocabulary; specific to certain courses and fields; teach when needed for comprehension

Exploring Lexical Thresholds



For Post-Secondary Reading and Writing

Lexical Frequency Profiling

- Information regarding the percentage text covered by particular frequency sets of vocabulary

(Laufer & Nation, 1995)

- Found to be
 - stable (distinguishes proficiency levels)
 - reliable (similar results for two texts by same writer)
 - valid (correlates with other measures of vocabulary)
 - valuable research and diagnostic instrument

(Laufer & Nation, 1995)

Compleat Lexical Tutor v.8
For data-driven language learning on the Web

SAVERS: Hypertext 1, 2, Cloze VP, N-Word, ID-word

QUICK LOOK-UP or LISTEN Summer 2015: TTS fully restored - 17 AUG

search or speak... ENG: Conc Dico FR: Conc Dico

Cross-browser, IE, FF, SAF, best on Chrome

100% free, no ads or registration "Best from Canada since Trivial Pursuit!" - Scott Thornbury

VP-1-WD BNC+COCA search... MOBILE APPS Conc, VP1,...

LEARNERS RESEARCHERS TEACHERS

Tests
List Learn
Group Lex v.8.2
RA-Reading resource assisted
Corpus Grammar Data-Driven Correction
Concord Writer

Concordance
** 15 SEPT: Conc APP proto **
Vocabprofile
Range Text Range v.3 July 2015
N-Gram
RT Builder
Vocab Stats
Research Base

Text Tools
Familiarizer
Frequency
Text Lex Compare
RaNdOmICITy
KeyWords
Morphology

CONC/INFER coming Autumn 2015
Work out defs from conc lines
To be known as DEFCON2
Cloze Teach+Test modes Monitor Dashboard
Hypertext
Focus on (Word) Forms
I.-D. xszxWORDS.vgft
*All New/ TTS-DICTATOR

UQAM Université du Québec à Montréal

Tom Cobb How to cite To the free dissemination of knowledge on the WWW

www.lextutor.ca
(Cobb, 2016)



Lexical Frequency Profiling

VOCABPROFILE ENGLISH x
www.lextutor.ca/vp/eng/

Home > VocabProfilers > English

Web VP Classic v.4

CHANGES IN USER LIST HANDLING - 24 JUNE 2013 ** [One-word VP](#)

Input method A Type or paste smaller text (<2000 words) below and click *Submit_window* to see its Frequency Profile.

Title: | [FREQ](#) | [VP-CLOZE](#) | [RESEARCH](#) | [TYPICAL PROFILES](#) | [FRENCH](#) | AWL texts > [APA](#) | [StatsCan](#)

MAIN TEXT

INSTRUCTIONS Type or paste your text here and click SUBMIT_window. VocabProfile will tell you how many words the text contains from the following four frequency levels: (1) the list of the most frequent 1000 word families, (2) the second 1000, (3) the Academic Word List, and (4) words that do not appear on the other lists. For a demo, enter this text, or one of the sample texts below.

TEXT SET-UP
General: Include an empty space after every comma or full stop.
Research: Deal with spelling errors and proper nouns.

USER LIST (OPTIONAL)

OPTIONS
 post_AWL
 overlap
[Demo](#)

Demos: [Isogram](#) | Lit (1) (2) | Science (1) (2) | News (1) (2) | Speech (1) (2) | [Rex M.](#) | List [AWL](#)

Non-Lexical Proper Nouns: Recategorize these words as 1k. [Type, paste, or dbl-click textarea items].
 AND/OR* all Capped non-initials

Input method B To upload larger text files, plus *OPTIONAL* technical or other user list

1. No file chosen « TEXT file for VP analysis OPTIONS:

1a. No file chosen « Optional user or tech list - called » post_AWL, or overlap with 2k/AWL

2.

Original VP by Heatley & Nation, VUW New Zealand & B. Laufer, U Haifa, Israel; AWL by A. Coxhead VUW; WebVP adapted by T. Cobb, UQAM Canada. [How to reference](#)

BNC-COCA 1-25k Output

TEXT FOR FILE: Untitled (2,704 chars)

Sentence Capped Offlist Words => 1k: (4 types): canada december maple olga end_of_list

Notes: In the output text, punctuation is eliminated; all figures (1, 20, etc) are replaced by the word *number*; contractions are replaced by constituent words (*won't* => *will not*); type-token ratio is calculated using the 1k sub-analysis content + function words may sum to less than total (depending on user treatment of proper nouns as well as program decision to class numbers as 1k although not contained in 1k list); single letters are not counted as words.

| Freq. Level | Families (%) | Types (%) | Tokens (%) | Cumul. token % |
|---------------------|--------------|-------------|-------------|----------------|
| K-1 Words : | 128 (70.33) | 145 (72.14) | 399 (84.89) | 84.89 |
| K-2 Words : | 31 (17.03) | 34 (16.92) | 36 (7.66) | 92.55 |
| K-3 Words : | 16 (8.79) | 16 (7.96) | 23 (4.89) | 97.44 |
| K-4 Words : | 5 (2.75) | 6 (2.99) | 7 (1.49) | 98.93 |
| K-5 Words : | 1 (0.55) | 1 (0.50) | 4 (0.85) | 99.78 |
| K-6 Words : | 1 (0.55) | 1 (0.50) | 1 (0.21) | 99.99 |
| K-7 Words : | | | | |
| K-8 Words : | | | | |
| K-9 Words : | | | | |
| K-10 Words : | | | | |
| K-11 Words : | | | | |
| K-12 Words : | | | | |
| K-13 Words : | | | | |
| K-14 Words : | | | | |
| K-15 Words : | | | | |
| K-16 Words : | | | | |
| K-17 Words : | | | | |

| RELATED RATIOS & INDICES | |
|----------------------------------|------|
| <i>Pertaining to whole text</i> | |
| Words in text (tokens): | 470 |
| Different words (types): | 201 |
| Type-token ratio: | 0.43 |
| Tokens per type: | 2.34 |
| <hr/> | |
| <i>Pertaining to onlist only</i> | |
| Tokens: | 470 |
| Types: | 201 |
| Families: | 182 |
| Tokens per family: | 2.58 |
| Types per family: | 1.10 |

(Cobb, 2016)



the five **species** of pacific **salmon** that live in british columbia waters have fed and **fascinated humans** for thousands of years and have been **keystones** in the **ecology** of both **coastal** waters and hundreds of **streams** throughout much of the **province** their lives are part of great **cycle** the **migration** of **fry** or **smolts** from **freshwater streams** to the **ocean** the grand travels of **silvery adults** through the north pacific the **arduous migration** **upstream** to their **birthplace** the **battles** and **lovmaking** of **gaudily** coloured **distorted** bodies on the **spawning** grounds and the **inevitable swift decay** and **death** of the **battered** fish **among** the eggs of the **generation** to follow all **aspects** of this **cycle** have **stirred** the **human** imagination

although pacific **salmon** all share the same basic **cycle** different **species** spend different **lengths** of time in **fresh** water as **juveniles** and in the **ocean** as **adult** fish they **spawn** in different kinds of **streams** and at different times of the year they travel to different parts of the **ocean** and so on

scientists still are not sure exactly how **salmon** find their **birthplace** but they certainly use their **noses** fish with **plugged noses** cannot find their way back unique **stream odours** probably become **imprinted** on **juvenile salmon** as they travel **downstream** and they follow these as they travel back up the **stream** **several** years later as **adults** if this sounds **amazing** just **recall** how specific **smells** from your childhood can take you **instantly** back in your mind at least to your school **yard** or family kitchen

in addition **salmon** may be helped by the fact that they travel **upstream** in the company of their brothers sisters and other **fellow spawners** they may be able to recognize members of their own **stock** by specific **smells released** by the fish and when many fish are trying to find the same place it is far less likely that any will go **astray** than if they tried on their own

although most **salmon** find their way back home small percentage do **stray** into **unfamiliar streams** either on their own or in the company of **salmon** that **belong** in those **streams** straying may or may not be **advantageous** to individuals but small amount of it certainly **aids** in the **survival** of the **species** strays introduce **genetic variation** into **breeding stocks** and without them

throughout_1] time_1] times_1] to_8] travel_4] travels_1] tried_1] trying_1] unique_1] up_1]
use_1] water_1] waters_2] way_2] when_2] will_1] with_1] without_1] would_1] year_1] years_2]
you_1] your_3]

BNC-2,000 types: [fams 31 : types 34 : tokens 39] extract

adult_1] adults_2] advantageous_1] aids_1] amazing_1] among_1] aspects_1] battles_1]
belong_1] coastal_1] cycle_3] death_1] disasters_1] fellow_1] fresh_1] generation_1] human_1]
humans_1] ice_1] lengths_1] mountains_1] noses_2] plugged_1] recall_1] released_1] rivers_1]
several_1] smells_2] stock_1] stocks_1] survival_1] unfamiliar_1] variation_1] yard_1]

BNC-3,000 types: [fams 8 : types 9 : tokens 16] extract

breeding_1] fascinated_1] fry_1] instantly_1] silvery_1] species_3] stirred_1] stream_2] streams_5]

BNC-4,000 types: [fams 9 : types 9 : tokens 17] extract

battered_1] decay_1] distorted_1] inevitable_1] ocean_3] province_1] salmon_7] stray_1] swift_1]

