

Technology and Language Learning

Online Tools for Reading Skills and Vocabulary Development

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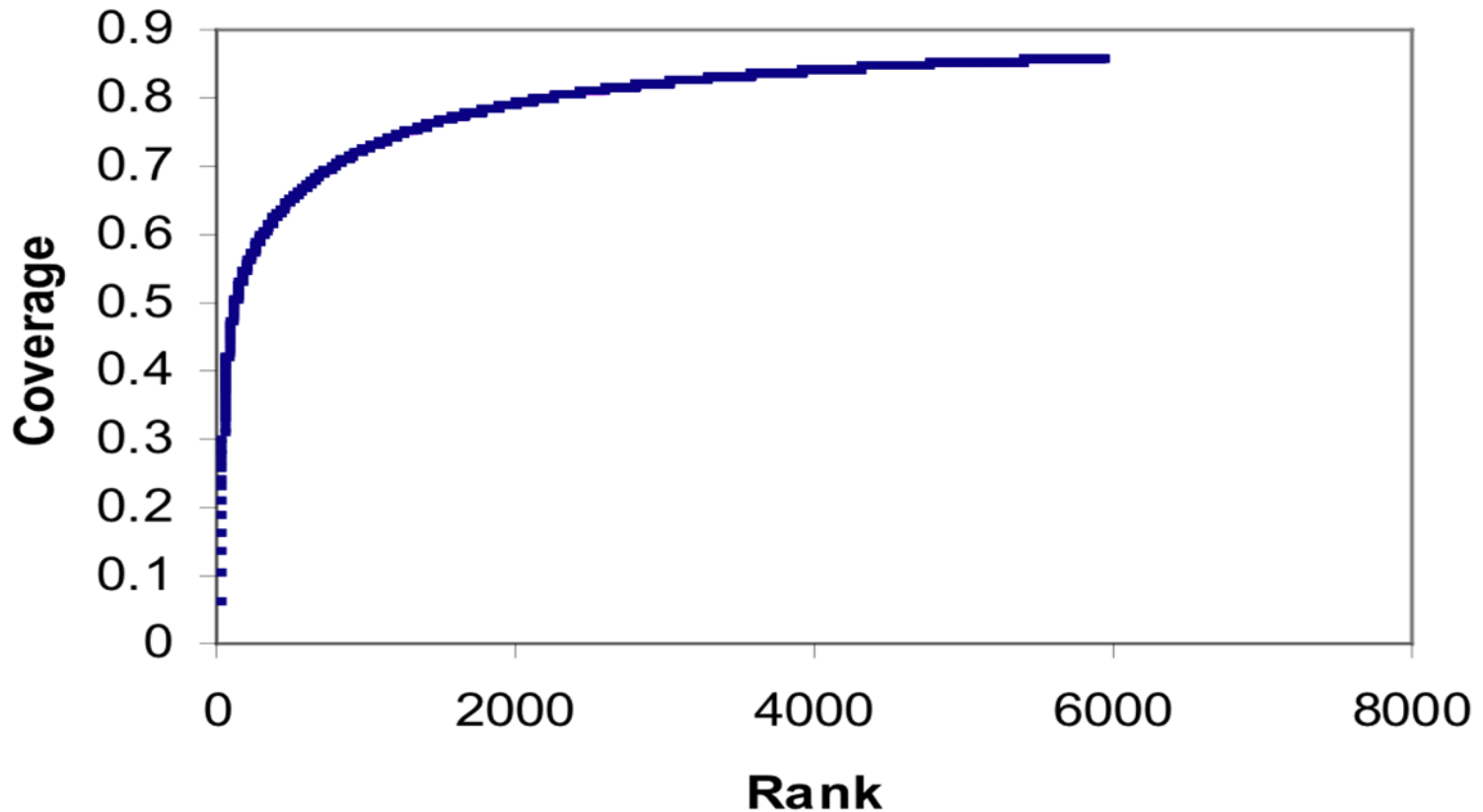
Outline of Presentation

1. Basic “facts” regarding vocabulary research
 2. Introduction to problems faced by Japanese EFL learners related to vocabulary and reading
 3. Introduction to a variety of free online vocabulary & reading development software
-

The Importance of “Coverage”

<u>Words</u>	<u>% known</u>	<u># known</u>	<u>Researcher</u>
1	7%	97/100	West(53), Nation(90)
10	25%	3/4	West(53), Nation(90)
100	50%	1/2	West(53), Nation(90),
1000	75%	1/4	West(53), Engles(68)
2000	85%	1/7	West(53), Nation(90)
4200	95%	1/20	Culligan (2008)
8000	98%	1/50	Laufer (92), Coady(93)
350,000	100%	100/100	Oxford English Dictionary

Coverage within the BNC for high frequency words (Leech, Rayson, & Wilson, 2001)



Problem 1:

EFL learners don't know enough
high frequency words...

How many words do L2 learners know?

Minimum **4200** words needed for independent learning

Country	Vocab. Size	Hours of Instruction	Reference
Japan (University)	2000-2300	800-1200	Shillaw (95), Barrow (99)
China (English Majors)	4000	1800-2400	Laufer (99)
Indonesia (University)	1220	900	Nurweni & Read (99)
Oman (University)	2000	1350	Hort et al (98)
Israel (HS graduates)	3500	1500	Laufer (98)
France (HS students)	1000	400	Arnaud et al (85)
Greece (age 15, HS)	1680	660	Milton & Meara (98)
Germany (age 15, HS)	1200	400	Milton & Meara (98)

75% Coverage

Provided by 1000 high frequency words

16 missing words

Forestry

If _____ planting rates are _____ with planting _____
_____ in each _____ and the forests _____ at
the earliest opportunity, the _____ wood supplies could
further increase to about 36 million _____ meters _____
in the _____ 2001-2015. The additional _____ wood
supply should greatly _____, even if
much is used for _____ production.

85% Coverage

Provided by 2000 high frequency words

9 missing words

Forestry

If _____ planting rates are maintained with planting targets satisfied in each _____ period and the forests milled at the earliest opportunity, the _____ wood supplies could further increase to about 36 million _____ meters _____ in the period 2001-2015. The additional _____ wood supply should greatly exceed _____ _____, even if much is used for _____ production.

95% Coverage

Provided by 4200 high frequency words

1 missing word

Forestry

If current planting rates are maintained with planting targets satisfied in each annual period and the forests milled at the earliest opportunity, the available wood supplies could further increase to about 36 million _____* meters annually in the period 2001-2015. The additional available wood supply should greatly exceed domestic requirements, even if much is used for energy production.

Vocabulary Thresholds:

- Below 80%, reading comprehension is almost impossible (Hu & Nation, 2001)
- 95% coverage is the point at which learners can read without the help of dictionaries (Laufer, 1989)

Problem 2:

Reading materials in Japan
are too difficult...

Vocabulary & Readability:

How do Japanese schools measure up?

Junior High:

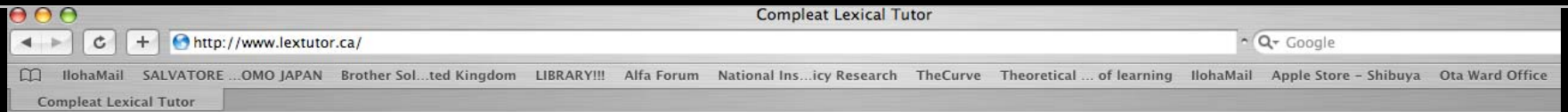
- Teaches first 1000 words fairly well
- Readability of texts seems good - short passages, easy vocabulary, lots of pictures to support texts

Senior High:

- Focus changes dramatically to teaching of low frequency words
 - Many, many words from 1000-2000 are never taught...
 - Readability of texts is actually MORE difficult than unsimplified native speaker texts!
-

The Compleat Lexical Tutor

www.lextutor.ca



Welcome to

The Compleat Lexical Tutor (v.4.5 03/06)

QUICK LOOK-UP

Eng: Conc Dico Fr: Conc Dico >>

For data-driven language learning on the web [BookBox] [Read a site review or comparison] AAAA! 07 - Getting the word out

TUTORIAL ?

- [Test](#)
your lexis Eng|Fr
NEW! 2 new tests!
- Resource-linked
[Word Lists](#)
Eng [v.1] | Fr
- [Group Lex](#) Eng|Fr
Collab, Extract, Quiz NEW! (v.6)
- Read
With Resources
Eng | Fr
- Check Errors
against corpus data
Eng | Fr

RESEARCH

- [Range](#) Eng|Fr
NEW! Word distribution
- [Vocabprofile](#) Eng|Fr
NEW! 20kBNC, 31 Dec 06
- [Concordancers](#)
Search a corpus
- [Phrase Extraktor](#)
Eng | Fr
- [RT Builder](#)
Time experiments
- [Vocab Stats](#)
Corr, chi2, t-test
- Why & wherefore
[Research Base](#)

TEACHERS

- [Text Tools](#)
Strip, List, Join...
RaNdOm NuMbErS!
- [FreqList Builders](#)
- [Tex_Lex](#)
[_Compare](#)
Compare texts, lists
NEW! Improved list subtraction
- [Random Word Generator](#)
- [WordLists](#)
Eng | Fr
- [BUILDERS!](#)
- [Text-to-Speech](#)
Hear your texts
Eng French Span
- [Cloze](#)
3 types, Eng|Fr
- [Hypertext](#)
Eng|Fr|Sp
- [MultiConc](#)
NEW! Cleaner contexts, May 07
- [Dictator](#)
Practice spelling



Vocab Profile: Online Vocabulary Analysis Tool

www.lextutor.ca

[Home](#) > [VocabProfilers](#) > [English](#)

Web VP v 2.5 Classic (300% speed-up on Jan 6, 2006)

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](#) | [FRENCH](#) | [X²](#) | [AWL texts](#) > [APA](#), [StatCan](#) |

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.

SIZE LIMITS: Web input is normally limited to 30,000 characters – use *UPLOAD* method below for larger files (up to 1000 kb as Dec 2004; must be ~.txt; send in straight from your own hard drive). Text is NOT stored on Web VP's server

Words to re-categorize as common words (proper nouns, etc.) **<Changed from drop to recat. Sept 06** **** One-word VP**

Samples: [Isogram](#) | [Lit \(1\) \(2\)](#) | [Science \(1\) \(2\)](#) | [News \(1\) \(2\)](#) | [Speech \(1\) \(2\)](#) | [Rex M.](#)

Input method B For larger text files

1. no file selected

own drive for file; and then 2.

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

Typical Graded Reader Results (1200 word level)

85% expected for 2000 words

WEB VP OUTPUT FOR FILE: Untitled

Words recategorized by user as 1k Items (proper nouns etc): NONE (total 0 tokens)

Note: 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 said constituents; and in the 1k sub-analysis content + function words may sum to less than total (depending on user treatment of proper nouns and program decision to class numbers as 1k although not contained in 1k list).

