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The NGSL Project: Building Wordlists and Resources to help EFL Learners (and Teachers) to Succeed

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Abstract

During my JALTCALL 2020 Plenary Address, I explained about the importance of high frequency and special purpose (SP) vocabulary for second language learners of English, and then went on to introduce our New General Service List Project, a collection of seven open-source, corpus-based word lists offering the highest coverage in each of their specific genres, as well as the large and growing number of free apps and online tools we have either developed or utilized to help learners, teachers, researchers and materials developers to better be able to utilize our lists. This chapter is a very brief summary of this project.

JATCALL2020の基調講演で、私は英語を第二言語として学ぶ学習者にとっての高頻出語彙と特殊目的の語彙の重要性を説明し、New General Service Listプロジェクトを紹介した。本プロジェクトは、ジャンルごとに広範な語彙を提供する7つのオープンソースを取りまとめているコーパスベースの単語リストや、そのリストを学習者、教員、研究者、教材開発者がよりよく利用できるようにするために開発・利用してきた無料アプリやオンラインツールを含んでいる。この章ではこのプロジェクトについて簡単にまとめる。

Keywords: NGSL, vocabulary learning, corpus linguistics, NAWL

A New General Service List

Back in 1953 Michael West published an incredibly useful list of high frequency words known as the General Service List or GSL (West, 1953). Based on more than two decades of pre-computer corpus research, input from other famous early 20th century researchers such as Harold Palmer and partially funded by the Carnegie Foundation and Rockefeller grants, the GSL was designed to be more than simply a list of high frequency words. The GSL went beyond that, combining both objective and subjective criteria to create a list of words that would be of general service to learners of English as a foreign language.

Although the list has helped teachers, students, and researchers for decades, it suffered from several problems including being based on a relatively small (2.5 million words) and dated corpus. Because language usage changes over time, it was clear that the GSL needed to be updated and in early 2013, the New General Service List or NGSL (Browne, 2013)

was published. The starting point for the NGSL was a carefully selected 273-million-word subsection of the 2-billion-word Cambridge English Corpus (CEC).

Table 1

New General Service List Corpus Overview

CEC Sub-Corpus	Tokens
Learner	38,219,480
Fiction	37,792,168
Journals	37,478,577
Magazines	37,329,846
Non-Fiction	35,443,408
Radio	28,882,717
Spoken	27,934,806
Documents	19,017,236
TV	11,515,296
Total	273,613,534

Like the GSL before it, the NGSL combines both quantitative criteria (frequency analysis of the corpus) with qualitative (the input and advice from vocabulary specialists and expert teachers). With over 600,000 words in the English language and most adult native speakers of English knowing at least 30,000 words, the 2800 words of the NGSL offers a surprisingly high 92% coverage for most general English books, newspapers and magazines, and even higher coverage for most TV shows and movies. Recent research (Iwamoto & Kramer, 2020) has shown that in addition to providing good coverage for general English in daily life, the NGSL is also very useful for test preparation in Japan, with the full 2800 word list providing 95.2% coverage of the National Center Test, and study of just the first 1000 most frequent NGSL words providing 98.1% coverage of the High School Entrance Exam. The NGSL and all of our word lists are available for free download and use under one of the least restrictive Creative Commons Licenses from the website http://ww.newgeneralservicelist.org.

Why Zipf's Law is So Important for Language Learners

There is a mathematical principle known as Zipf's law, which shows us that while on the one hand, the highest frequency words are very few in number yet occur with unbelievably frequency in our daily lives, the inverse is true for low frequency words, which are huge in number and are almost never met. Below is a summary of some of the frequency research. In it you can see that the first 8000 most frequent words of English represent 98% of the words most learners would ever meet, whereas the remaining 592,000 words of the English language would only give an additional 2% coverage.