BNC-5,000 types: [fams 1 : types 1 : tokens 2] extract

migration_2]

BNC-6,000 types: [fams 4 : types 5 : tokens 5] extract

eruptions_1] genetic_1] juvenile_1] juveniles_1] volcanic_1]

BNC-7,000 types: [fams 1 : types 1 : tokens 1] extract

astray_1]

BNC-8,000 types: [fams 1 : types 1 : tokens 1] extract

ecology_1]

BNC-9,000 types: [fams 3 : types 3 : tokens 3] extract

arduous_1] imprinted_1] odours_1]

BNC-10,000 types: [fams 5 : types 6 : tokens 7] extract

birthplace_2] downstream_1] freshwater_1] keystones_1] spawn_1] spawning_1]

Exploring Reading Thresholds



Post-Secondary Studies

With the frequency principle

Vocabulary, Reading, Academic Success

Strong relationship between vocabulary knowledge and reading comprehension for all levels

(Stanovich, 1986; 2000, Verhoeven, 2000; Nassaji, 2003; Roessingh, 2008)

Receptive vocabulary knowledge needed for reading comprehension. Reading comprehension needed for academic success

(Nation, 2001; Coxhead & Nation, 2001; Cobb & Horst, 2001; Corson, 1997)

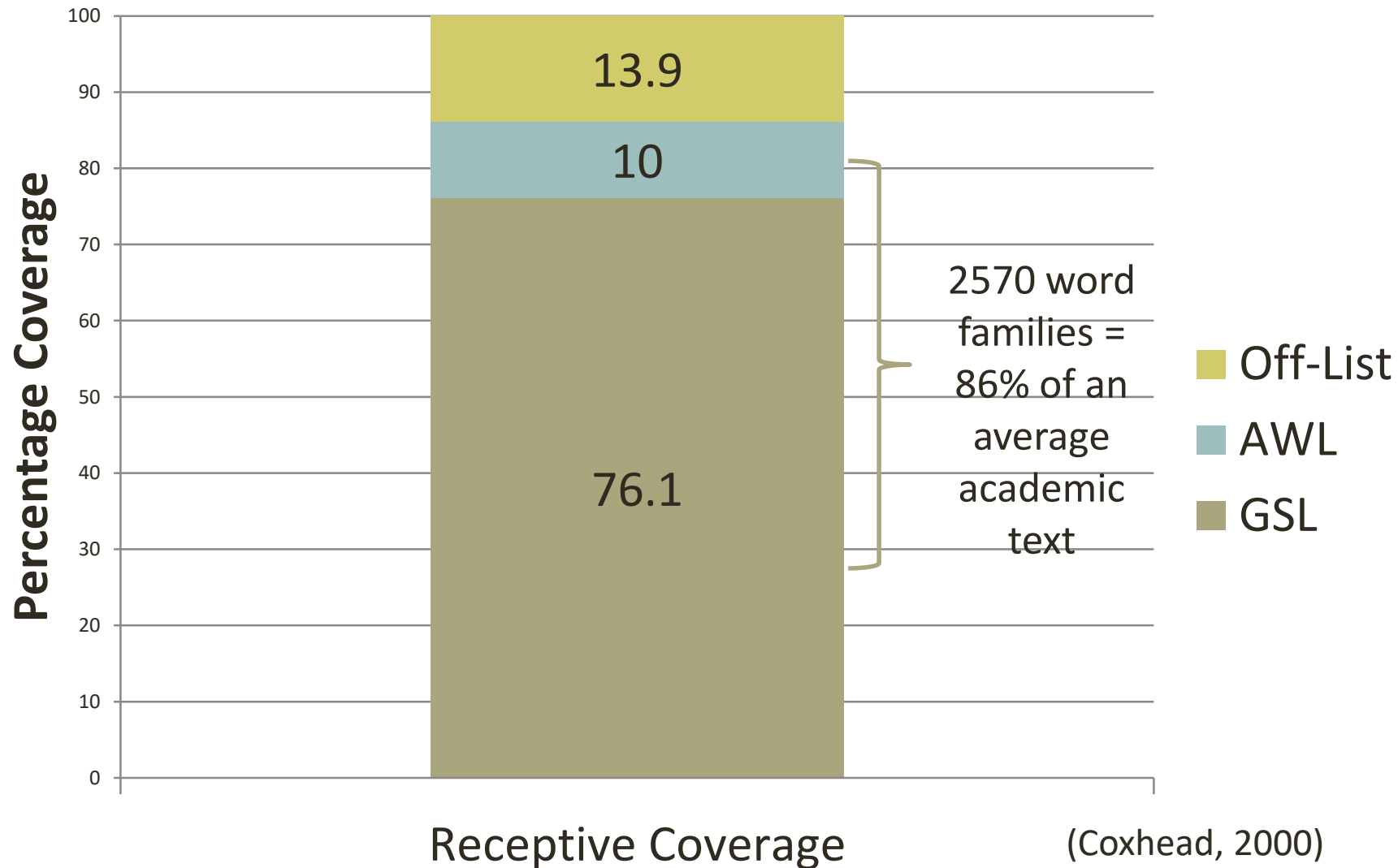
Considered reading demands

- Textbooks
- Online textbooks
- Academic articles
- Book chapters
- Laboratory manuals
- Online learning management systems
- E-mails
- Course catalogues
- Websites
- Newspapers
- Magazines

The Academic Word List (Coxhead, 2000)