	Families	Types	Tokens	Percent		
K1 Words (1 to 1000):	52	60	100	87.72%	Words in text (tokens):	114
Function:	...	...	(56)	(49.12%)	Different words (types):	69
Content:	...	...	(44)	(38.60%)	Type-token ratio:	0.61
> Anglo-Sax	...	...	(27)	(23.68%)	Tokens per type:	1.65
=Not Greco-Lat/Fr Cog:	...	...			Lex density (content words/total)	0.51
K2 Words (1001 to 2000):	4	4	6	5.26%	<hr/>	
> Anglo-Sax:	...	...			<i>Pertaining to onlist only</i>	
1k+2k					Tokens:	106
AWL Words (academic)					Types:	64
Off-List Words:					Families:	56
					Tokens per family:	1.89
					Types per family:	1.14
					Anglo-Sax Index:	82.08%
					(A-Sax tokens + functors / onlist tokens)	
					Greco-Lat/Fr-Cognate Index: (Inverse of above)	17.92%

98.9%

For easy editing as MS Word table - [Edit/print-friendly table](#)

Page menu: [Tokens](#) [Types](#) [Families](#)

Integral text: no thank you i do not want any ice just water please thank you he was your friend k said yes a very good friend too the colonel said putting his head between his hands dead michael gray dead i can not believe it it is sad k said but it is true tell me about him we were in the army together that was twenty five years ago then michael left the army married elizabeth and went into cavell and company that is lady elizabeth's family business she was a cavell i left the army five years ago i am not in the army dead michael gray dead i can not believe it

Typical Yomiuri Newspaper Article

85% expected for 2000 words

VOCABPROFILE ENGLISH OUTPUT

http://www.lexutor.ca/vp/eng/output.pl? cobb compleat

Vocabulary B...ary Profiler Alfaowner.com SCF SEIJO TIRE on the web!! VTrain Spaced repe...ncyclopedia Monkasho Jobs Page Password Lexile Lexxica General Deto...orld Online Daulton-List... (I-TESL-J) digg USA TAXES

Home > VocabProfilers > English (Alt-arrow-left to preserve settings) > Output

300% SPEED UP ON JAN 6, 2006

WEB VP OUTPUT FOR FILE: Untitled

Words recategorized by user as 1k items (proper nouns etc): NONE (total 0 tokens)

Note: 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 ration is calculated using said constituents; and in the 1k sub-analysis content + function words may sum to less than total (depending on user treatment of proper nouns and program decision to class numbers as 1k although not contained in 1k list).

	Families	Types	Tokens	Percent
K1 Words (1 to 1000):	78	85	119	76.77%
Function:	...	...	(74)	(47.74%)
Content:	...	...	(45)	(29.03%)
> Anglo-Sax				
=Not Greco-Lat/Fr Cog:	...	...	(29)	(18.71%)
K2 Words (1001 to 2000):	12			
> Anglo-Sax:				
1k+2k				

AWL Words (academic)

Off-List Words:

87.4%

Words in text (tokens):	155
Different words (types):	119
Type-token ratio:	0.77
Tokens per type:	1.30
Lex density (content words/total)	0.52
<i>Pertaining to onlist only</i>	
Tokens:	133
Types:	99
Families:	92
Tokens per family:	1.45
Types per family:	1.08
Anglo-Sax Index:	81.95%
(A-Sax tokens + functors / onlist tokens)	
Greco-Lat/Fr-Cognate Index: (Inverse of above)	18.05%

For easy editing as MS Word table - [Edit/print-friendly table](#)

Page menu: [Tokens](#) [Types](#) [Families](#)

Integral text: reasons to leave madonna alone spare some sympathy for madonna not a lot mind you celebrities are better cushioned against life slings and arrows than the rest of us and the flamboyant u s turned british pop star is a super mega celebrity still the pillorying she has suffered in recent weeks is unreasonable anyone would think the woman had incorporated into her latest concert tour a routine in which she sings while hanging on a mirrored cross wearing a crown of thorns oh wait she did do that so there actually plenty to pillory but we will get back to that that is not what the true blue madonna haters are up in arms about just now the thing that has really focused their attention is her frivolous selfish wish to adopt a number month old motherless malawian boy whose dirt poor father had turned him over to an orphanage how shocking is that

Harry Potter Chapter 2

85% expected for 2000 words

VOCABPROFILE ENGLISH OUTPUT

http://www.lex Tutor.ca/vp/eng/output.pl? cobb compleat

Vocabulary B...ary Profiler Alfaowner.com SCF SEIJOY TIRE on the web!! VTrain Spaced repe...ncyclopedia Monkasho Jobs Page Password Lexile Lexica General Deto...orld Online Daulton-List... (I--TESL--J) digg USA TAXES

WEB VP OUTPUT FOR FILE: Untitled

Words recategorized by user as 1k items (proper nouns etc): NONE (total 1 tokens)

Note: 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 said constituents; and in the 1k sub-analysis content + function words may sum to less than total (depending on user treatment of proper nouns and program decision to class numbers as 1k although not contained in 1k list).

	Families	Types	Tokens	Percent
K1 Words (1 to 1000):	79	91	150	78.53%
Function:	...	...	(90)	(47.12%)
Content:	...	...	(60)	(31.41%)
> Anglo-Sax				
=Not Greco-Lat/Fr Cog: ...				
K2 Words (1001 to 2000):	10	10	10	5.14%
> Anglo-Sax:				
1k+2k				
AWL Words (academic):				
Off-List Words:	?			
	92+?			

Words in text (tokens):	191
Different words (types):	122
Type-token ratio:	0.64
Tokens per type:	1.57
Lex density (content words/total)	0.53

Pertaining to onlist only

Tokens:	164
Types:	104
Families:	92
Tokens per family:	1.78
Types per family:	1.13
Anglo-Sax Index:	85.37%
(A-Sax tokens + functors / onlist tokens)	
Greco-Lat/Fr-Cognate Index: (Inverse of above)	14.63%

For easy editing as MS Word table - [Edit/print-friendly table](#)

Page menu: [Tokens](#) [Types](#) [Families](#)

Integral text: chapter two harry went down to breakfast the next morning to find the three dursleys already sitting around the kitchen table they were watching a brand new television a welcome home for the summer present for dudley who had been complaining loudly about the long walk between the fridge and the television in the living room dudley had spent most of the summer in the kitchen his piggy little eyes fixed on the screen and his five chins wobbling as he ate continually harry sat down between dudley and uncle vernon a large beefy man with very little neck and a lot of mustache far from wishing harry a happy birthday none of the dursleys made any sign that they had noticed harry enter the room but harry was far too used to this to care he helped himself to a piece of toast and then looked up at the reporter on the television who was halfway through a report on an escaped convict the public is warned that black is armed and extremely dangerous a special hotline has been set up and any sighting of black should be reported immediately

Typical Time Magazine Article

85% expected for 2000 words

WEB VP OUTPUT FOR FILE: Untitled

Words recategorized by user as 1k items (proper nouns etc): NONE (total 0 tokens)

Note: 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 ration is calculated using said constituents; and in the 1k sub-analysis content + function words may sum to less than total (depending on user treatment of proper nouns and program decision to class numbers as 1k although not contained in 1k list).

	Families	Types	Tokens	Percent		
K1 Words (1 to 1000):	57	60	91	75.83%	Words in text (tokens):	120
Function:	...	...	(54)	(45.00%)	Different words (types):	86
Content:	...	...	(37)	(30.83%)	Type-token ratio:	0.72
> Anglo-Sax	...	...	(14)	(11.67%)	Tokens per type:	1.40
=Not Greco-Lat/Fr Cog:	...	...			Lex density (content words/total)	0.55
K2 Words (1001 to 2000):	4				<hr/>	
> Anglo-Sax:					<i>Pertaining to onlist only</i>	
1k+2k					Tokens:	100
AWL Words (academic)					Types:	69
Off-List Words:					Families:	66
					Tokens per family:	1.52
					Types per family:	1.05
					Anglo-Sax Index:	71.00%
					(A-Sax tokens + functors / onlist tokens)	
					Greco-Lat/Fr-Cognate Index: (Inverse of above)	29.00%

80.9%

For easy editing as MS Word table - [Edit/print-friendly table](#)

Page menu: [Tokens](#) [Types](#) [Families](#)

Integral text: the postponement of the first session of a high stakes summit between president bush and iraq prime minister nuri al maliki wednesday night in jordan may indeed be as officials on both sides took pains to stress simply a matter of logistics but reports on the outlook that each man was going to bring to the table suggests that the two may be on a collision course the meeting was touted as a crisis summit designed to set a new course for tackling iraq mounting violence civil war or whatever one chooses to call it the salient point is that iraq has spun so dangerously out of control that existing policies appear to offer no way out of the mayhem

Japanese High School Textbook (Spectrum Unit 16)

85% expected for 2000 words

WEB VP OUTPUT FOR FILE: Untitled

Words reclassified by user as 1k items (proper nouns etc): NONE (total 0 tokens)

Note: 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 ration is calculated using said constituents; and in the 1k sub-analysis content + function words may sum to less than total (depending on user treatment of proper nouns and program decision to class numbers as 1k although not contained in 1k list).

	Families	Types	Tokens	Percent		
K1 Words (1 to 1000):	47	55	100	76.34%	Words in text (tokens): 131	
Function:	...	...	(71)	(54.20%)	Different words (types): 81	
Content:	...	...	(29)	(22.14%)	Type-token ratio: 0.62	
> Anglo-Sax	...	...	(15)	(11.45%)	Tokens per type: 1.62	
=Not Greco-Lat/Fr Cog:	...	...			Lex density (content words/total) 0.46	
K2 Words (1001 to 2000):	2	2	2	1.52%	<hr/>	
> Anglo-Sax	...	...			<i>Pertaining to onlist only</i>	
1k+2k					Tokens:	116
AWL Words (acad)					Types:	68
Off-List Words:					Families:	60
					Tokens per family:	1.93
					Types per family:	1.13
					Anglo-Sax Index:	75.86%
					(A-Sax tokens + functors / onlist tokens)	
					Greco-Lat/Fr-Cognate Index: (Inverse of above)	24.14%

76.8%

For easy editing as MS Word table - [Edit/print-friendly table](#)

Page menu: [Tokens](#) [Types](#) [Families](#)

Integral text: spectrum unit number to put it concisely walking is an inherent biological function of the human species not so language it is true that in a certain sense the individual is predestined to talk but that is due entirely to the circumstance he is born in and the lap of a societal situations that are certain to lead him to its traditions eliminate society and it is justified to reason that he will learn to walk if he survives at all or again remove the newborn individual from the societal environment into which he has come and transplant him to an utterly alien one he could possibly develop the skill of walking in this novel environment but his speech will be utterly at variance with the speech of his native environment

Summary of Vocab-Profile Results for Various Texts

Type of Text	% Coverage for 2000 High Frequency Words
Native Speaker Texts	85%
Graded Reader (1200 words)	99%
Yomiuri Newspaper	87%
Harry Potter	94%
Time Magazine	81%
Japanese HS textbook	77%

Are Japanese students **reading** the right vocabulary? (Browne, 1996, 1998)

Text	Coverage from 2000 High Frequency Words
Spectrum	71%
Milestone	78%
Unicorn	79%
Unsimplified Native Texts	85%

Are universities **testing** the right vocabulary?