Table 2Zipf's Law in Frequency Data

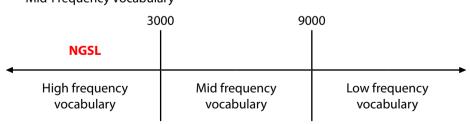
Words	% known	# known	Researcher
1	7%	97/100	West (1953), Nation (1990)
10	25%	3/4	West (1953), Nation (1990)
100	50%	1/2	West (1953), Nation (1990)
1000	75%	1/4	West (1953), Engles (1968)
2200	80%	1/7	West (1953), Nation (1990)
2801	92%	1/13	Browne et al (2013)
5000	95%	1/20	Hirsch & Nation (1992)
8000	98%	1/50	Laufer (1992), Coady (1993)
600,000	100%	100/100	Oxford English Dictionary

We know from the research on vocabulary thresholds that a minimum of 90% but preferably 95–98% of the words in a reading or listening text must be known in order to be able to understand it (Laufer, 1989, 1992), so what Zipf's law means for second language learners is that in order to reach these important coverage targets, it is absolutely essential for them to know all of the words in the NGSL since any significant gap in knowledge of these ultra-high frequency words would make it virtually mathematically impossible to achieve 90% or higher coverage.

Next Steps: Mid-Frequency and Special Purpose Vocabulary

So what is the next step after the NGSL? Perhaps the next most logical possibility is a focus on mid-frequency vocabulary. Though they occur with less frequency than words in the NGSL, they are much more likely to be encountered than low frequency words, and when studied systematically, can increase percent coverage of texts from the low 90s (offered by the NGSL) to the high 90s.

Table 3Mid-Frequency Vocabulary



The problem is that it takes many years to learn the first 3000 most frequent words of English, more than 12 years of public school study in the case of Japanese EFL learners This

means that learning another 6000 mid-frequency words is not a practical target for most learners as it would take more than another 2 decades of study at the same rate of learning!

A potential shortcut for certain language learners is the study of English for Specific Purposes (ESP) vocabulary. Mastering the highest frequency ESP words within a specific genre can help learners to reach higher coverage figures much sooner than if they continue to study general English vocabulary at the mid-frequency level.

As the NGSL Project is very much about efficiency and creating shortcuts for learners, we thought it would make good pedagogic sense to create solid, corpus-based ESP wordlists as a second step for students with that particular goal (after mastering the core, foundational words of the NGSL). To date, we have created four additional ESP word lists, for the genres of academic English, TOEIC preparation, business English and fitness English.

A New Academic Word List

Many years after the original GSL was published, an Academic Word List (AWL) was created (Coxhead, 2000) to go along with the GSL as a 2nd step in vocabulary development for second language learners hoping to go on to do university level studies in English speaking countries. Although this special purpose (SP) vocabulary list was very well constructed and offered good coverage for academic texts, it was designed to work together with the original GSL rather than the NGSL, so the next step was to develop our own academic word list that would align better with the NGSL (i.e., each list represents the highest frequency words in that genre but with no overlapping words).

First published in May of 2013 (Browne et al., 2013) and available for free download at http://www.newgeneralservicelist.org/nawl-new-academic-word-list, the New Academic Word List (NAWL) is based on a 288 million word academic corpus (see the summary below in Table 4) and offers an average of 92% coverage of academic texts and lectures, when learned in conjunction with the NGSL.

Table 4New Academic Word List Corpus Overview

Corpora	Size	Percent
CEC Academic	248 million	86.30%
Oral	3 million	1.10%
Textbooks	36 million	12.60%
Total	288 million	100%

CEC: Academic journals, non-fiction, student essays, academic discourse
Oral: MICASE (Michigan Corpus of Academic Spoken English), and

BASE (British Academic Spoken English)

Textbooks: Corpus of 100s of top-selling academic textbooks

English for TOEIC

TOEIC is a high stakes English proficiency exam produced by English Testing Service (ETS) and is said to be a measure of business English ability. The 1200 word TOEIC Service List, also known as the TSL (Browne & Culligan, 2015a) is available for free download at http://www.newgeneralservicelist.org/toeic-list, and is based on a carefully constructed 1.5 million word corpus of various TOEIC preparation materials. At the time of release in 2015, we found that when learned in conjunction with the NGSL, the TSL offers 99% coverage of the TOEIC exam.