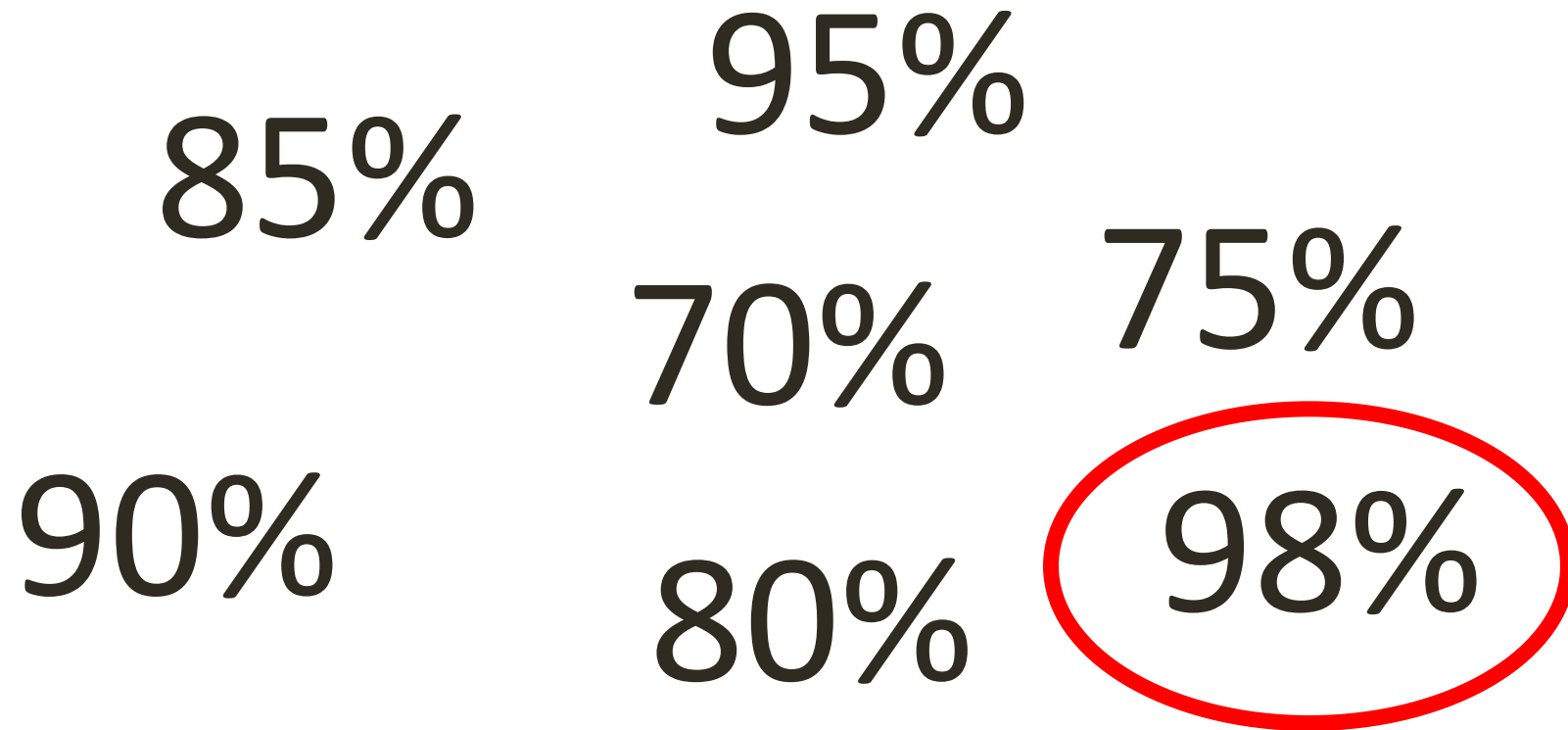


GSL/AWL Receptive Coverage



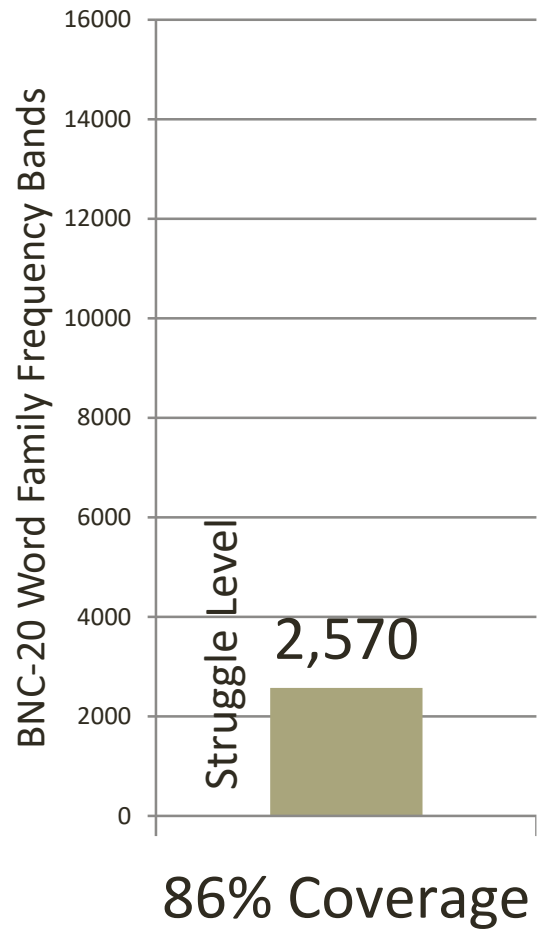
What percentage of running words ...

... is needed to understand a reading passage?

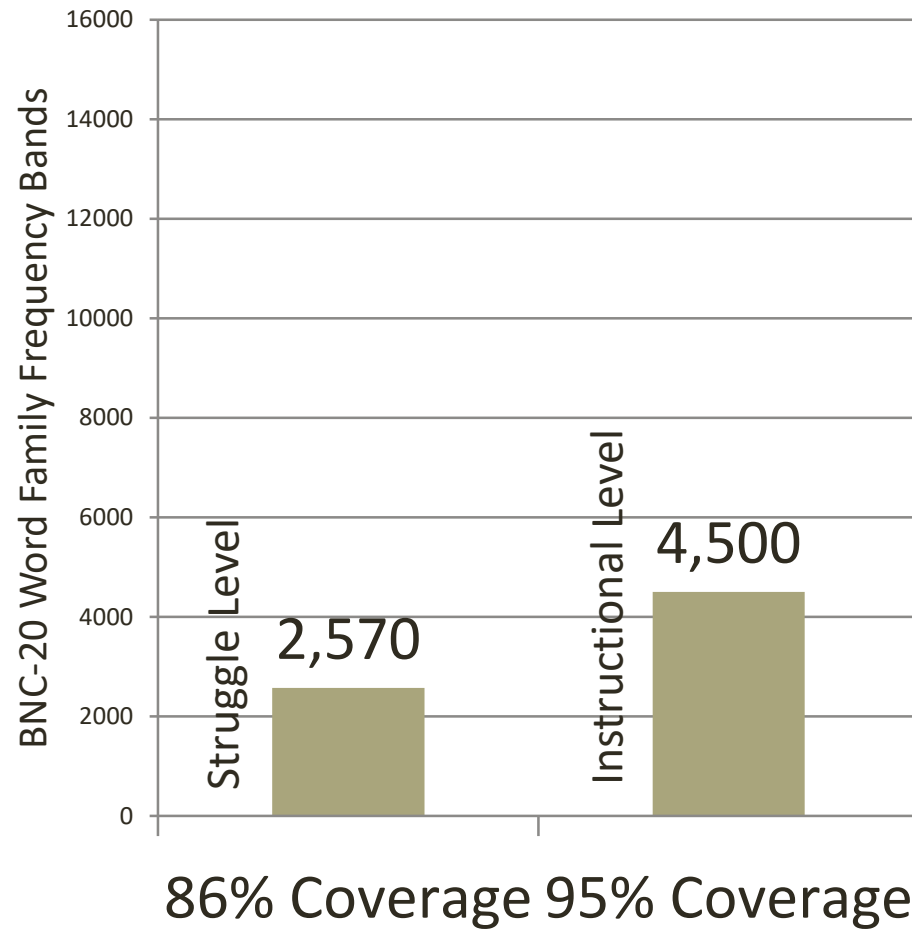


(Hu & Nation, 2000; Nation, 2001)