(Kikuchi, 2006, Browne & Kikuchi, 2008)

Text of Entrance Examinations for:	% Coverage from 2000 High Frequency Words
Keio Univ.	69%
Sophia Univ.	72%
Waseda Univ.	72%
Kyoto Univ.	77%
Nagoya Univ.	68%
Tokyo Univ.	80%

Examples of low frequency words found in high school textbooks:

- anemone
 - hearth
 - syncopate
 - cockcrow
 - neigh
 - insularism
 - cataclysm
 - seedle
 - prodigious
 - lappilus
 - whin
 - pitchblende
 - mazurka
 - polonaise
-

Solution Number One:

Find out which high frequency words learners don't know and teach them

Nation's Vocabulary Levels Test (Nation, 1990)

- Estimates vocabulary size through “random” sampling of 36 words per word band (1000 ~5000 words)
- Doesn't make predictions about specific words known...
- Online version can be found at:

www.lex tutor.ca

Vocabulary Levels Test (Recognition version)

2000 level

- | | |
|----------------|---|
| 1. original | |
| 2. private | <input type="checkbox"/> complete |
| 3. royal | <input type="checkbox"/> first |
| 4. slow | <input type="checkbox"/> not public |
| 5. sorry | |
| 6. total | |
| | |
| 1. blame | |
| 2. hide | <input type="checkbox"/> keep away from sight |
| 3. hit | <input type="checkbox"/> have a bad effect on something |
| 4. invite | <input type="checkbox"/> ask |
| 5. pour | |
| 6. spoil | |
| | |
| 1. basket | |
| 2. crop | <input type="checkbox"/> money paid regularly for doing a job |
| 3. flesh | <input type="checkbox"/> heat |
| 4. salary | <input type="checkbox"/> meat |
| 5. temperature | |
| 6. thread | |

3000 Level

- | | |
|-------------------|--|
| 1. administration | |
| 2. angel | <input type="checkbox"/> managing business and affairs |
| 3. front | <input type="checkbox"/> spirit who serves God |
| 4. herd | <input type="checkbox"/> group of animals |
| 5. mate | |
| 6. pond | |

Lexical Decision Task

(Meara, 1992)

Do you know this word?

time

Lexical Decision Task

(Meara, 1992)

Do you know this word?

ghart

V-Check online vocabulary test

www.lexica.com

Available June 2008

- Identifies both size of vocabulary and specific words known
- Uses IRT to identify each word item's statistical difficulty
- A patented Computer Aided Test using Lexical Decision Tasks, IRT, and Signal Detection Theory

V-Check answers the questions:

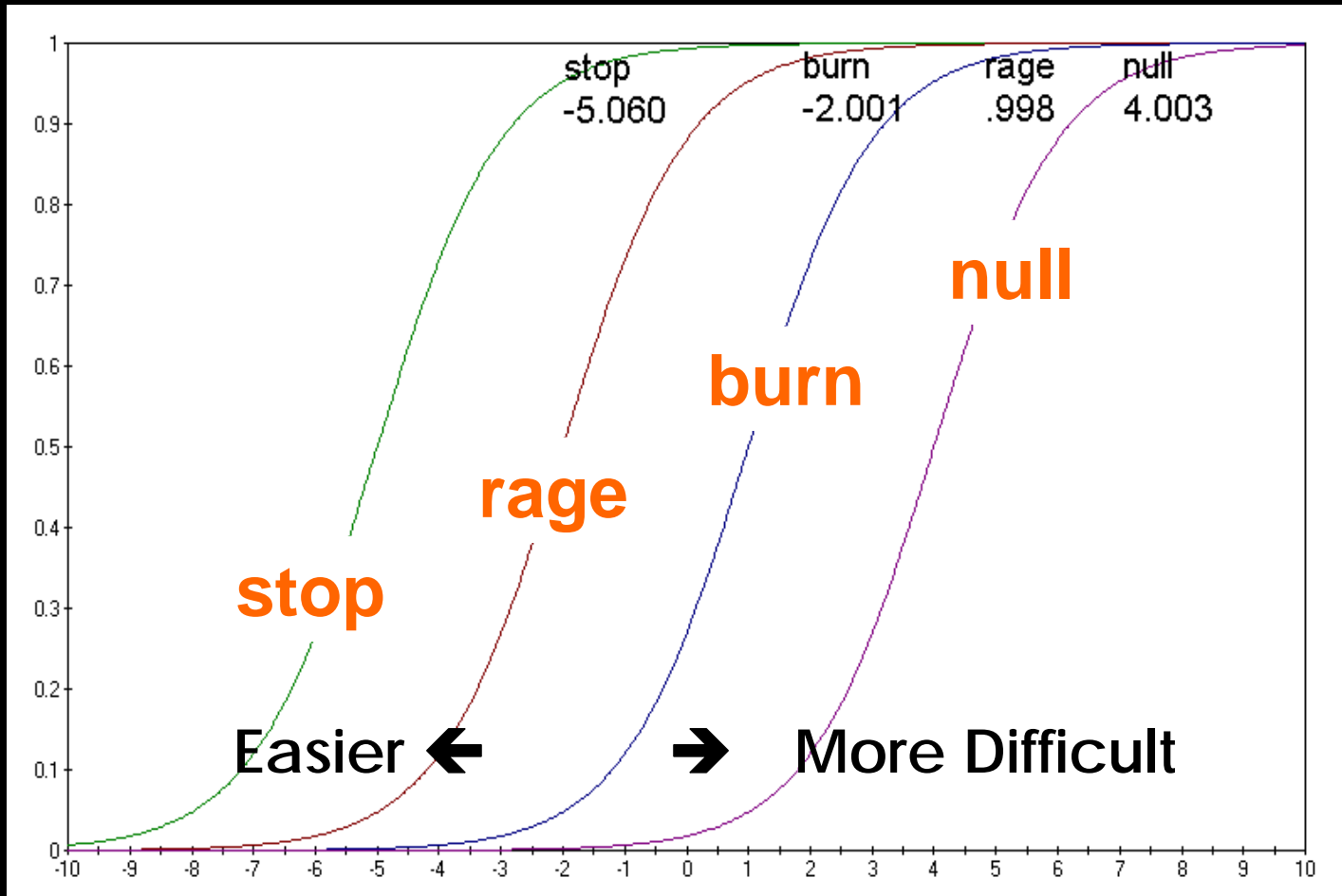
What words do you already know?

Which high frequency words are you missing?



A screenshot of the V-Check interface. It features a blue background. At the top, a yellow rounded rectangle contains the word "legacy" in a black serif font. Below this, the question "Do you know this word?" is written in white. At the bottom, there are two blue rounded buttons with white text: "yes" on the left and "no" on the right.

IRT generates item difficulty for each specific population



Word Frequency vs. Difficulty

	injured	hurt
Frequency	25x	55x

Average occurrences per million words

Word Frequency vs. Difficulty

	injured	hurt
Frequency	25x	55x
Difficulty	1.33	2.34
	People with a 1600 word vocabulary will know injured	People with a 2500 word vocabulary will know hurt

Which is more difficult?