Below is a list of some of the TOEIC textbooks, practice tests, and TOEIC preparation materials included in the corpus:

600 Essential Words for the TOEIC – 3rd Edition Achieve TOEIC Bridge
Barron's TOEIC Practice Exams
Collins' Practice Test for the TOEIC Test
Oxford practice tests for the TOEIC test
Oxford Preparation Course for the TOEIC test
Pass the TOEIC Test Advanced
Pass the TOEIC Test Intermediate
Practice Examinations for the TOEIC Test
Tactics for TOEIC Listening and Reading Tests

In 2018, two years after the publication of our TSL, the format of the TOEIC test underwent a few changes in format and question type, so in order to see if the TSL would still offer good coverage of the new format, in 2019, we created a small corpus from the 8 official TOEIC practice tests and found that the combination of learning the NGSL and TSL provides 98.5% coverage of the latest version of the TOEIC exam.

Business English

Although TOEIC is said to be a test of business English, anecdotal evidence such as the failure of the TOEIC initiative at Rakuten, as well as independent research that has been critical and unsupportive of ETS's claims that it is good measure of business English ability (Childs, 1995; Hirai, 2002) led us to feel that separate from our TSL word list, which was designed help students improve their scores on a high stakes exam, we should also release a business English vocabulary list based on a corpus that is more representative of the business English that EFL and ESL learners were likely to encounter in the real world.

The 1700 word Business Service List, also known as the BSL (Browne & Culligan, 2015b) is available for free download at: http://www.newgeneralservicelist.org/bsl-business-service-list and is based on a carefully constructed 64 million word corpus of business English texts as follows:

Table 5Business English List Corpus Overview

Business Corpus	Size
BNC	8,386,492
Internet	9,199,615
Magazines	25,085,121
Textbooks	21,980,494
Total	64,651,722

Fitness English

Very recently (Browne & Culligan, 2020a), we published a list of high frequency fitness English words known as the Fitness English List (FEL). Originally developed for a chain of English-medium gyms in Japan, we have been given permission to share our research and NGSL-compatible word list with the general public (the chain of gyms is using a different version of the FEL that does not include the NGSL). Based on a 9.7-million-word corpus of various fitness-related texts, websites and YouTube channels, the 600 words of the FEL gives up to 98% coverage of common fitness English when combined with the 2800 words of the NGSL. It is available for free download and use from http://www.newgeneralservicelist.org/fitness-english-list. A summary of the corpus appears below:

Table 6Fitness English Corpus Overview

Sub-Corpus	Size (number of words)	Percent of Total Corpus
Fitness Certifications	176,037	1.8%
Flexibility Training	5,273,464	54.0%
Functional Training	1,470,372	15.1%
Nutrition-related	528,381	5.4%
Recovery-related	330,827	3.4%
Strength Training	1,979,129	20.3%
Total	9,758,210	100%

New Dolch List: Paving the Way for Young Learners of English

Though the NGSL is an extremely useful first step for adult learners of English, the type of English that young learners of English are exposed to is significantly different, than that of adults, so in the summer of 2020 the New Dolch List, or NDL (Browne & Culligan, 2020b) was published and is available for free download at

http://www.newgeneralservicelist.org/new-dolch-list. The NDL was developed with the goal of creating a reliable and valid corpus-based list of high frequency English words important for young second language learners to be able to successfully interact with EFL learning materials, other EFL learners, as well as popular children's TV shows and children's picture books.

The NDL is a significant update of the original Dolch list, which was published back in 1936 by Edward William Dolch (Dolch, 1936). That list contained 220 sight words, words which need to be quickly and easily recognized to achieve reading fluency in English as well as an additional list of 95 important nouns. It has been argued that up to 70% of all words used in schoolbooks, library books, newspapers, and magazines are a part of the Dolch basic sight word vocabulary. Though quite dated, the Dolch lists are still widely assigned for memorization in American elementary schools and used in ESL and EFL settings and materials around the world.