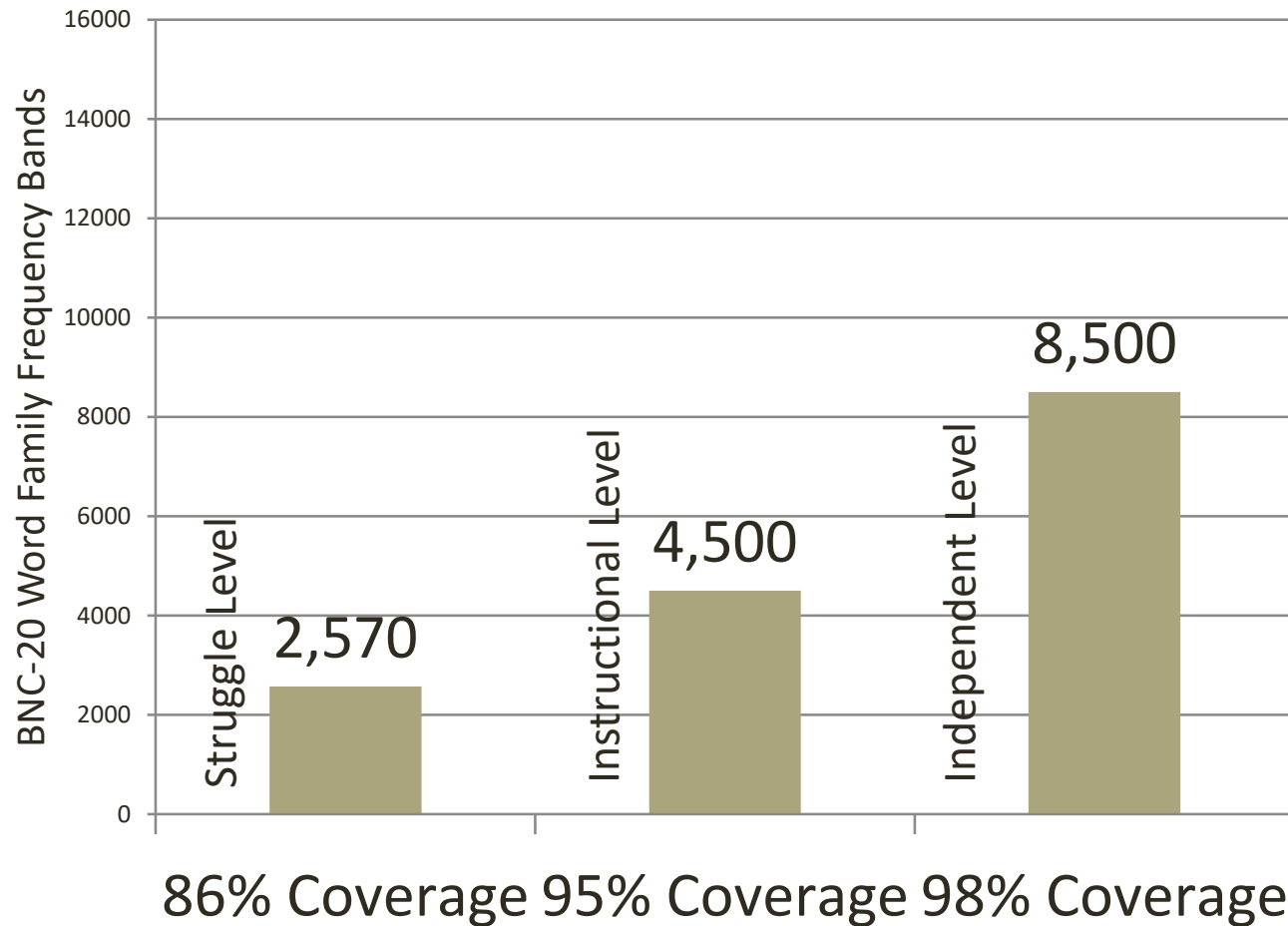
Receptive Vocabulary Thresholds



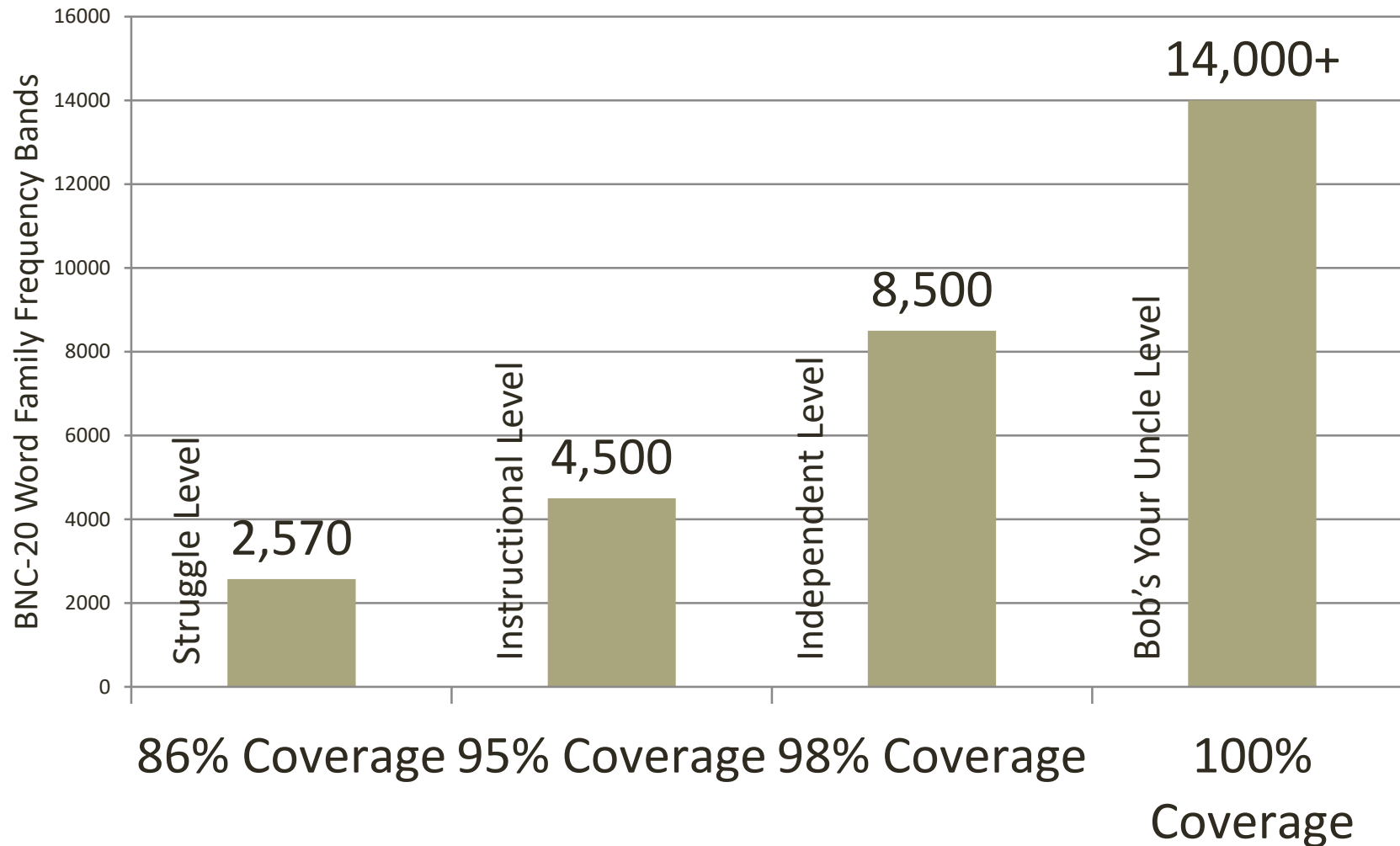
Receptive Vocabulary Thresholds

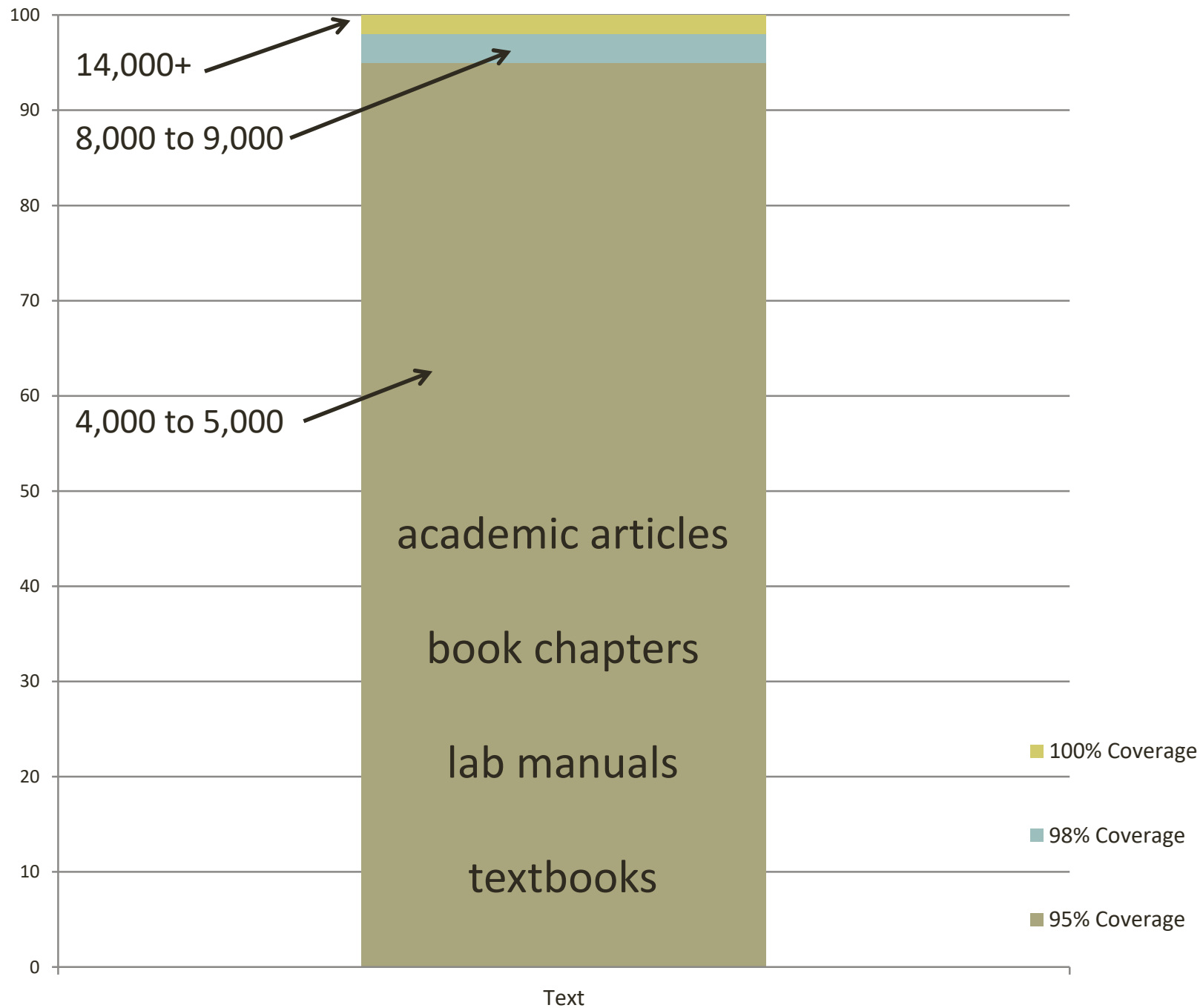


Receptive Vocabulary Thresholds



Receptive Vocabulary Thresholds





Receptive Vocabulary Thresholds: Reading

2,000 Word Families

Encounter an unfamiliar word \approx 1 in 4 times (76%)

2,570 Word Families

Encounter an unfamiliar word \approx 1 in 7 times (86%)

4,000 – 5,000 Word Families

Encounter an unfamiliar word \approx 1 in 20 times (95%)

8,000 – 9,000 Word Families

Encounter an unfamiliar word \approx 1 in 50 times (98%)

1 in 4: Lost Level (2 K)

One two three [REDACTED] five six seven [REDACTED] nine ten
eleven [REDACTED] thirteen fourteen fifteen [REDACTED]
seventeen eighteen nineteen [REDACTED] twenty-one
twenty-two twenty-three [REDACTED] twenty-five
twenty-six twenty-seven [REDACTED] twenty-nine
thirty thirty-one [REDACTED] thirty-three thirty-four
thirty-five [REDACTED] thirty-seven thirty-eight
thirty-nine [REDACTED] forty-one forty-two forty-three
[REDACTED] forty-five forty-six forty-seven
[REDACTED] forty-nine fifty fifty-one [REDACTED]
fifty-three fifty-four fifty-five [REDACTED] fifty-seven
fifty-eight fifty-nine [REDACTED]

1 in 7: Struggle Level (2.57 K)

One two three four five six [REDACTED] eight nine ten
eleven twelve thirteen [REDACTED] fifteen sixteen
seventeen eighteen nineteen twenty [REDACTED]
twenty-two twenty-three twenty-four twenty-five
twenty-six twenty-seven [REDACTED] twenty-nine
thirty thirty-one thirty-two thirty-three thirty-four
[REDACTED] thirty-six thirty-seven thirty-eight
thirty-nine forty forty-one [REDACTED] forty-three
forty-four forty-five forty-six forty-seven
forty-eight [REDACTED] fifty fifty-one fifty-two
fifty-three fifty-four fifty-five [REDACTED] fifty-seven
fifty-eight fifty-nine sixty

1 in 20: Instructional Level (4.5 K)

One two three four five six seven eight nine ten
eleven twelve thirteen fourteen fifteen sixteen
seventeen eighteen nineteen twenty-one
twenty-two twenty-three twenty-four twenty-five
twenty-six twenty-seven twenty-eight twenty-nine
thirty thirty-one thirty-two thirty-three thirty-four
thirty-five thirty-six thirty-seven thirty-eight
thirty-nine forty-one forty-two forty-three
forty-four forty-five forty-six forty-seven
forty-eight forty-nine fifty fifty-one fifty-two
fifty-three fifty-four fifty-five fifty-six fifty-seven
fifty-eight fifty-nine

1 in 50: Independent Level (8.5 K)

One two three four five six seven eight nine ten
eleven twelve thirteen fourteen fifteen sixteen
seventeen eighteen nineteen twenty twenty-one
twenty-two twenty-three twenty-four twenty-five
twenty-six twenty-seven twenty-eight twenty-nine
thirty thirty-one thirty-two thirty-three thirty-four
thirty-five thirty-six thirty-seven thirty-eight
thirty-nine forty forty-one forty-two forty-three
forty-four forty-five forty-six forty-seven
forty-eight forty-nine fifty-one fifty-two
fifty-three fifty-four fifty-five fifty-six fifty-seven
fifty-eight fifty-nine sixty

Environmental Change and Challenge, 4th Ed.