tulip

lily

snake

crow

peanut

onion

More difficult

tulip

lily

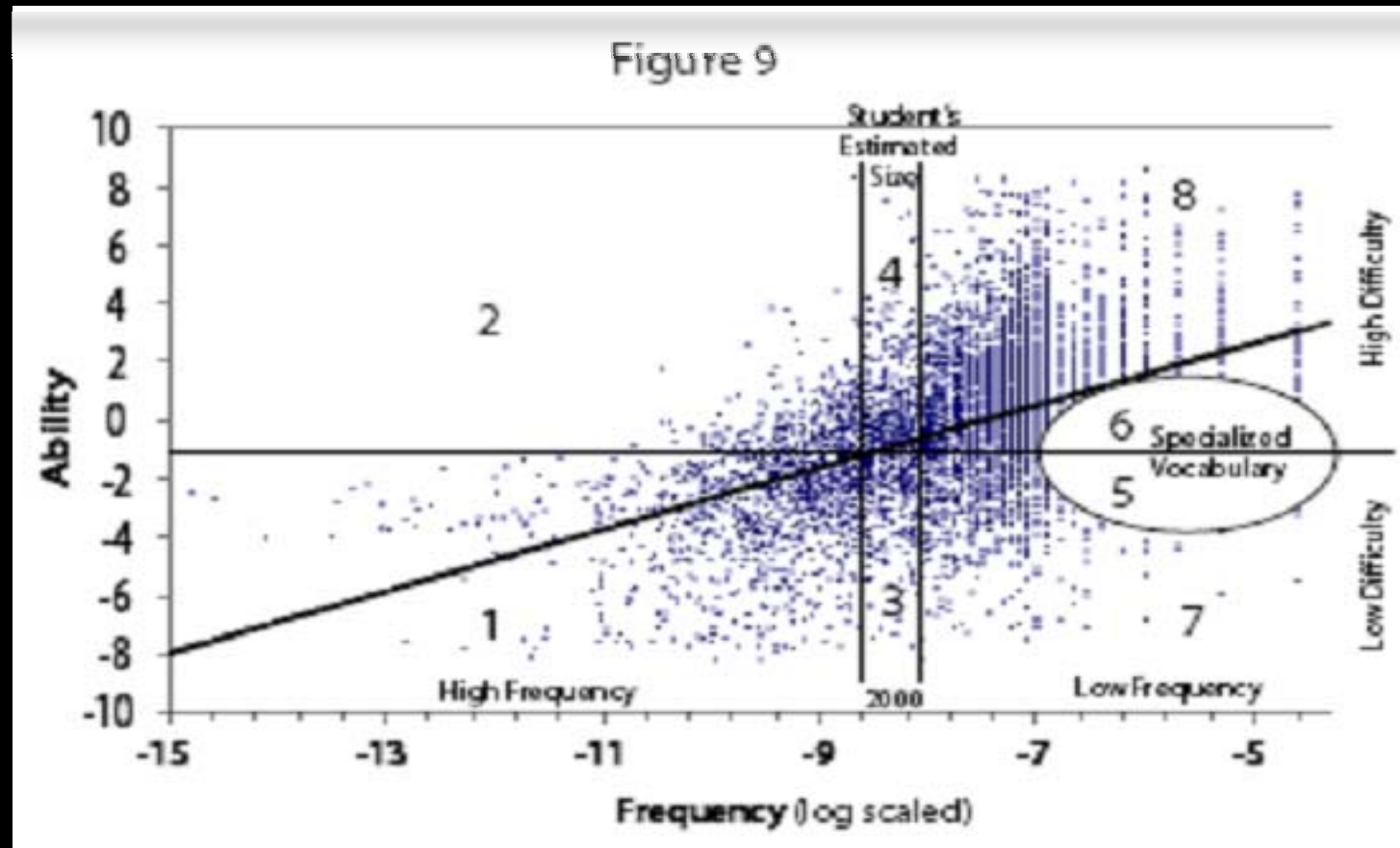
snake

crow

peanut

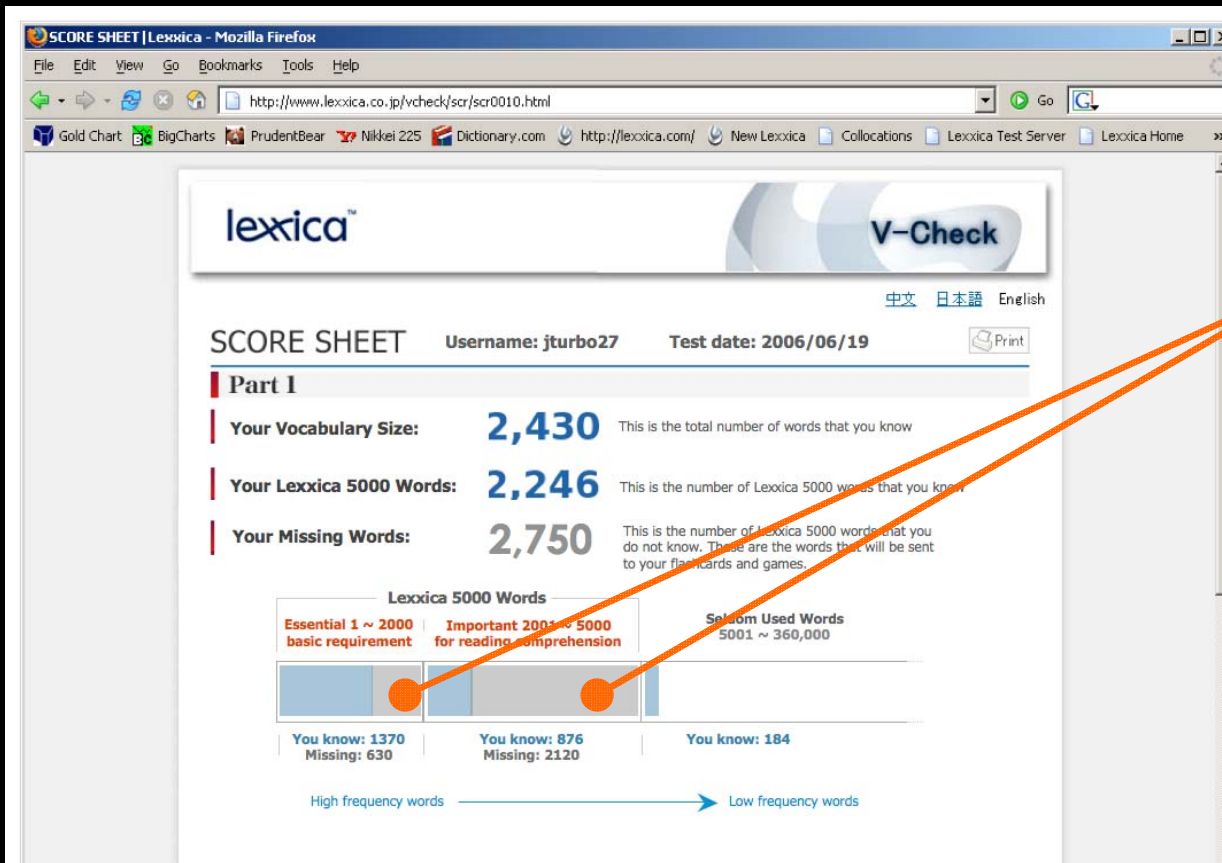
onion

Word difficulty regression for Japanese learners



Sample V-Check Results Sheet

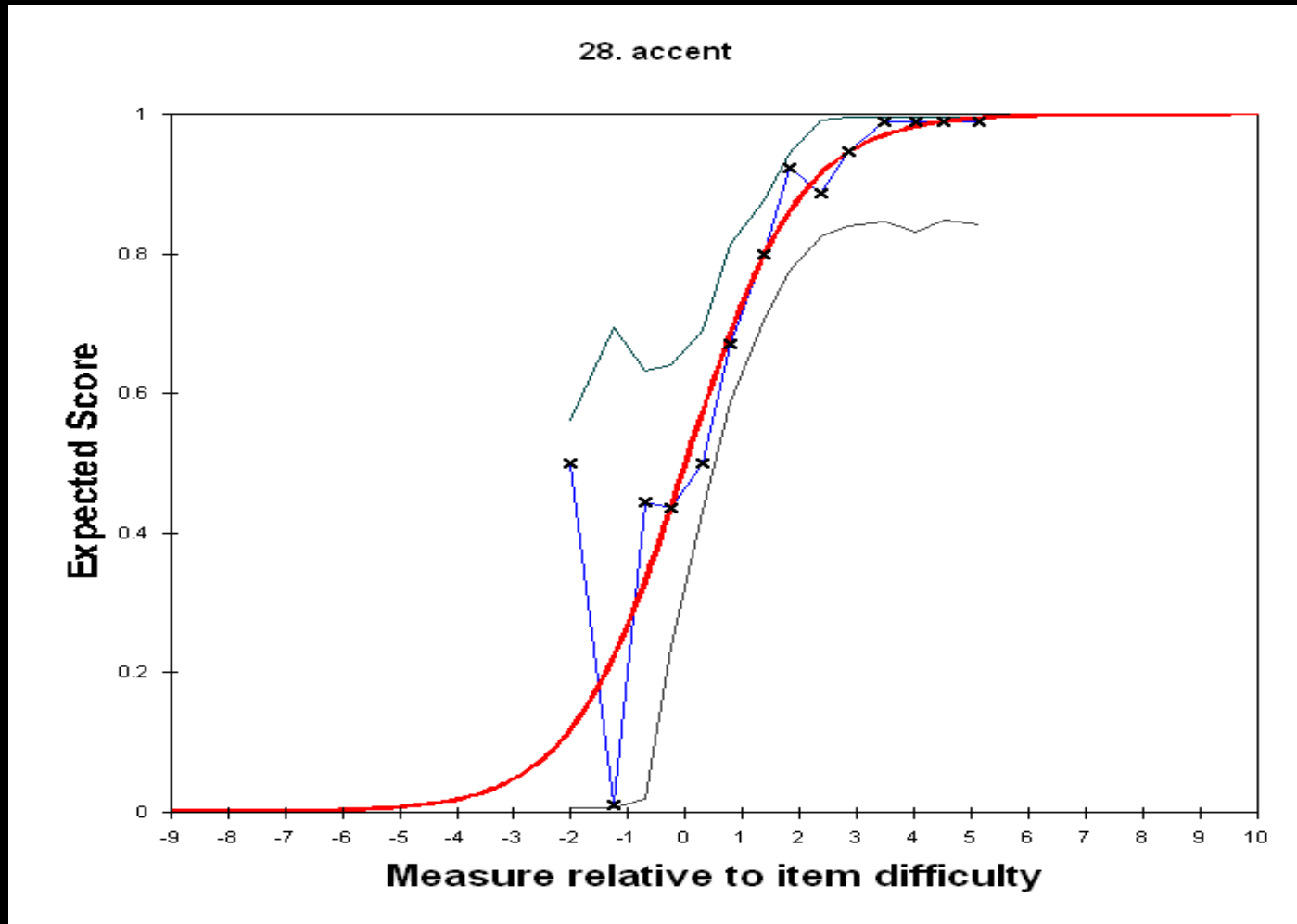
- 1) Estimates vocabulary size
- 2) Identifies specific known/unknown words