That said, a wordlist is only as good as the corpus it is based on. Like West's 1953 General Service List (GSL), which was replaced by the New General Service List (Browne, 2013), the Dolch 1936 list has often been criticized for being based on outdated resources. The English language changes and evolves over time and an update to the 90-year-old Dolch list was long overdue.

The original Dolch list was based on a corpus and word lists designed only for native speakers of English attending primary school in English speaking countries. English is now taught and studied as a second language in countries around the globe and the original Dolch list was not designed with these needs in mind. EFL learners do not get as much input in English as those living in English speaking countries and the sources of input are more limited. EFL textbooks, children's songs, children's textbooks and children's TV shows are usually the primary sources of input for most EFL learners and we have created a corpus of such materials to generate a list of the most important words for EFL learners in the hopes that this would be a valuable asset to EFL teachers, students, textbook authors and educational software developers around the world. The NDL is based on a carefully selected, 2.5-million-word corpus of children's reading and listening materials as follows:

Table 7New Dolch Children's Corpus Overview

Category	Total
Children's Graded Readers	991,104
Elementary EFL Textbooks (MEXT)	4,623
Middle School Textbooks	322,169
Picture Books (for L1)	13,347
EFL Textbooks	575,976
Top Kids YouTube Videos	548,172
New Dolch Corpus Total	2,455,391

The 315 words of the original Dolch word list (220 sight words plus 95 nouns) were

said to offer up to 70% coverage, though there do not seem to be any empirical papers to verify this claim. In looking at the NDL, it can be seen that at 315 words, coverage has already surpassed this, giving 78% coverage:

Table 8Preliminary Coverage Data for the NDL

305	877	under	1593	Functors	-5.341	0.0004	0.77	NGSL0193	1-NGSL
306	876	end	4961	Lexeme	-3.725.	0.0004	0.77	NGSL0152	1-NGSL
307	876	repeat	62177	Lexeme	-3.055	0.0004	0.77	NGSL1251	1-NGSL
308	875	clothes	6926	Lexeme	-2.160	0.0004	0.77	NGSL0955	1-NGSL
309	874	often	19308	Lexeme	-4.806	0.0004	0.77	NGSL0288	1-NGSL
310	871	board	31366	Lexeme	-0.164	0.0004	0.77	NGSL0741	1-NGSL
311	870	ball	405	Lexeme	-2.841	0.0004	0.77	NGSL1199	1-NGSL
312	863	visit	5184	Lexeme	-3.934	0.0004	0.77	NGSL0333	1-NGSL
313	862	along	6501	Functors	-3.589	0.0004	0.77	NGSL0388	1-NGSL
314	854	everyone	7367	Lexeme	-4.087	0.0004	0.77	NGSL0650	1-NGSL
315	849	light	2693	Lexeme	-5.697	0.0004	0.78	NGSL0349	1-NGSL
316	846	cold	1909	Lexeme	-3.593	0.0004	0.78	NGSL0866	1-NGSL
317	844	die	18972	Lexeme	-4.370	0.0004	0.78	NGSL0454	1-NGSL
318	841	own	19090	Lexeme	-3.671	0.0004	0.78	NGSL0129	1-NGSL
319	841	train	2814	Lexeme	-4.359	0.0004	0.78	NGSL0289	1-NGSL
320	840	side	4814	Lexeme	-3.036	0.0004	0.78	NGSL0276	1-NGSL
321	840	sleep	2708	Lexeme	-5.491	0.0004	0.78	NGSL0826	1-NGSL

Unfortunately, SLA research shows that 78% is not nearly enough. Teachers often tell their students that when they come across an unknown word in a text that they should not stop and look it up in a dictionary but rather to guess the meaning from context. Research on vocabulary thresholds show that for this to be achieved, learners need to know a minimum of 90% of the words on the page, but preferably 95–98% (Laufer, 1989; 1992).

Therefore, in order to help students, schools and teachers get closer to the coverage levels needed to read and guess unknown words from context more easily, the NDL list was extended to 875 words, which offers 90% coverage for most EFL materials for young learners.