(Dearden & Mitchell, 2012)

- Essay Question:
 - What is the best kind of development for protecting the environment while also promoting economic growth?
- Textbook excerpt
 - Does it contribute to answering the question?
 - Is the argument valid? Why or why not?
 - You only have automatic recall for 2,000 word families.

Environmental Change and Challenge, 4th Ed.

(Dearden & Mitchell, 2012)

Sustainable development is often contrasted with development today. As a result, in some countries and regions, interest has shifted to the concept of sustainable livelihoods, viewed as more realistic and focused. The idea of sustainable livelihoods emphasizes the conditions necessary to ensure that basic human needs (e.g., food, shelter, and health) are satisfied. However, the concept has been criticized by those who view it as anthropocentric. Critics argue that other living organisms or ecosystems may be sacrificed or degraded to meet human needs.

What is the best kind of development?

Environmental Change and Challenge, 4th Ed.

(Dearden & Mitchell, 2012)

Sustainable development is often greeted with skepticism today. As a result, in some countries and regions, interest has shifted to the concept of sustainable livelihoods, viewed as more realistic and focused. The idea of sustainable livelihoods emphasizes the conditions necessary to ensure that basic human needs (e.g., food, shelter) are satisfied. However, the concept has been criticized by those who view it as too anthropocentric. Critics argue that other living creatures or inanimate components of ecosystems may be sacrificed or degraded to meet human needs.

Implication: the more the better

The more words a reader knows, the better those words facilitate comprehension and free up cognitive space for critical engagement with the topic

- The more words students have at their disposal, the better their engagement with a text:
 - Finding, assessing, and choosing sources
 - Reading
 - Taking notes
 - Creating connections
 - Making inferences
 - Evaluating arguments

Key Points: Novice Academic Reading

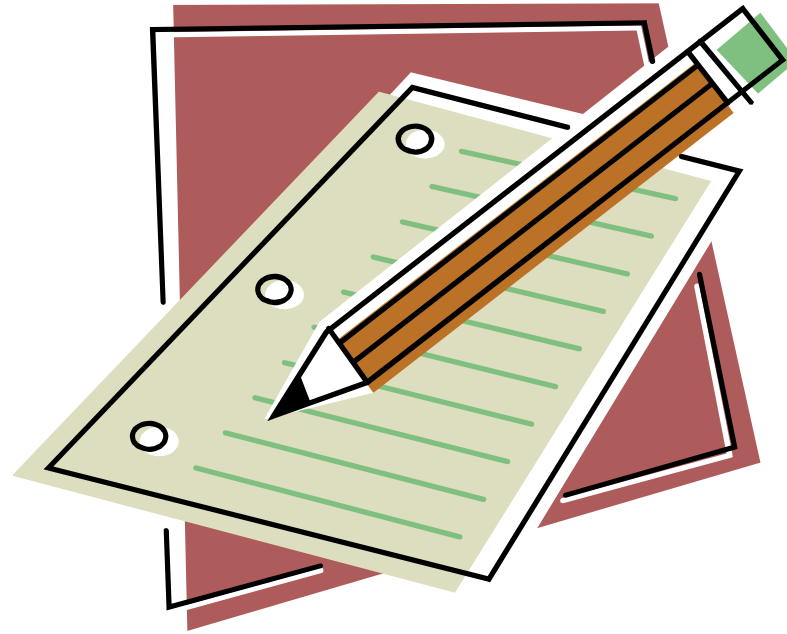
Good instructional level for content areas:

- **4,000 to 5,000** automatized receptive word families

Good independent level for content areas:

- **8,000 to 9,000** automatized receptive word families

Exploring Writing Thresholds



Post-Secondary Studies

With the frequency principle

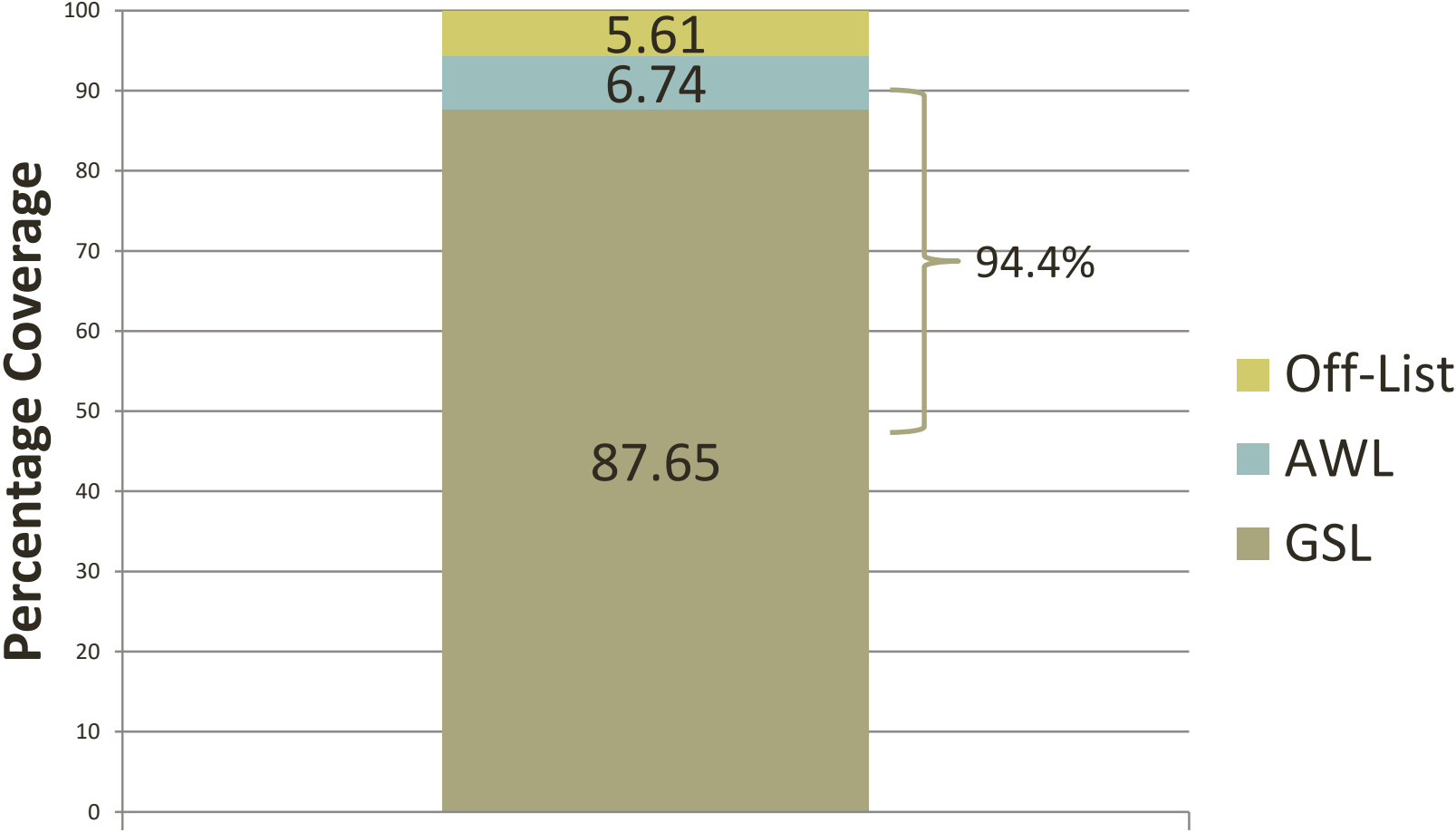
Vocabulary, Writing, Academic Success

- Skilled use of vocabulary leads to improved generation, development, and presentation of ideas.
 - (Raimes, 1983; Raimes, 1985; Grabe, 1985; Engber, 1995; McNamara, Crossley, & McCarthy, 2010; Smith, 2003)
- Vocabulary directly associated with the quality of a written text (Brynildssen, 2000)
- Low rated writing typically accompanied by simple vocabulary (Cobb, 2003; Hinkel, 2003)
- Students demonstrate their knowledge of matter studied through their skilled use of vocabulary in writing. Academic success is dependent on writing and the ability to use vocabulary effectively. (Nation, 2008)

Considered writing demands

- research papers synthesizing info from multiple sources
- Traditional essays
- Laboratory, business, and technical reports
- Reflective Journals
- Annotated Bibliographies
- Chapter summaries
- Website development
- Presentation scripts
- Case studies
- Brochures
- Posters