Note the gaps in knowledge of high frequency words

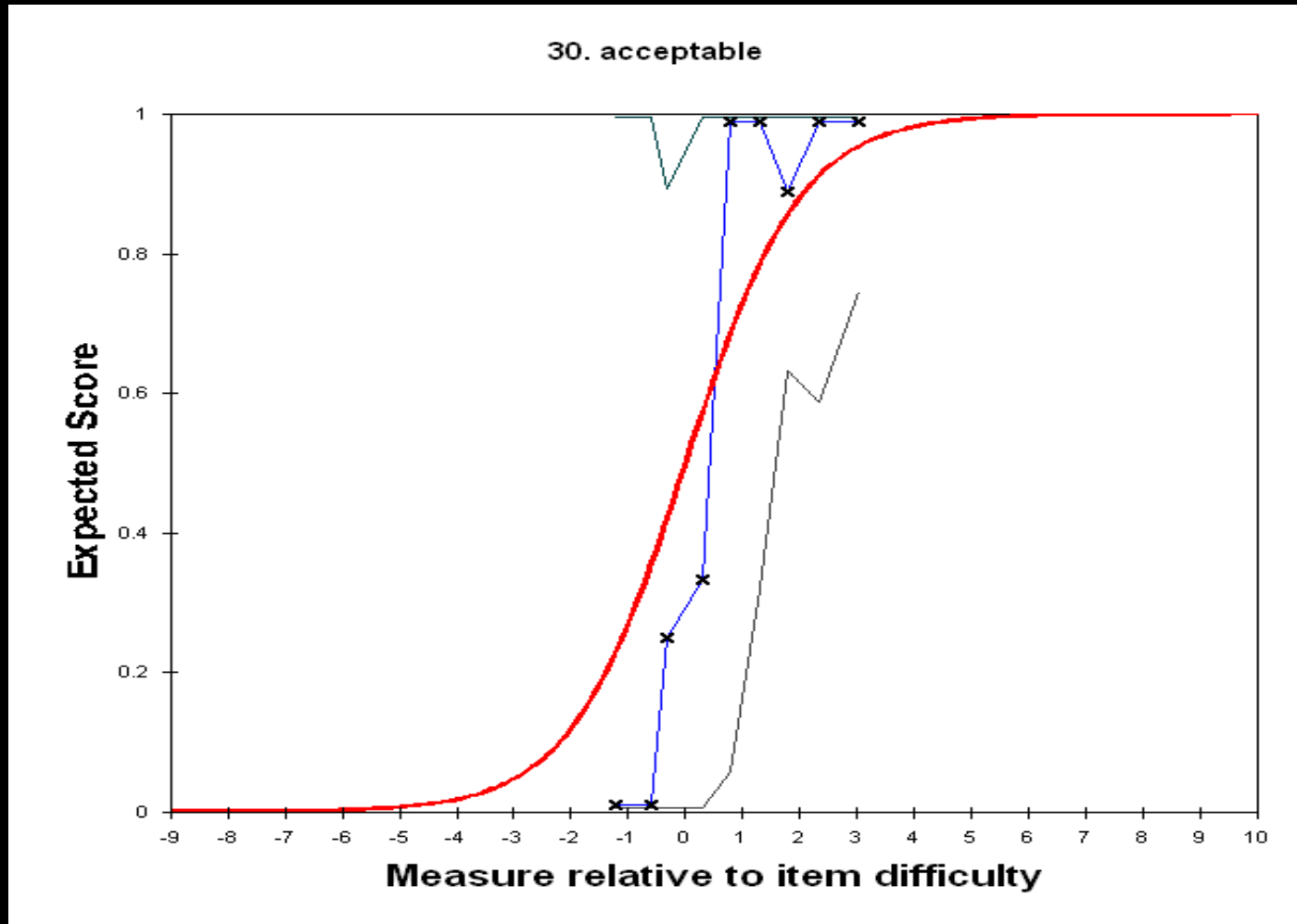
Limitations to a Paper-based Test

N = 385



Limitations to a Paper-based Test

$N = 30$



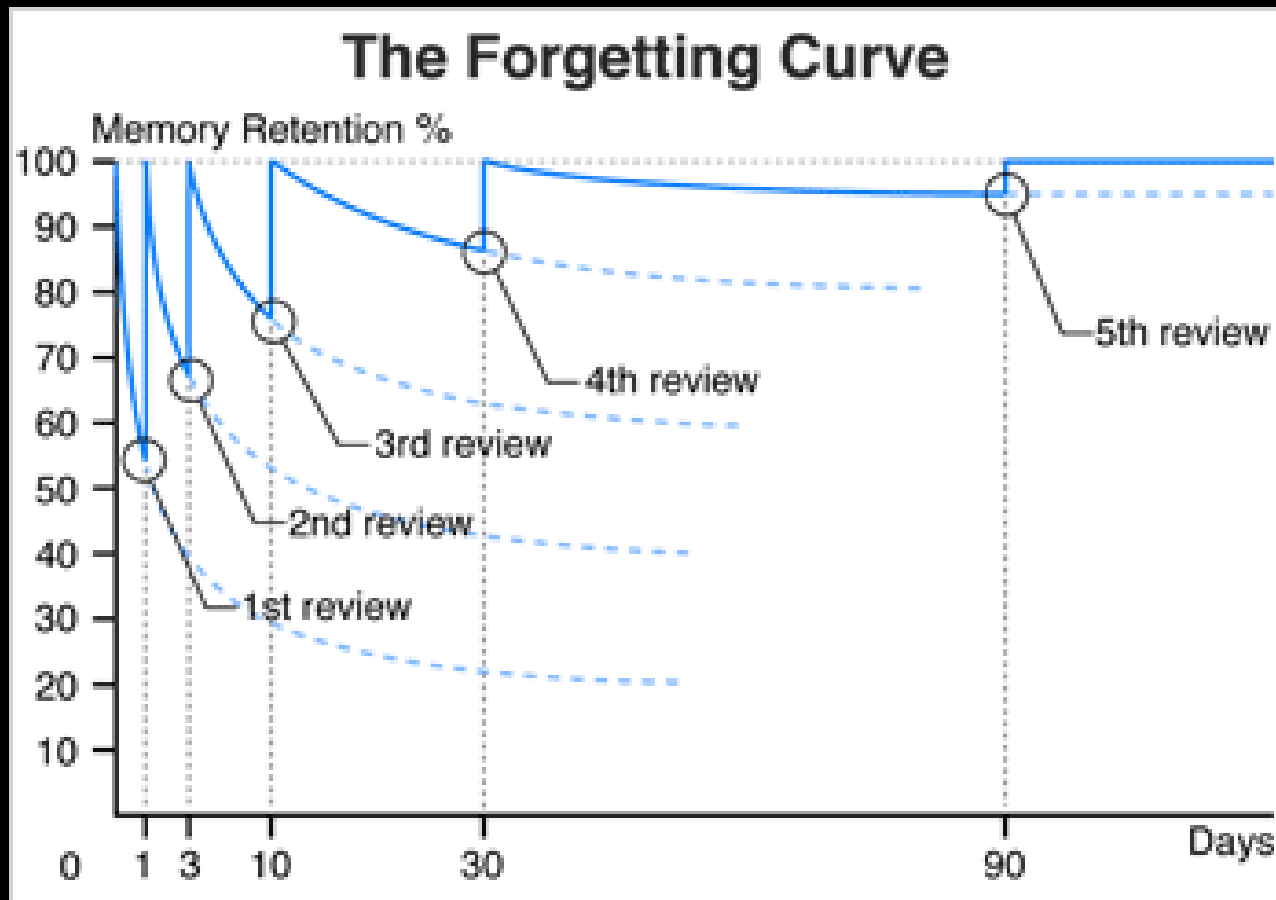
Solution Number Two:

Spaced repetition vocabulary
learning system

Personal target word lists based on
actual need

The Forgetting Curve

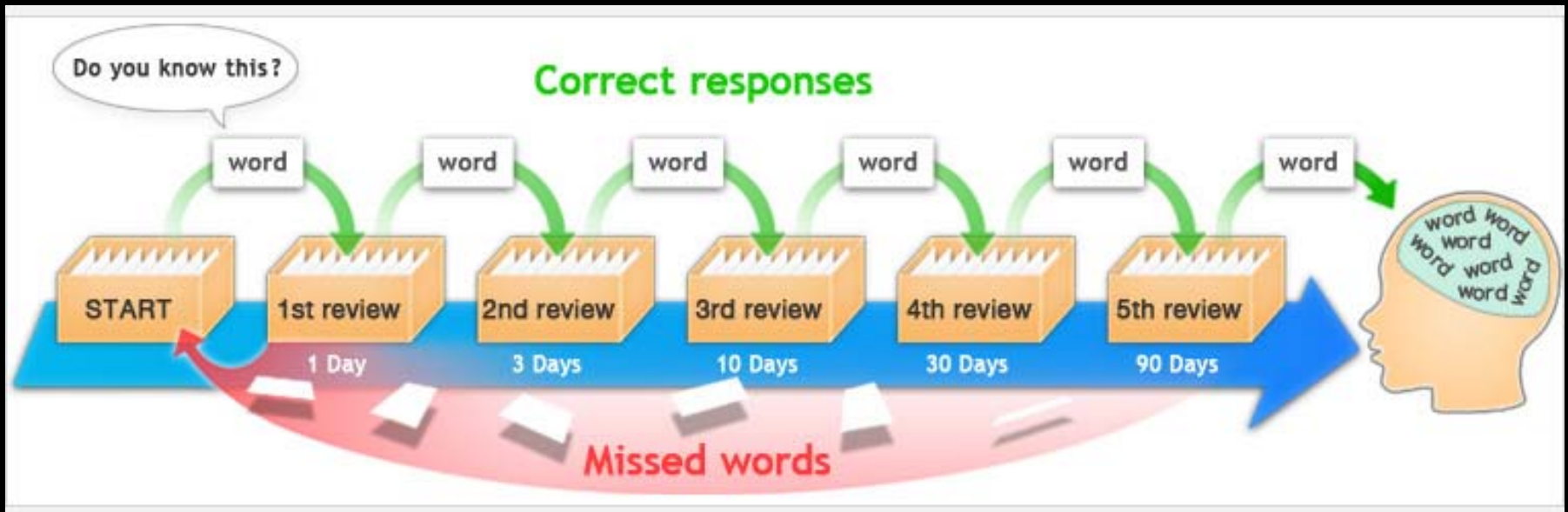
Ebbinghaus (1885), Leitner (1972), Pimsleur (1967), Mondria, (1994)



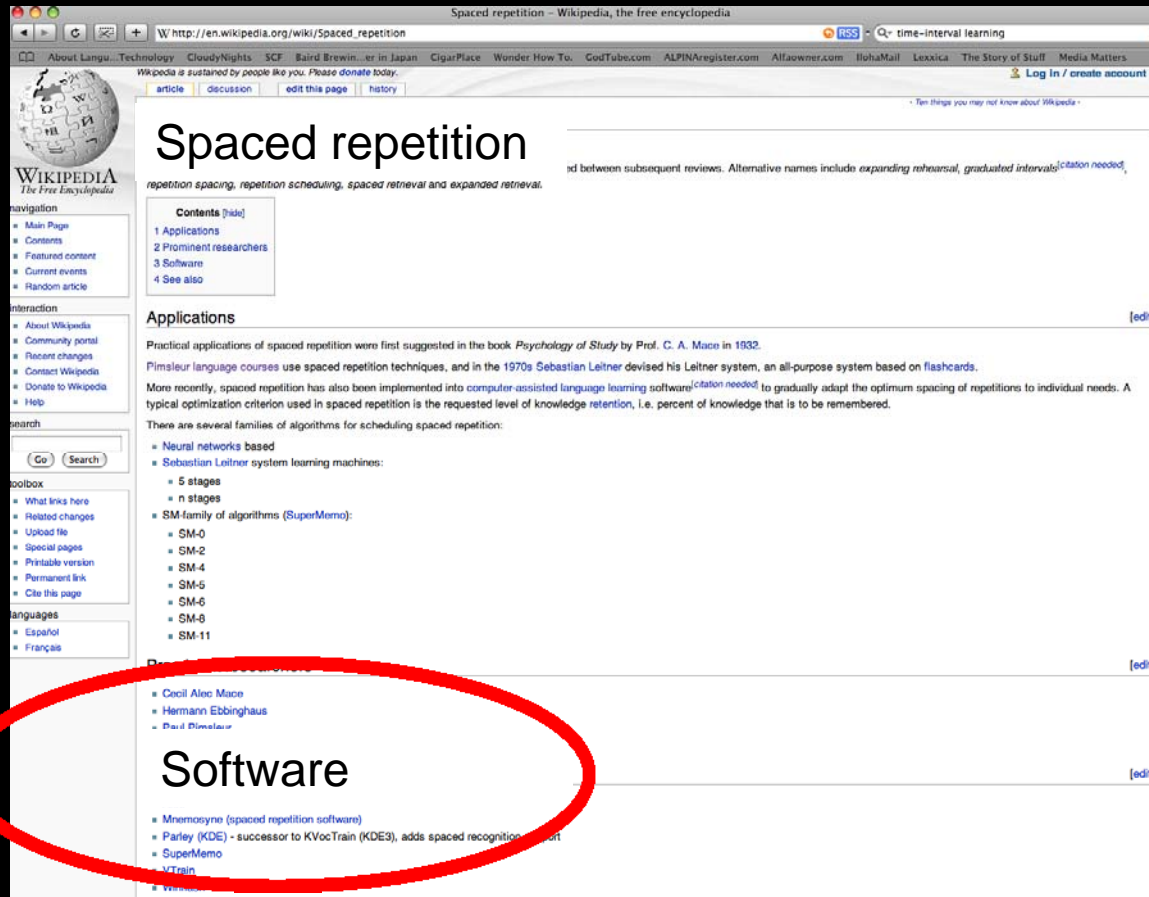
Repeated viewings foster long-term retention

Spaced repetition learning systems

Words are automatically selected and repeated at increasing time intervals until the student acquires long-term retention



Programs using spaced-repetition mentioned in Wikipedia



The image shows a screenshot of the Wikipedia article titled "Spaced repetition". The page is viewed in a browser window with the URL http://en.wikipedia.org/wiki/Spaced_repetition. The article content includes a table of contents, an "Applications" section, and a "Software" section. A red circle is drawn around the "Software" section header and its list of items.

Spaced repetition
repetition spacing, repetition scheduling, spaced retrieval and expanded retrieval.

Contents [hide]

- 1 Applications
- 2 Prominent researchers
- 3 Software
- 4 See also

Applications [edit]

Practical applications of spaced repetition were first suggested in the book *Psychology of Study* by Prof. C. A. Mace in 1932.

Pimsleur language courses use spaced repetition techniques, and in the 1970s Sebastian Leitner devised his Leitner system, an all-purpose system based on flashcards.

More recently, spaced repetition has also been implemented into computer-assisted language learning software^[citation needed] to gradually adapt the optimum spacing of repetitions to individual needs. A typical optimization criterion used in spaced repetition is the requested level of knowledge retention, i.e. percent of knowledge that is to be remembered.

There are several families of algorithms for scheduling spaced repetition:

- Neural networks based
- Sebastian Leitner system learning machines:
 - 5 stages
 - n stages
- SM family of algorithms (SuperMemo):
 - SM-0
 - SM-2
 - SM-4
 - SM-5
 - SM-6
 - SM-8
 - SM-11

Software [edit]

- Mnemosyne (spaced repetition software)
- Parley (KDE) - successor to KVocTrain (KDE3), adds spaced recognition support
- SuperMemo
- VTrain
- VReview

Spaced repetition learning systems



[Intro](#) - [Why Anki?](#) - [Screenshots](#) - [FAQ](#) - [Wiki](#) - [Forum](#) **Download** - [Study online](#)

Download Anki

Latest version: **0.9.5.7**

- [Windows](#)
- [Mac OSX](#)
- [Debian](#)
- [Source \(Linux/BSD\)](#)

Debian packages are in 'unstable' and 'testing' distributions. The testing packages lag behind by at least 10 days.