The NDL wordlist can be downloaded from the above link in a variety of formats including with just headwords, lemmatized for teaching purposes, and lemmatized for research purposes. We also have provided definitions in simple English for all words. In the near future, the NDL wordlist will also be added to free flashcard sites like Quizlet (http://quizlet.com), Memrise (http://memrise.com/), Word-Learner (our own flashcard app), and the free Online Graded Text Editing Tool (OGTE) which can be found at https://www.er-central.com/ogte/.

Spoken English

In response to several requests for a list of high frequency spoken English words, the three spoken subsections of the NGSL corpus were analyzed and in late 2013, Browne and Culligan published the NGSL-S (Browne & Culligan, 2013). The 1.0 version contained 822 words which provided 89% coverage for spoken English. In 2016, the 1.1 version of the list was published, with slightly better coverage (718 words to reach 90%). In October 2017 the 1.2 version of the NGSL was released. This list is 721 words and provides up to 90% coverage for unscripted spoken English (explained in Table 9).

Table 9

New General Service List-Spoken Overview

CEC Sub-Corpus	Tokens
Learner	38,219,480
Fiction	37,792,168
Journals	37,478,577
Magazines	37,329,846
Non-Fiction	35,443,408
Radio	28,882,717
Spoken	27,934,806
Documents	19,017,236
TV	11,515,296
Total	273,613,534

The Tools

We have created and made use of a large and growing number of free online tools to help teachers, students, researchers, and content creators to be able to utilize our word lists.

Wordlists & Definitions

The first set of tools that should be mentioned is the wordlists themselves. For each wordlist we have tried to make several downloadable versions available, including in alphabetical order, frequency order, lemmatized for teaching purposes, lemmatized for research purposes and also with basic statistical data from our analysis.

In order to make use of these wordlists in the classrooms as well as via many online learning platforms, we realized that teachers and learners would need to have definitions for each word and we did our best to write and provide definitions in simple English for all wordlists. Please note that these definitions were written very quickly, and we sometimes needed to pay people to help us write them. This means that although the downloadable definitions are original and free for use as people wish, but they have not been carefully edited. Please feel free to update or change the definitions as necessary. If there are any glaring errors,

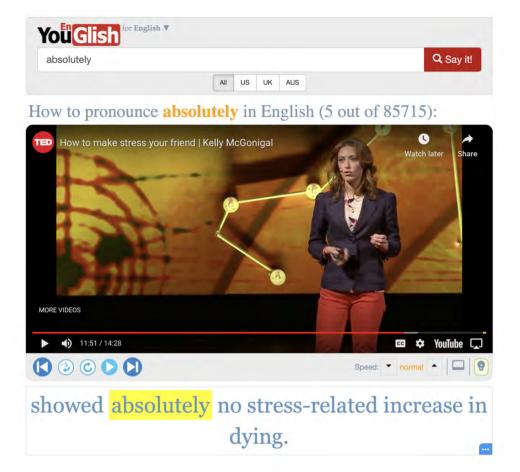
please let us know and we will update the definition files available for download. Please also note that if you want very carefully edited definitions or sample sentences for all of our wordlists, these are available as part of our Word-Learner app (which contains flashcards, games, a 90k learner dictionary in 12 languages and an LMS).

One of the newest and most interesting resources that has been created is the interactive glossaries which include direct links to an in-context video concordance to help learners hear pronunciation of the word in various authentic contexts, something that is also great for helping to develop collocational knowledge. The NGSL Glossary can be accessed from http://www.newgeneralservicelist.org/ngsl-glossary. After you see one clip for the word you are interested in, click the forward button – most words have thousands of examples lined up to see. Below is a screenshot of a small section of the NGSL glossary. If you click on the HTML pronunciation link for the word absolutely you are brought to a cliplist player that will show more than 85,000 authentic video clips that use the word absolutely in various contexts. The first clip is shown in Figure 1 below:

Figure 1
Screen Shots 1 and 2: Interactive NGSL Glossary and Video Concordancer

NGSL Glossary

Word	PoS	FpM	Pronunciation	Definition
а	art	27872	<u>/ει/</u>	one (of something)
abandon	verb	37	/ə•bæn•dən/	to leave someone you should stay to take care of
ability	n	123	/ə•bi•li•ti/	the power, money, or skill to do something
able	adj	361	/ <u>ει•bl/</u>	having the ability to do something
abortion	n	24	/ə•boə•ʃən/	a medical operation to end a pregnancy
about	prep	2967	/ə•baʊt/	of (a subject); concerning
above	adv	228	/a•bʌv/	in a higher place than something else
abroad	adv	39	/a•broa·d/	in or to a foreign country
absence	n	43	/æb•səns/	fact of not being present, or not existing
absolute	adj	27	/æb•sə•lut/	complete and total
absolutely	adv	84	/æb•sə•lut•lı/	completely; totally; very
abstract	adj	21	/æb•strækt/	concerning something that doesn't exist physically
abuse	verb	52	/ə•bjuz/	to use in an inappropriate or excessive way
academic	n	43	/æ•kə•dε•mık/	educator who works at a college or university
accept	verb	172	/ək•sɛpt/	to agree to receive or take something offered
acceptable	adj	26	/ək•sɛp•tə•bl/	satisfactory; good enough
access	n	119	/æk•sɛs/	way to enter a place, e.g. A station or stadium



Tests

The New General Service List Test (NGSLT) is a diagnostic test of written receptive knowledge of the New General Service List (NGSL) that was developed by Phil Bennett and Tim Stoekel (Bennet & Stoekel, 2013; Stoekel & Bennet, 2015). The NGSLT is comprised of 100 items, 20 for each of five approximately 560-word bands of the NGSL. Both the New Academic Word List Test (NAWLT) and the NGSLT have been designed to the same specifications as the Vocabulary Size Test (VST) (Nation & Beglar, 2007). Each item provides the target word followed by a short sentence containing this word in a natural yet non-defining context. The test shows very high reliability (over .90), and was designed to help place students in approximately the right frequency band for study of NGSL words via the Quizlet word stacks or our free NGSL apps (NGSL Builder, described below). The test, answer sheet, and explanation can be downloaded directly from a dedicated webpage on our NGSL website (http://www.newgeneralservicelist.org/ngsl-levels-test).

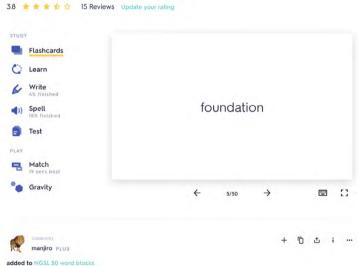
The NAWLT (Bennet & Stoekel, 2013; Stoekel & Bennet, 2015) is a diagnostic test of written receptive knowledge of the New Academic Word List (NAWL). The NAWL is a list of 963 words that appear frequently in academic discourse and that are not part of the New General Service List (Browne et al., 2013). The NAWLT is comprised of 40 items, 20 from

each of two frequency-determined bands of the NAWL. This sampling rate is approximately equal to that of the NGSLT by the same authors. Sampling from bands of around 500 words is useful for two reasons. First, it allows for more precise feedback than sampling from 1000-word bands, which has been the norm in recent years. Second, it was felt that approximately 500 words is a reasonable learning goal for a semester of study, especially considering that some of those words will already be known to learners. The test was designed to help place students in approximately the right frequency band for study of NAWL words via the Quizlet word stacks or the free NAWL apps (NAWL Builder, described below). The test, answer sheet, and explanation can be downloaded directly from this page via the same link as was given above for the NGSLT.

Flashcards

One of the first free flashcard websites you can use to study our wordlists is Quizlet. More than just flashcards, Quizlet is a site that allows learners to study wordstacks via 5 study and 2 game-like activities.