GSL/AWL Productive Output

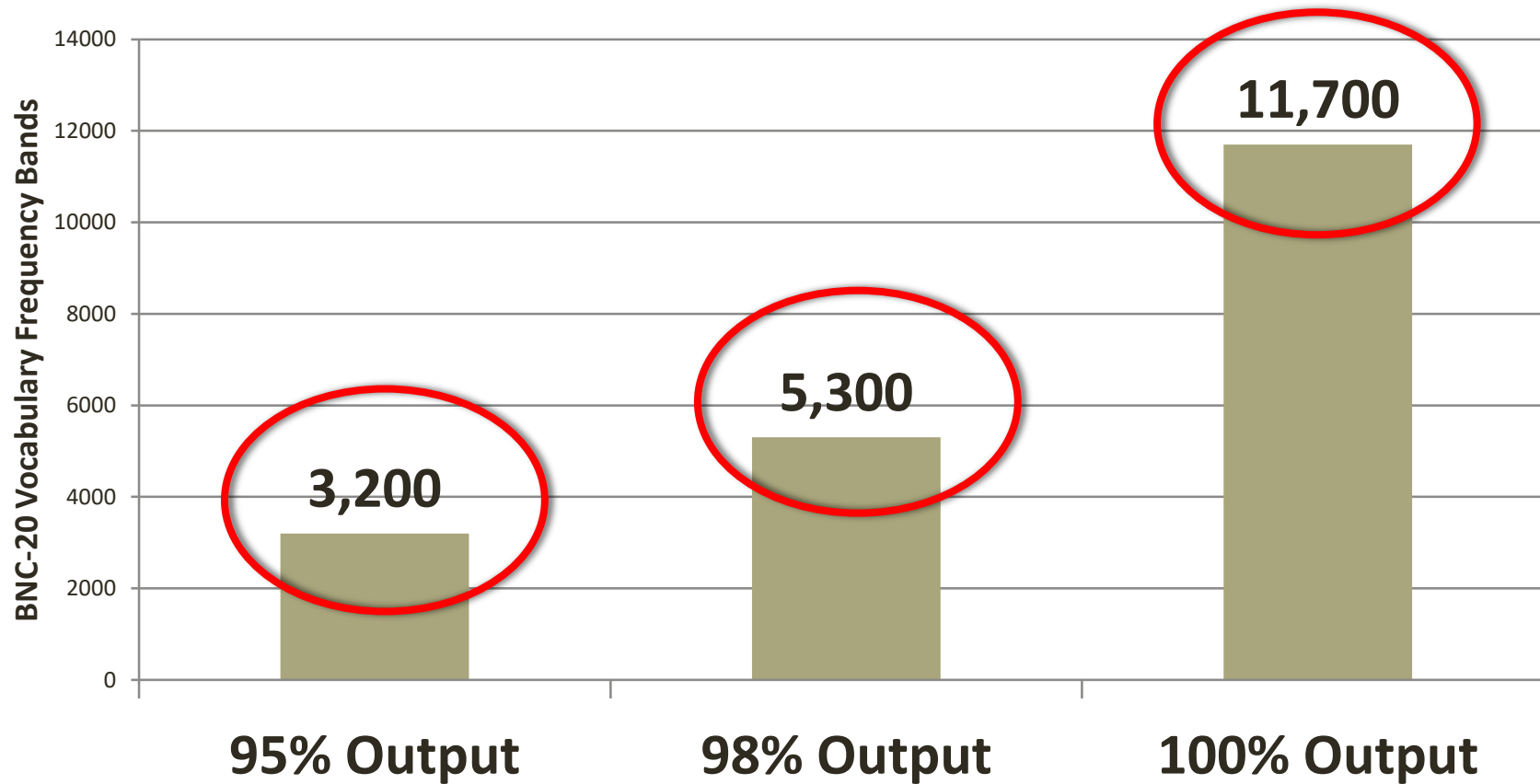


Productive Output

(Douglas, 2013)



Satisfactory Productive Output Thresholds: Lexical Stretch



(Douglas, 2013)

Productive Vocabulary Thresholds: Writing

2,000 Word Families

Stop \approx 1 in 8 times to search for a word (88%)

2,570 Word Families

Stop \approx 1 in 17 times to search for a word (94%)

3,200 Word Families

Stop \approx 1 in 20 times to search for a word (95%)

5,300 Word Families

Stop \approx 1 in 50 times to search for a word (98%)

Product of Inquiry

Student Inquiry Question:

- What is a major challenge facing cities today?

Writing Sample (w/ only 2K)

Major Challenge Facing Cities Today

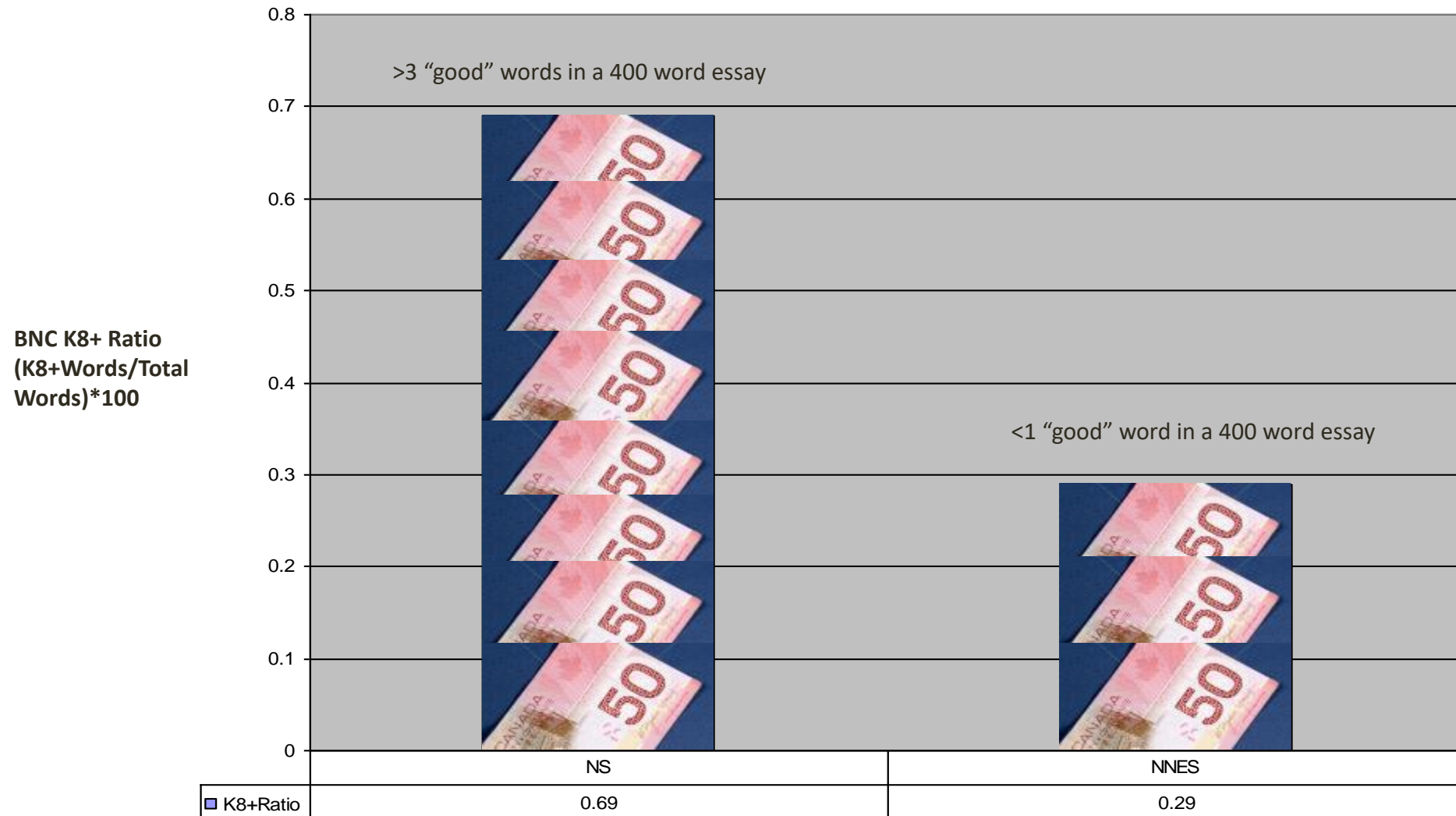
As a city quickly grows outwards, country roads become city streets and roads between cities become busy with a big increase in cars. For as the ever growing city makes new neighbourhoods, there are more people making trips to the city's centre. This puts a lot of use on the existing road system. The street 22X, in the southern end of Calgary, is an excellent example of the use new neighbourhoods place on aging roads. Originally built as a highway south of Calgary, development quickly stretched past the old highway and there are now two new neighbourhoods south of it. However, in the old days there were very few cars in that part of the city so that only a two way road was made. With all the people now using 22X, it slows down. On several of the occasions that I have driven it, I found the cars to hardly move for a while. Now that is not the only road busy with cars; the between city connection of Elbow Drive and Glenmore Trail is a bad dream at rush hour. Clearly, fast growth puts heavy use on the road systems of a city. Finding the means to deal with increased cars is a big problem for the management of a busy city.