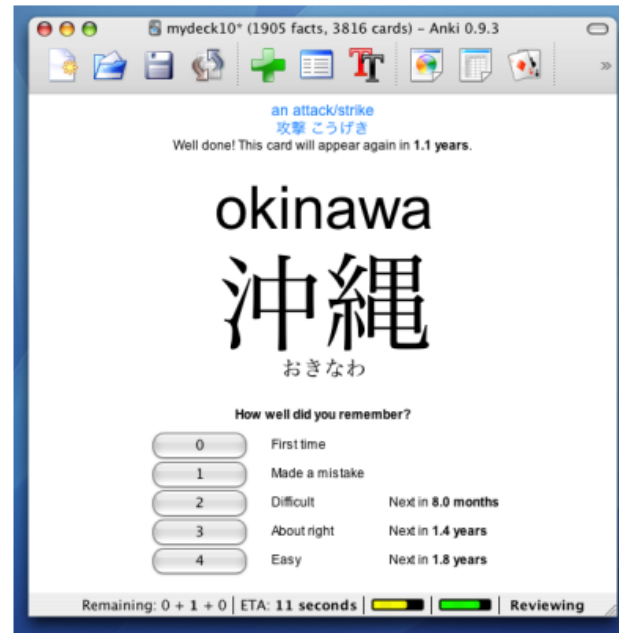
For more info and previous releases, see the [sourceforge page](#).



Development

A development release is available, too. Install [Mercurial](#) and then grab the following two projects and put them in the same directory:

```
$ hg clone http://ichi2.net/hg/libanki
$ hg clone http://ichi2.net/hg/ankigt
```



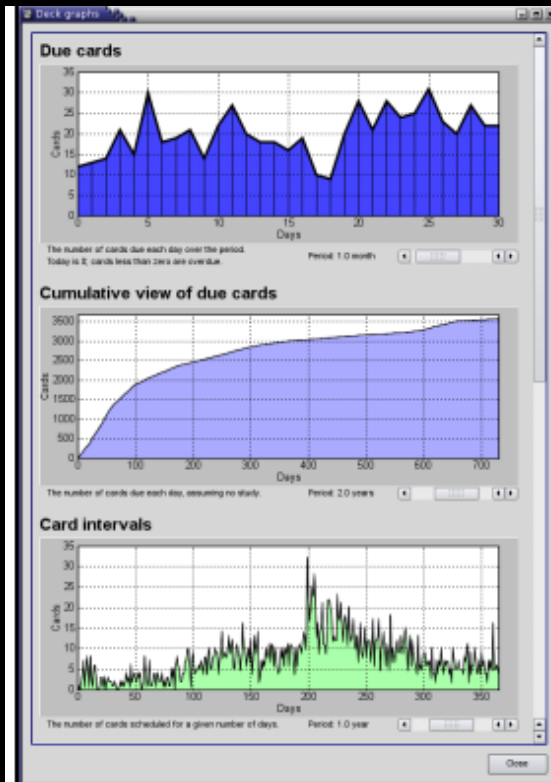
Spaced repetition learning systems



Multimedia Support

Sound and graphics are also supported.

Spaced repetition learning systems



Statistics and Graphs

Anki provides a number of graphs related to your deck: cards due by date in a per-day and cumulative graph, interval distribution of cards, cards added a day, cards answered a day, and ease distribution over new, young and mature cards.

Spaced repetition learning systems

[home](#) - [download](#) - [register](#) - [accolades](#) - [screenshots](#) - [manual](#) - [FAQ](#) - [databases](#)

SuperMemo Screenshots

Here you can view 26 sample screenshots.
Point your mouse to a picture to see its description.
You can find more than 150 screenshots in the SuperMemo manual.
The manual can be [read online](#) or [downloaded](#) to your computer for offline reading.

SuperMemo	Test Drill
* Anatomy	62
☑ French	128 24
* History	
* Spanish	37
☑ MSCP Exam	
☑ Who is who	
☑ World Geography	19
Total	147 123

French

Cards: 1093
Memorized: 922 (84%)
Remaining: 171 (16%)
Categories: 8 + 1
Committed: 2/23/06 (-99)
Created: 2/21/06 (-101)

Done Action...

French Animals

English	French
beaver	castor
bird	oiseau
butterfly	papillon
cat	chat
dog	chien
fish	poisson
horse	cheval
reptile	reptile
sheep	mouton
snake	serpent

Look Up: New

Card Details

Interval: 12 days (33)
Difficulty: 40% (28)
Recalls: 5 of 7 (71%)
Lapses: 2 of 7 (29%)
Next test: 3/18/06 (+25)
Last test: 2/14/06 (-8)
Committed: 9/10/05 (-165)
Created: 9/10/05 (-165)

Done Delete... Reset...

mémoire

memory

une bonne, une mauvaise mémoire

Done Q A Commit

mémoire

memory

une bonne, une mauvaise mémoire

Right Wrong Next

mémoire

memory

une bonne, une mauvaise mémoire

A B C D E F Next

Tips

Recall - correct answer

- A: excellent and instant
- B: some hesitation
- C: difficulties

Lapse - wrong or no answer

- D: answer is familiar now
- E: you seem to know it
- F: you never saw it before

Done

Spaced repetition learning systems

● Question phase

With each card in a drill, you will be shown a question first. When you read it, you should try to recall the answer.

When you think you know the answer or when you cannot recall any answer at all, it is time to tap the *Show Answer* button. This will reveal the correct answer and you can proceed to the Answer phase.



Spaced repetition learning systems

● Answer phase

When you see the correct answer, compare it to the answer you prepared in your mind before and grade its quality on the *Right/Wrong* scale. The evaluation is much easier than in the tests:

Right (perfect answer)

The card will be removed from the drill

Wrong (inaccurate or no answer)

The card will remain in the drill and will reappear later



Spaced repetition learning systems

● Reverse drills

With SuperMemo you can also reverse your cards in drills. This is a very useful feature and it allows you to learn your cards in both directions. In reversed mode, SuperMemo will ask you showing the answer side of the card, and you have to reply recalling the question side.

Of course such mode is not suitable for all kinds of data. It is good for learning pairs such as Country to Capital (Capital to Country in reversed mode) or word pairs such as English to German (German to English in reversed mode).

To turn the reversed drills on or off for a particular database, tap the bottom left silkscreen menu button and select *Card / Reverse*. You will see a dialog offering you *Normal* or *Reversed* drills.



Spaced repetition learning systems

lexica

Flashcards for
comprehension



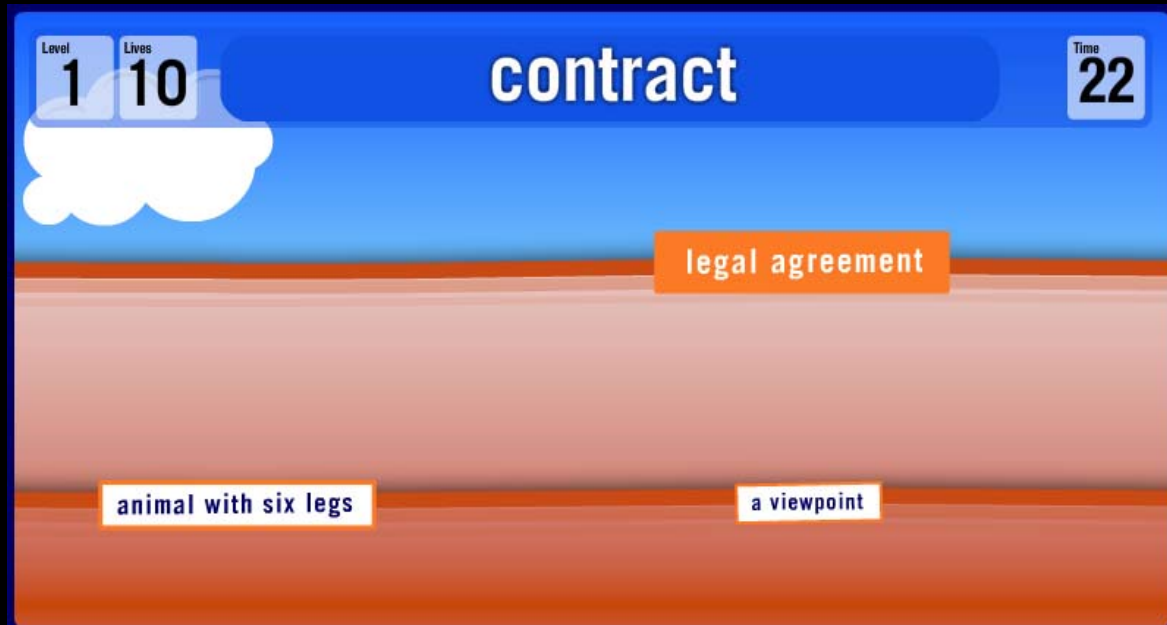
A screenshot of a flashcard from the Lexica application. The card has a light blue background and a white border. At the top, the word "thermal" is written in a large, bold, black font. Below it, the Japanese characters "熱の" (netsu no) are displayed in a smaller, blue font. Underneath the characters, the word "collocation" is written in a small, black font. Below that, the phrase "thermal springs, thermal insulation, thermal underwear, thermal properties" is written in a medium-sized, blue font. At the bottom of the card, there is a blue button with a white speaker icon, indicating an audio feature. Below the card, the text "Did you know it?" is written in a white font. At the very bottom, there are two blue buttons with white text: "yes" on the left and "no" on the right.

Available June 2008

Spaced repetition learning systems

lexica

Visual
automaticity
games



Available June 2008

Spaced repetition learning systems

lexica

Aural
automaticity
games



Available June 2008

Solution Number Three:

Graded reading online

Reading materials at student's 95%
comprehension level

Extensive Reading


California Distance Learning Project

Adult Learning Activities | California Distance Learning Project

http://www.cdjponline.org/index.cfm?fuseaction=stories&topicID=10

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HOME **Adult Learning Activities** California Distance Learning Project

GOING PLACES  

Story List

Click on the name of the story you want to read, or [pick another topic](#). Stories with a  have a video to watch.

- [Air Rage](#) 
- [BART Strike](#)
- [Bicycle Messengers](#)
- [Cell Phone Safety](#) 
- [Children From Russia Spend Summers in California](#)
- [County Starts Using Electric Buses](#)
- [Danger at Car Shows](#)
- [Disabled Parking Signs Abused](#)
- [Fast Car](#)
- [Gas Prices Increase a Penny a Day](#)
- [Golden Gate Birthday](#)
- [High Seas](#)
- [Holiday Traffic](#)
- [Light Rail Grows](#) 
- [Low Air Fares](#)
- [Mall Makeovers](#)
- [Photographers Gather at Yosemite](#)
- [President Asks People to Conserve Fuel](#)
- [Red Light Runners](#) 
- [Roads Being Fixed After Rainy Weather](#)
- [Screening Truck Drivers](#) 
- [Sensible Driving Can Save Fuel](#)
- [Seven Year Old Boy Sets Swimming Record](#)
- [Some New Cars Save Gas](#)
- [Stop Carjacking](#)
- [World's Largest Motorcycle](#)
- [Yosemite Car Ban](#)



NOTE: Some of these stories came from news stories, which may be old. Things may have changed since the story was written. Be sure to check before you do something based on these stories.