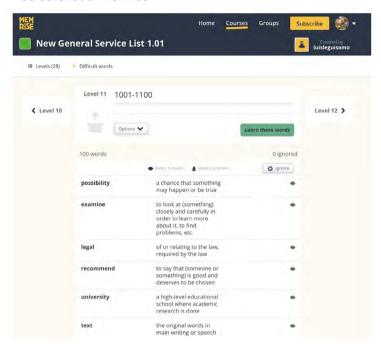




We have created stacks for the wordlists in various sizes to accommodate different purposes. For example, the NGSL can be studied in 560 word blocks which matches the categories and results from the NGSLT, and is said to be a good number of words to set as a target for a full semester or year of study, or it can be studied in more granular 100 word blocks or 50 word blocks. The easiest way to access these stacks is from the direct links provided on the NGSLT website (http://www.newgeneralservicelist.org/ngsl-for-quizlet-soon).

Another popular free flashcard website that we have made use of is Memrise. Like Quizlet, Memrise allows you to upload any list of words and definitions for study.

Figure 3
Screenshot of Memrise



Although it does not offer the many different learning modalities of Quizlet, Memrise does offer something that Quizlet does not, and that is the ability for students to modify and personalize their flashcards, adding pictures and text to help them better remember their new words. You can access the NGSL wordstacks we have created via the direct links on the NGSL website at (http://www.newgeneralservicelist.org/ngsl-for-quizlet-soon).

I have also created a number of free smartphone applications to help with the learning of our wordlists, all of which make use of spaced-repetition algorithms to enhance the speed and depth of learning. The earliest flashcard apps I made are called NGSL Builder and NAWL Builder. You can find English and Japanese versions of the app in both the iOS and Android app stores. Figure 4 below includes some screen shots from NGSL Builder:

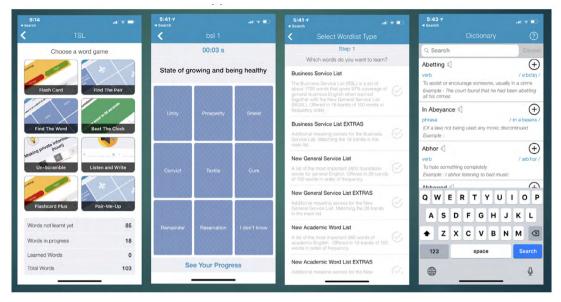
Figure 4
Screenshot of the NGSL Builder App



As a side note, I have also created free apps for the original GLS and AWL word lists as well. All of the above apps can be downloaded from the iOS and Android app stores or also accessed from our dedicated web page here (http://www.newgeneralservicelist.org/ngslnawl-iphone-apps)

More recently, Rob Waring and I have released a more advanced learning app called Word-Learner. Like NGSL Builder, Word-Learner also uses spaced-repetition algorithms to help improve learning, but also uses principles of gamification to make the learning more fun. In addition to flashcards, the app allows learners to work with their word stacks using flashcards as well as seven other game-like activities, adding a point system to track their progress. Word-Learner also provides free access to our 90,000-word proprietary learner dictionary which gives carefully edited definitions and sample sentences in easy English as well as eight other languages including Japanese. The app contains all NGSL word lists as well as several Cambridge wordlists, the Oxford 3000, SAt and CEFR-J (see Figure 5). It also provides teachers with a learner-management system (LMS) and has the ability to give students placement and progress tests. As with NGSL Builder, the app can be found on both the iOS and Android app stores, or you can get more information from the dedicated app web page here (http://www.newgeneralservicelist.org/ngslnawl-iphone-apps).