Writing Sample (original w/ 2K+ highlighted)

Major Challenge Facing Cities Today

As a city rapidly expands outwards, country roads become urban streets and intercity roads become overwhelmed by the tremendous increase in traffic. For as the ever growing metropolis creates new communities, there are more people making their commute to the city's centre. This puts a strain on the existing road system. The roadway 22X, located at the southern end of Calgary, is an excellent example of the tension new communities place on aging roads. Originally built as a highway south of Calgary, development quickly stretched past the old highway and there are now two new communities south of it. However, historically there has been very little traffic in that area so that only a two lane road was constructed. With all the people now using 22X, it grinds down to a crawl. On several of the occasions that I have driven it, I found the traffic to scarcely move for periods. Now that is not only the road swamped by automobiles; the intercity intersections of Elbow Drive and Glenmore Trail is a nightmare at rush hour. Clearly, rapid growth puts heavy strains on the roadway systems of a city. Finding the means to deal with increased traffic constitutes a major challenge to the management of a bustling metropolis.

Comparing Lexical Profiles: Apt Word Choice



(Douglas, 2010)

Implications

- The more words a student knows, the better those words facilitate expression and free up cognitive space for critical engagement with the topic
- The more words students have at their disposal, the better their engagement with inquiry-based learning
 - Produce learning products
 - Demonstrate awareness of register and genre
 - Communicate ideas with precision
 - Share new knowledge
 - Self-evaluate learning
 - Revise and edit work

Key Points: Novice Academic Writing

Good instructional level for content areas:

- **3,000 to 4,000** automatized productive word families

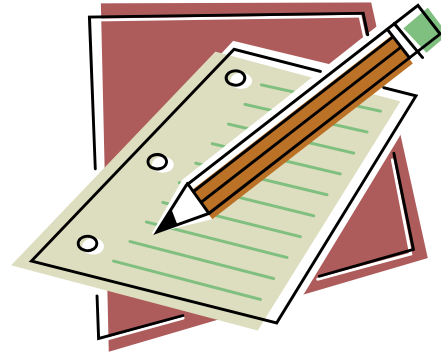
Good independent level for content areas:

- **5,000 to 6,000** automatized productive word families

(Douglas, 2013)



Bringing it together



Bringing it together

| Word Families | Reading | Writing |
|---------------|---------------------|-------------------|
| 1,000 | | |
| 2,000 | 76% ¹ | 88% ⁴ |
| 2,570 | 86% ¹ | 94% ⁴ |
| 3,000 | | 95% ⁴ |
| 4,000 | | |
| 4,000-5,000 | 95% ² | |
| 5,000 | | 98% ⁴ |
| 6,000-7,000 | | |
| 8,000-9,000 | 98% ^{2 3} | |
| 11,000 | | |
| 12,000 | | 100% ⁴ |
| 14,000 | 100% ^{est} | |

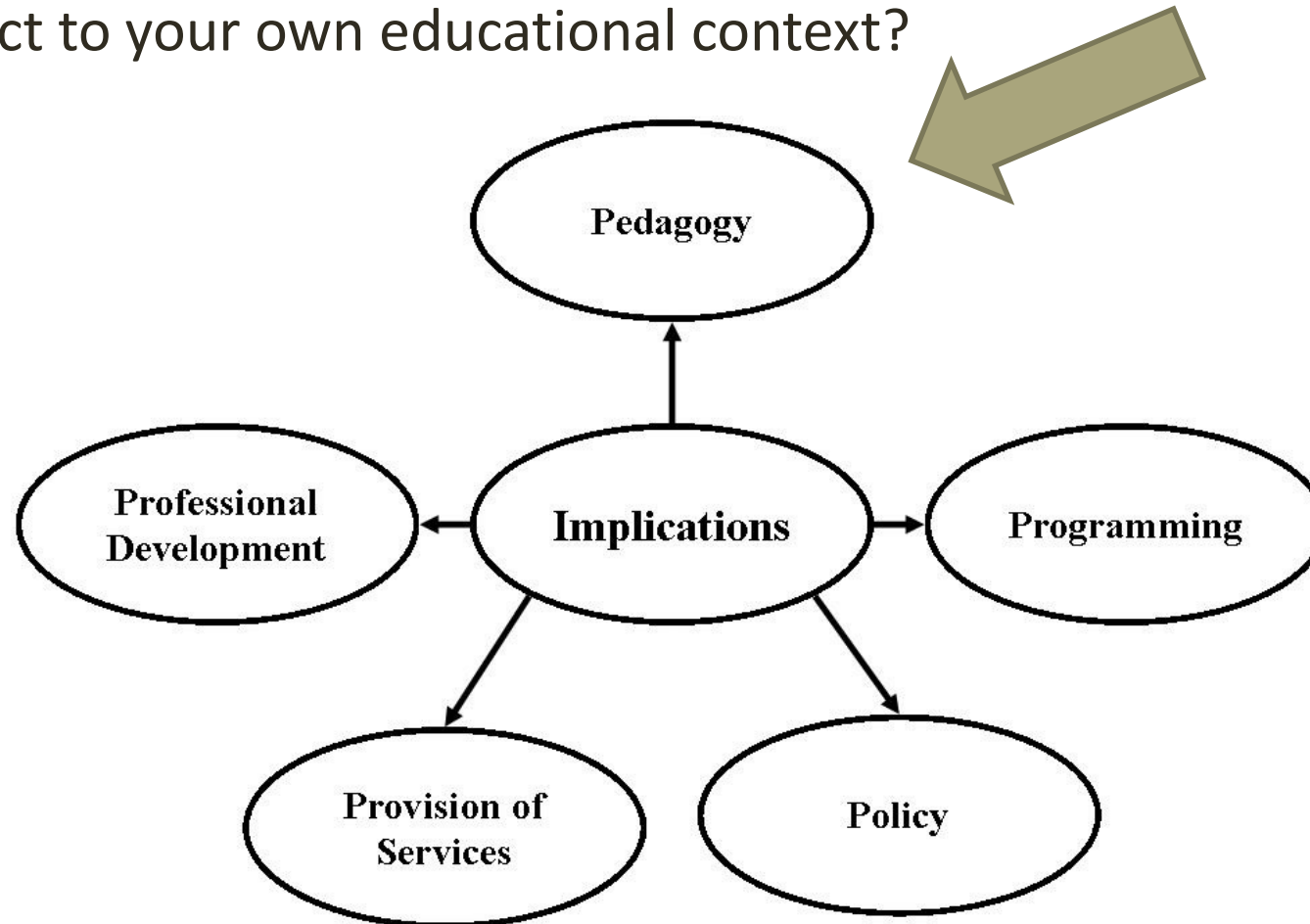
Vocabulary is one thread of many...

Vocabulary is an underlying variable of language proficiency

- Other things may be at play:
 - Syntax
 - Context
 - Background knowledge
 - Culture
 - Individual learner characteristics
 - Multi-word units
 - Imagery

Implications for teaching and learning

How do the proposed lexical thresholds for novice academic reading and writing connect to your own educational context?



20 Principles for Effective Vocabulary Teaching

What are some possible elements of an effective vocabulary instructional strategy or activity?

1. Effective vocabulary instruction ...

... activates background knowledge.

2. Effective vocabulary instruction ...

... is relevant to learners.

3. Effective vocabulary instruction ...

... is context embedded.

4. Effective vocabulary instruction ...

... promotes comprehensible input ($i+1$).

5. Effective vocabulary instruction ...

... maintains low affective filters.

6. Effective vocabulary instruction ...

... involves meaningful reading and listening input.

7. Effective vocabulary instruction ...

... encourages communicative writing and speaking output.

8. Effective vocabulary instruction ...

... includes multiple opportunities for interaction.

9. Effective vocabulary instruction ...

... uses multi-modal input and output.

10. Effective vocabulary instruction ...

... takes advantage of varied and interesting activities.

11. Effective vocabulary instruction ...

... is cognitively engaging.

12. Effective vocabulary instruction ...

... primes students to notice future encounters.

13. Effective vocabulary instruction ...

... uses both pre- and post- encounter teaching.

14. Effective vocabulary instruction ...

... develops strategies and learner autonomy.

15. Effective vocabulary instruction ...

... affords access to learner dictionaries and first language resources.

16. Effective vocabulary instruction ...

... stimulates automaticity and fluency.

17. Effective vocabulary instruction ...

... balances inductive learning with direct and explicit instruction.

18. Effective vocabulary instruction ...

... recycles vocabulary for multiple encounters.