Extensive Reading

California Distance Learning Project

Adult Learning Activities | California Distance Learning Project

http://www.cdplonline.org/index.cfm?fuseaction=activity1&topicID=10&storyID=233

GOING PLACES

HOME **Adult Learning Activities**
California Distance Learning Project

[Basic Story](#) | [Full Story](#) | [Activities](#) [Pick another story](#)

Seven Year Old Boy Sets Swimming Record

(5/22/06)

Read the story. Click the "LISTEN" button at the bottom of the page to hear the story. When you are done, click the "NEXT" button.

A boy named Braxton is an excellent swimmer. He is seven years old. He holds the record for being the youngest person to swim from Alcatraz to San Francisco's Aquatic Park.

This second-grader read a magazine article. The article was about another boy who did the same swim. That boy was nine-years-old when he did it. Braxton decided that he wanted to swim it too.

Braxton's swim was 1.4 miles long. He did it with his coach and two other swimmers. A Coast Guard boat was next to them also. When they finished, the boy became the youngest swimmer to ever make the swim.

Braxton's mother was not always excited about the idea of her son doing the swim. Once he proved that he really wanted to do it she agreed. He trained two hours a day, four times a week.

Someone asked Braxton what the hardest part was about his record-breaking swim was. He said, "The swimming."

(This was adapted from an original story provided by News10 Rewrite.)

[LISTEN](#) [STOP](#) [NEXT](#)



Extensive Reading


Literacy Net . Org

Learning Resources


http://literacynet.org/cnnsf/skateboard/storyweek.html

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HOME
STORY ARCHIVES



Skateboarding Physics



[STORY](#) [ABRIDGED STORY](#) [STORY OUTLINE](#)

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Extensive Reading

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Sequencing Exercise

http://literacynet.org/cnsf/skateboard/abridged/sequencing.html

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ACTIVITY INSTRUCTIONS

Number the items below in the correct order in which they occurred in time. Choose the numbers 1, 2, 3, 4, or 5 to list the sentences in correct time order.

Sequencing: What happens when a skateboarder performs an Ollie?

The back of the board collides with the ground. [?????]

The board and the rider fly up in the air. [?????]

The front of the board shoots up into the air. [?????]

The board bounces back up in the air. [?????]

The skateboarder steps on the back of the board. [?????]

Check Your score is:

Contents Previous Next


LEARNING RESOURCES

Skateboard Physics

Abridged Version

From a news story by
San Francisco CNN Reporter Greg Lefevre

February 2005



Skateboarders and scientists came together in an exhibition at the Exploratorium in San Francisco to demonstrate the educational side of skateboarding.

Physicist Paul Doherty explained that a skateboarding trick called an Ollie is a perfect lesson in physics. In an Ollie, the skateboarder steps on the back of the board. This causes the front end to shoot up in the air. Then the back collides with the ground and bounces off, like a ball bouncing, and this causes the board and the skateboarder to go up in the air.

Skateboard tricks involve the physical forces of momentum, inertia, and friction. For example, when a skateboarder goes up a kind of ramp called a half pike, momentum is what carries him into the air. Also, skateboards are covered in grip tape, and then the force of friction keeps the skateboarder from sliding off.

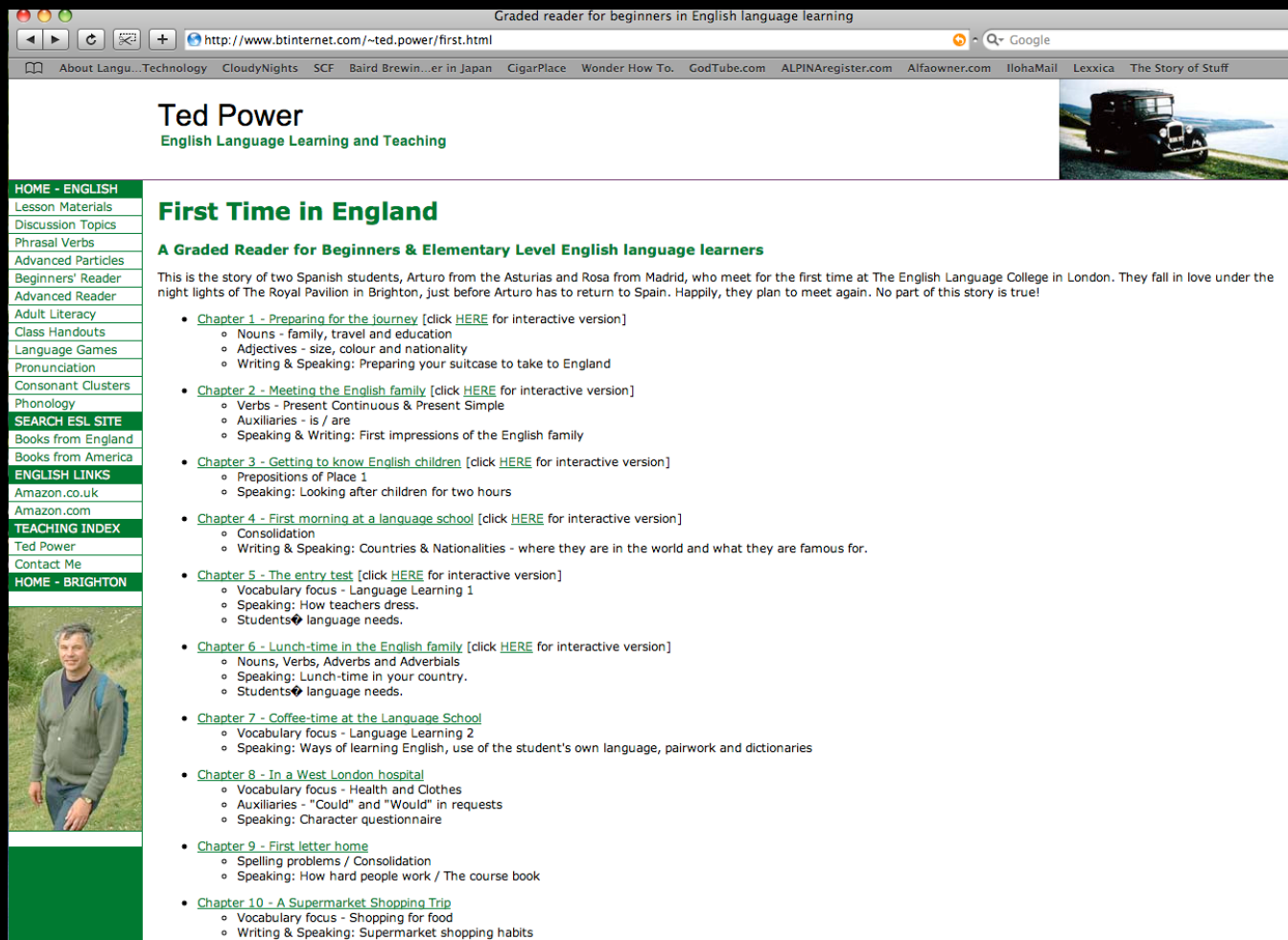
Parents brought their kids to the Exploratorium to link a fun sport with the need for education. However, one mother said that her son saw right through this. "Mom, they're going to try to teach us about gravity and I hate learning stuff."

Another young skateboarder saw the value of learning about the science of skateboarding. "It comes in handy because you learn about going down hills and stuff."

The physicist, Paul Doherty, also explained that gravity, the force discovered by Isaac Newton, is evident in any sport that involves motion. For example, when a skateboarder falls down during an Ollie, that is an example of gravity.

Extensive Reading

Ted Power's Website




Graded reader for beginners in English language learning

http://www.btinternet.com/~ted.power/first.html

About Langu... Technology CloudyNights SCF Baird Brewin...er in Japan CigarPlace Wonder How To GodTube.com ALPINAregrister.com Alfaowner.com IlohaMail Lexxica The Story of Stuff

Ted Power

English Language Learning and Teaching




- HOME - ENGLISH
 - Lesson Materials
 - Discussion Topics
 - Phrasal Verbs
 - Advanced Particles
 - Beginners' Reader
 - Advanced Reader
 - Adult Literacy
 - Class Handouts
 - Language Games
 - Pronunciation
 - Consonant Clusters
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- SEARCH ESL SITE
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- ENGLISH LINKS
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 - Amazon.com
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 - Ted Power
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First Time in England

A Graded Reader for Beginners & Elementary Level English language learners

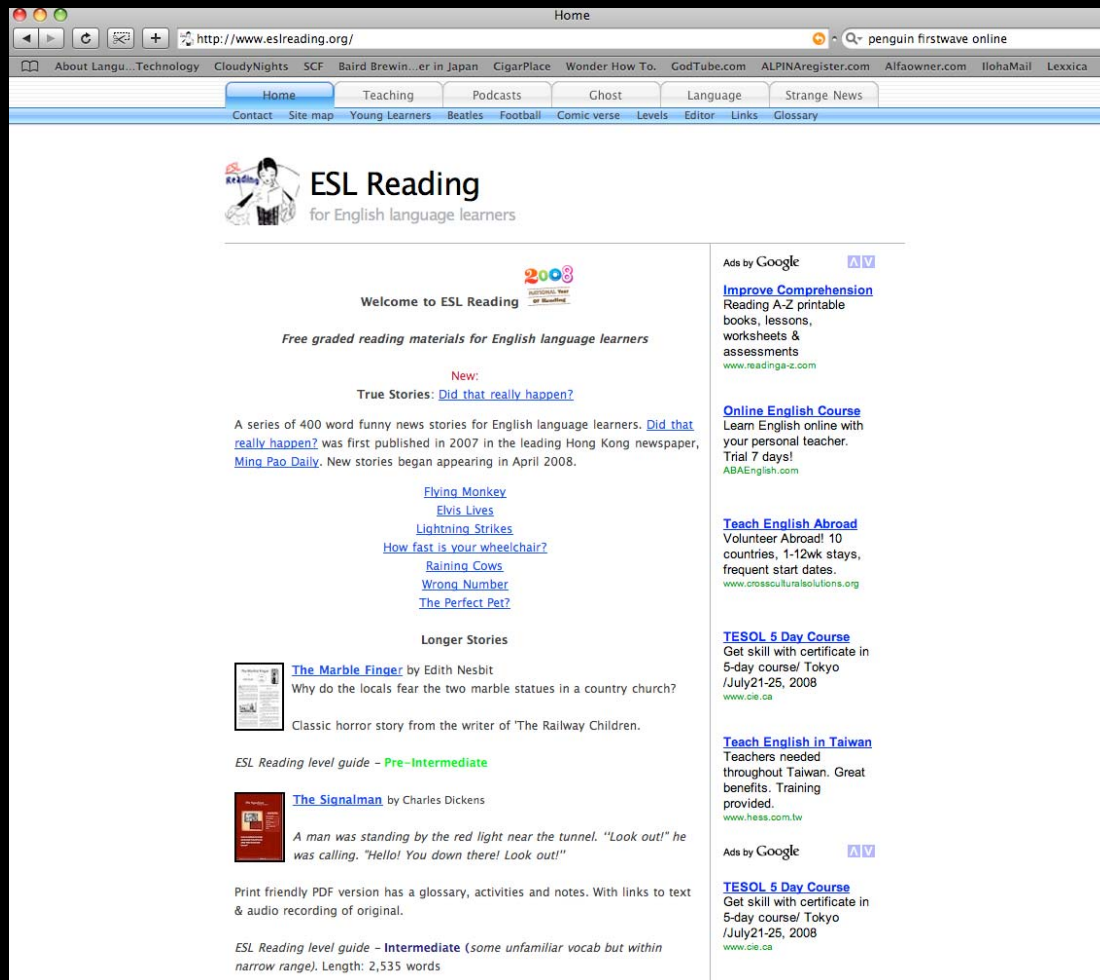
This is the story of two Spanish students, Arturo from the Asturias and Rosa from Madrid, who meet for the first time at The English Language College in London. They fall in love under the night lights of The Royal Pavilion in Brighton, just before Arturo has to return to Spain. Happily, they plan to meet again. No part of this story is true!

- Chapter 1 - Preparing for the journey** [click [HERE](#) for interactive version]
 - Nouns - family, travel and education
 - Adjectives - size, colour and nationality
 - Writing & Speaking: Preparing your suitcase to take to England
- Chapter 2 - Meeting the English family** [click [HERE](#) for interactive version]
 - Verbs - Present Continuous & Present Simple
 - Auxiliaries - is / are
 - Speaking & Writing: First impressions of the English family
- Chapter 3 - Getting to know English children** [click [HERE](#) for interactive version]
 - Prepositions of Place 1
 - Speaking: Looking after children for two hours
- Chapter 4 - First morning at a language school** [click [HERE](#) for interactive version]
 - Consolidation
 - Writing & Speaking: Countries & Nationalities - where they are in the world and what they are famous for.
- Chapter 5 - The entry test** [click [HERE](#) for interactive version]
 - Vocabulary focus - Language Learning 1
 - Speaking: How teachers dress.
 - Students language needs.
- Chapter 6 - Lunch-time in the English family** [click [HERE](#) for interactive version]
 - Nouns, Verbs, Adverbs and Adverbials
 - Speaking: Lunch-time in your country.
 - Students language needs.
- Chapter 7 - Coffee-time at the Language School**
 - Vocabulary focus - Language Learning 2
 - Speaking: Ways of learning English, use of the student's own language, pairwork and dictionaries
- Chapter 8 - In a West London hospital**
 - Vocabulary focus - Health and Clothes
 - Auxiliaries - "Could" and "Would" in requests
 - Speaking: Character questionnaire
- Chapter 9 - First letter home**
 - Spelling problems / Consolidation
 - Speaking: How hard people work / The course book
- Chapter 10 - A Supermarket Shopping Trip**
 - Vocabulary focus - Shopping for food
 - Writing & Speaking: Supermarket shopping habits



Extensive Reading

ESL Reading . Org



The screenshot shows a web browser window with the URL <http://www.eslreading.org/>. The page features a navigation menu with links for Home, Teaching, Podcasts, Ghost, Language, and Strange News. Below the menu is a header with the ESL Reading logo and the text "ESL Reading for English language learners".

The main content area includes a "Welcome to ESL Reading" message with a "2008" anniversary badge. It offers "Free graded reading materials for English language learners" and lists "New" true stories such as "Did that really happen?". A series of 400 word funny news stories is also mentioned, with links to "Flying Monkey", "Elvis Lives", "Lightning Strikes", "How fast is your wheelchair?", "Raining Cows", "Wrong Number", and "The Perfect Pet?".

Under "Longer Stories", there are two featured items: "The Marble Finger" by Edith Nesbit, described as a classic horror story, and "The Signalman" by Charles Dickens, with a quote: "A man was standing by the red light near the tunnel. 'Look out!' he was calling. 'Hello! You down there! Look out!'".

At the bottom, there is a note about a "Print friendly PDF version" and a reference to an "ESL Reading level guide - Intermediate" with a length of 2,535 words.

On the right side, there are two "Ads by Google" sections. The first advertises "Improve Comprehension" (Reading A-Z printable books, lessons, worksheets & assessments) and "Online English Course" (Learn English online with your personal teacher, Trial 7 days!). The second advertises "Teach English Abroad" (Volunteer Abroad! 10 countries, 1-12wk stays, frequent start dates) and "TESOL 5 Day Course" (Get skill with certificate in 5-day course! Tokyo /July21-25, 2008).

Extensive Reading

Lexica . com Available Sept 2008

Lexica - Mozilla Firefox

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http://dev2.lexica.com/vflash

Language English

username: password: [Free signup!](#)

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Learning Tools

All Word Engine learning tools automatically select and give repeated exposure to the exact words needed to increase your subject comprehension in the fastest and most direct way possible.



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Focus on Comprehension

Flashcards might seem a bit old fashioned, yet they remain one of the most efficient ways to rapidly increase your vocabulary size. Our patented electronic flashcard system offers major improvements over paper-based cards.



SIGHT WORDS

Focus on Visual Speed

Research confirms that faster visual recognition leads directly to higher ability and performance! SightWords is a fast-paced game designed to increase the speed of your visual recognition of high-frequency vocabulary.



SoundBubbles

Focus on Listening Speed

Research confirms that fast sound recognition is essential for effective comprehension. SoundBubbles is a listening game designed to increase your aural skills fast.



Reading & Practice

Focus on Control

Reading and listening are great ways to help you gain control of new vocabulary and grammar. Word Engine provides a wide variety of stories, podcasts, and practice exercises that are adjusted to your ability.



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Reading & Practice

[channels](#) search

Channels:

- [Classic Literature](#)
A fantastic selection of classic English literature suitable for English literature majors, and for anyone who enjoys expertly written English novels.
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A collection of original and classic short stories covering a wide range of subjects and interests. Suitable for readers at all levels.
- [News Articles](#)
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- [TOEIC Practice](#)
Articles and practice materials to help you score higher on TOEIC.
- [TOEFL Practice](#)
Articles and practice materials to help you score higher on TOEFL.
- [Coaching Blogs](#)
Advice and support services from Word Engine Coaches. Find a Coach to match your learning style and signup for email study reminders and support based on your vocabulary ability and needs.

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Reading

channels search

Classic Literature

 **Anne of Green Gables**
level: **Unsimplified**
Mrs. Rachel Lynde is Surprised Mrs. Rachel Lynde lived just where the Avonlea main road dipped down into a little hollow, fringed with alders and ladies' eardrops and traversed by a brook that had its source away back in the woods of the old Cu... [read more](#)

 **Frankenstein**
level: **Unsimplified**
Letter 1 TO Mrs. Saville, England St. Petersburg, Dec. 11th, 17-- You will rejoice to hear that no disaster has accompanied the commencement of an enterprise which you have regarded with such evil forebodings. I arrived here yesterday, and my... [read more](#)

 **The Great Gatsby**
level: **Unsimplified**
It was a matter of chance that I should have rented a house in one of the strangest communities in North America. It was on that slender notous island which extends itself due east of New York and where there are, among other natural cunosities,... [read more](#)



Extensive Reading

Lexica . com Available Sept 2008

Lexica - Mozilla Firefox

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http://dev2.lexica.com/vflash

Language English username: password: login! Free signup!

Word Engine My personal coach

Home Learning Tools V-Check V-Admin

Reading Practice

channels search

Classic Literature

The most important thing is to enjoy reading without a dictionary.
Please feel free to adjust the level up or down to where you feel most comfortable.

The Great Gatsby - Chapter 1.1

by F. Scott Fitzgerald



Then wear the gold hat, if that will move her; If you can bounce high, bounce for her too, Till she cry "Lover, gold-hatted, high-bouncing lover, I must have you!"
--THOMAS PARKE D'INVILLIERS

In my younger and more vulnerable years my father gave me some advice that I've been turning over in my mind ever since. "Whenever you feel like criticizing any one," he told me, "just remember that all the people in this world haven't had the advantages that you've had."

He didn't say any more but we've always been unusually communicative in a reserved way, and I understood that he meant a great deal more than that. In consequence I'm inclined to reserve all judgments, a habit that has opened up many curious natures to me and also made me the victim of not a few veteran bores. The abnormal mind is quick to detect and attach itself to this quality when it appears in a normal person, and so it came about that in

1129 v

Unsimplified
4000 level
3000 level
2000 level
1000 level

The Great Gatsby
F. Scott Fitzge...
ロープライス ¥2,334
or 新品 ¥2,851
amazon.co.jp で買う

フライシャーについて

V-Lexx Editing Application

Lexxica . com Available Sept 2008

Lexxica admin - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://202.218.199.33/vlexx.php/vreadContent/edit/id/107/text_id/246

Vlexx by Lexxica

Home Authors Levels Logout

► The Great Gatsby - Chapter 1.1

3000 words Unsimplified

Difficulty

ADD LEVEL +

Draft

B I line break paragraph break

Chapter 1.1

Then wear the gold hat, if that will move her;
If you can bounce high,
bounce for her too,
Till she cry "Lover,
gold-hatted, high-bouncing
lover,
I must have you!"

--THOMAS PARKE D'INVILLIERS

ANALYZE ✓ SAVE

Preview

88.4%

Chapter 1.1

Then wear the gold hat, if that will move her;
If you can bounce high, bounce for her too,
Till she cry "Lover, gold-hatted,
high-bouncing lover,
I must have you!"

--THOMAS PARKE D'INVILLIERS

In my younger and more haive years my father øave me some advice that I've been

Statistics

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http://202.218.199.33/vlexx.php/vreadContent/edit/id/107/text_id/246

Vlexx by Lexxica

Home Authors Levels Logout

▶ The Great Gatsby - Chapter 1.1

3000 words Unsimplified ADD LEVEL +

Difficulty

Draft

B I line break paragraph break

Till she cry "Lover,
gold-hatted, high-bouncing
lover,
I must have you!"

--THOMAS PARKE D'INVILLIERS

In my younger and more
sensitive years my father
gave me some advice that
I've been turning over in my

ANALYZE ✓ SAVE

Preview

95%

Chapter 1.1

Then wear the gold hat, if that will move
her;
If you can jump high, jump for her too,
Till she cry "Lover, gold-hatted,
high-bouncing lover,
I must have you!"

--THOMAS PARKE D'INVILLIERS

In my younger and more sensitive years my
father gave me some advice that I've been

Statistics

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Increase your vocabulary fast!

Learn with any of these popular programs – FREE!

2874
Basic English
2874 words
95% coverage
Start now!
About this program

The 2874 high-frequency words that provide 95% coverage of all English in all situations!

3461
TOEIC
3461 words
99% coverage
Start now!
About this program

The 3461 high-frequency words that provide 99% coverage of all English TOEIC exams.

7931
Ultimate English
7931 words
99% coverage
Start now!
About this program

The ultimate list of 7931 high-frequency words. Covers 99% of all English in all situations!

2426
Interchange
2426 words
99% coverage
Start now!
About this program

The 2426 high-frequency words that provide 99% coverage of all Interchange textbooks.

Example of a special purpose V-Check test and teaching lexicon developed specifically to assist learners using the Interchange textbook.

High-speed learning tools help you develop instant recognition ability, and the built-in spaced repetition system ensures long-term memory retention.

Finally, there's a fast and easy way to acquire high-frequency vocabulary!

Available June 2008

Thank you!

Dr. Charles Browne, Professor of Linguistics
Meiji Gakuin University, Dept. of English
Director, Lexxica Corp.
browne@ltr.meijigakuin.ac.jp