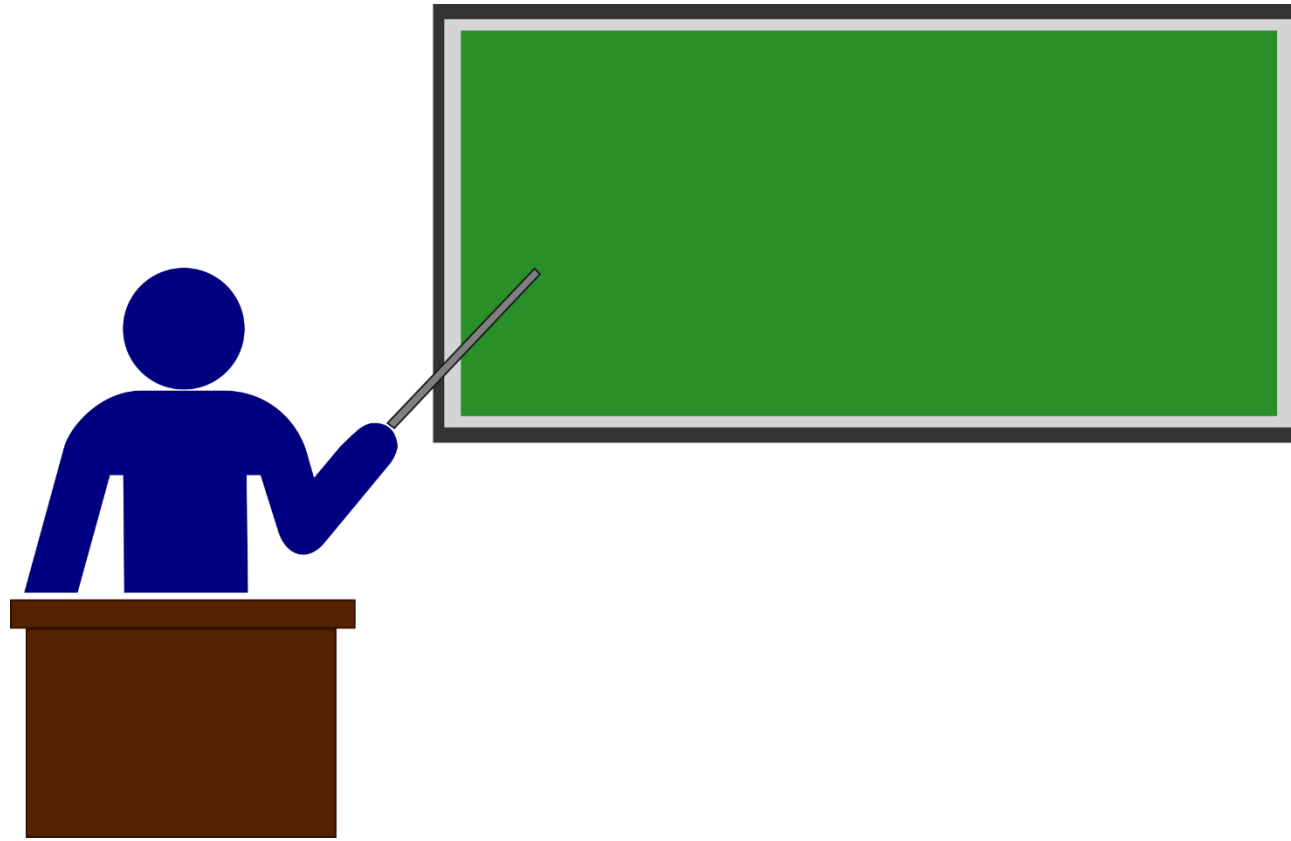
19. Effective vocabulary instruction ...

... spirals concepts for encounters beyond
simple definitions.

20. Effective vocabulary instruction ...

... includes learner accountability.

10 Vocabulary Teaching Ideas



1. Cloze Activities

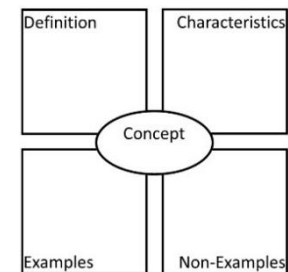
- Use vocabulary cloze activities to review key passages from a reading.
- One way to create a vocabulary cloze activity is to blank out target vocabulary in the reading passage, and have students work to fill in the blanks with information either from a word bank (less challenging) or from memory (more challenging).
- Vocabulary cloze activities can also be used to reinforce new vocabulary learning after a lecture, reading, or video.
- These activities have the double benefit of getting students to think about language (how words fit into the blanks) as well as content (which words fit into the blanks).

2. Dictogloss

- Give students a list of target vocabulary from a reading passage.
- Then read the passage aloud twice to students.
- The first time, students listen and take notes of the main ideas.
- The second time, students listen and add in the supporting details for the main ideas.
- Next, they work in groups to try and recreate the passage as completely as possible.
- Students should use the vocabulary provided before the activity began.
- Vocabulary Dictogloss has the benefit of getting students to think about content (what ideas they should include in their writing) and language (how they should put down those ideas and incorporate new vocabulary).

3. Frayer Models

- A Frayer Model is a diagram with four parts.
- It is used to help students uncover the core definition of a key vocabulary item.
- The vocabulary item is in the middle of the chart, with essential characteristics, examples, non-examples, and the definition in the corners.
- Students work together to complete the chart, and then develop a definition.
- Frayer models can be great warmers, reviews for a previous lesson, or closers that demonstrate learning.
- They are useful when there can be multiple interpretations of a concept's meaning.



4. Frequency-based Previews

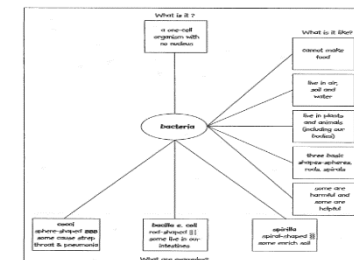
- Extract what you think are important vocabulary terms from an upcoming lesson and introduce them based on how frequently people use them.
- You can focus on high frequency words first that students will encounter more often.
- These words might be from a list of 2,000 high frequency word families in English (Tier 1 Words), or general academic words (Tier 2 Words) that cross disciplines (such as words in the Academic Word List).
- Next, you can focus on lower frequency words that are discipline specific and key for content understanding (such as technical terminology).
- Tools such as the vocabulary profilers on www.lex tutor.ca can help you determine which words to teach based on their frequency.

5. Vocabulary Splashes

- Before a lesson, you can show students from 12 to 20 important vocabulary words that they will encounter.
- You can do this on the board or with PowerPoint, etc.
- Ask students to look over the words and work in pairs to make a list of five words they are unfamiliar with in connection to the lesson topic.
- Once each pair has five words, you can elicit five words from the class as a whole.
- Then you can explain those five words briefly before beginning the lesson.
- This will help to heighten students' awareness of the new words they will be encountering during the lesson as well as activate their background knowledge.

6. Concept Definition Maps (Reiss, 2012)

- Students make a graphic organizer with the vocabulary target in the middle and three questions around the outside:
 - What is it?
 - What is it like?
 - What are some examples?
- Students then work together to answer the questions and complete the graphic.
- They might use their textbooks, dictionaries, and the internet to help them find the answers to their questions



7. Student Glossaries

- Have students keep their own personal glossaries of key terms and vocabulary during the course.
- Students can add terms to their glossaries during class or while they are studying.
- Students can organize their glossaries either alphabetically or by topic.
- In addition to English definitions, students might include parts of speech, pronunciation guides, synonyms, antonyms, collocations, illustrations, translations, and sample sentences.
- With personal glossaries, students become lexicographers, creating their own personal dictionaries for later reference.
- Give students regular time to work on their glossaries so they become a habit.

8. Word Walls

- Have a wall in the classroom where key vocabulary related to the course content is posted for all students to see.
- Students can add to the wall when they find a particularly useful term or word they are curious about.
- Word walls can also make a useful exit ticket from class.
- As students leave, they can put up new, challenging, or interesting words onto the word wall.
- The most common words can be gathered together for later vocabulary practice.
- If you don't have access to a physical classroom wall, you can explore creating a virtual wall online.

9. Exit Tickets

- At the end of class, give each student an index card.
- Students write their names on the cards along with a word from that day's lesson that they found challenging.
- As they leave, students hand in their index cards.
- The next day, redistribute the cards to different students.
- Students can look up the words on the cards, and then provide a definition, draw a picture, make a sample sentence or give a translation on the back.
- Students return the cards to the original owners.
- By the end of the semester, students have a full set of index cards they can use as flash cards to review challenging vocabulary.

10. Jig-Saws

- Jig-saw activities break a reading down into parts.
- Groups of students each read one section of a text and identify key vocabulary.
- Then they work together to solidify their understanding of that section and its key vocabulary.
- Next, the original groups break up and reform with new partners.
- Each group now contains students who have read different parts of the text.
- They tell each other about their sections of the text and explain two or three key words from their particular sections.
- Once students have an understanding of the entire text, they go back to their original groups to compare what they have learned and make note of new words.

Other Ideas?



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Conclusions ...

- An EAL curriculum should include a lexical scope and sequence across receptive and productive skill domains
- Realistic vocabulary goals and practical guidelines for reaching 95% to 98% coverage are an important element of the curriculum
- Focusing on automatization below the thresholds releases cognitive space to engage with textual demands and tap into common underlying proficiency

More Conclusions ...

- Total output of proficient users neither necessary nor realistic
- Avoid receptive desires for productive tasks
- Inform assessment and evaluation
- Inform materials development with suitable lexical targets and a systematic focus

Essential Question of the Day

What lexical thresholds support novice post-secondary reading and writing, and how do we get there?

| | | | |
|---------------------------------------|-----------------------------|--------------------|--------------------------------|
| Counting Vocabulary | Lexical Frequency Principle | The First 2,000 | Stages of Language Acquisition |
| Reading Thresholds | | Writing Thresholds | |
| Principles for Vocabulary Instruction | | Sample Activities | |

Thank you !

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