Figure 5
Screenshot of the Word-Learner app



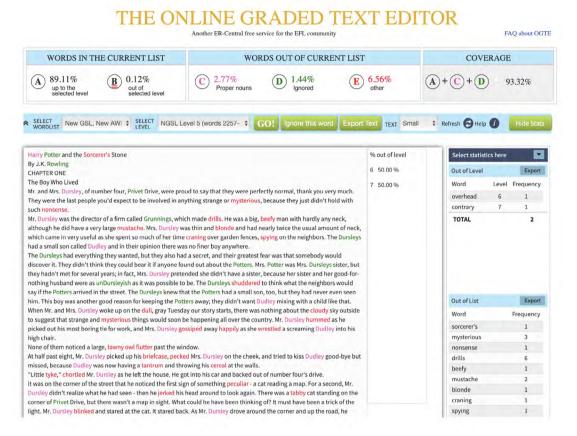
Text Analysis Tools

One of the important principles of doing graded, extensive reading or listening with your students is to make sure they are getting *Comprehensible Input* at their *i*+1 level (Krashen & Terrell, 1983; Krashen, 1985). Many researchers have quantified this *i*+1 level to be the point where students know at least 95-98% of the words on the page (Laufer, 1992; Nation, 2000). One of the main purposes of the NGSL Project is to get students to this level as quickly as possible. Our word lists and learning tools are there to help students to master the highest frequency words systematically and efficiently. But what about the materials or content side of the equation? How does a teacher decide if authentic reading or listening materials are at an appropriate level for their students? How do they go about modifying and simplifying authentic materials to the level of their students? How do they create or write original materials at the students' level? This is the main purpose of the free Online Graded Text Editor Tool (OGTE) (Browne & Waring, 2015), which can be accessed from http://www.er-central.com/ogte/.

With OGTE, users can choose one of our word lists to see how much coverage it provides of the text you want to use with your students. Color coding helps to make the output easier to understand. For example, in Figure 6 below, it is clear that knowing the NGSL would provide 93.32% coverage for the first chapter of *Harry Potter*. Words in black are the NGSL words with pink words being proper nouns – that can be ignored since students usually do not have difficulty with place and people names – and words in red being the off-list words that are potentially difficult for the students.

Figure 6

Screenshot of the NGSL Coverage for *Harry Potter* Using OGTE Tool



The tool allows teachers to make judgments about the suitability of a text for their students (if they know the NGSL, *Harry Potter* is fairly close to being at their *i*+1 level), and also can help teachers to be able to quickly simplify texts that are too difficult for their students. In the above text, if a user wanted to get it closer to the 95–98% threshold you could try removing a few difficult words, for example *mysterious* or *beefy*, or replacing difficult words for simpler ones: for example, replacing *craning* with *looking*.

In addition to our own OGTE tool, we have made our NGSL wordlists available for other similar tools such as the VocabProfile tool by Tom Cobb (https://www.lextutor.ca/vp/comp/), or AntWordProfiler by Laurence Anthony (www.laurenceanthony.net/software/antwordprofiler/).

Conclusion

Michael West began work on the original GSL in 1936 and did not publish his final version of the list for 17 years until 1953. The first version of the NGSL was published in 2013. In the ensuing 7 years the NGSL list has been updated and improved several times,

published six additional lists, and a growing multitude of online tools to better utilize these lists in and out of the classroom, in research and in content creation. We figure that gives us at least another 10 years to work out the kinks in the various parts of the NGSL Project. Our lists and tools are imperfect but we have made them all open-source and free, and it is our strong intention to continue to publish additional lists and tools while doing our best to improve the existing ones, all with the overriding goal of making the lives of EFL students, teachers, researchers and content creators a little better.

References

- Bennett, P., & Stoeckel, T. (2013). Developing equivalent forms of a test of general and academic vocabulary. In N. Sonda & A. Krause (Eds.), *JALT2012 conference proceedings*. JALT.
- Browne, C. (2013). The New General Service List: Celebrating 60 years of vocabulary learning. *The Language Teacher*, 37(4), 13–15.
- Browne, C., & Culligan, B. (2013). The New General Service List Spoken. http://www.newgeneralservicelist.org/ngsls.
- Browne, C., & Culligan, B. (2015a). TOEIC Service List. http://www.newgeneralservicelist.org/toeic-list.
- Browne, C., & Culligan, B. (2015b). Business Service List. http://www.newgeneralservicelist.org/bsl-business-service-list.
- Browne, C., & Culligan, B. (2020a). The Fitness English List. http://www.newgeneralservicelist.org/fitness-english-list.
- Browne, C., & Culligan, B. (2020b). The New Dolch List. http://www.newgeneralservicelist.org/new-dolch-list.
- Browne, C., & Waring, R. (2015). The Online Graded Text Editor. http://www.er-central.com/ogte/.
- Browne, C., Culligan, B., & Phillips, J. (2013). New General Service List. http://www.newgeneralservicelist.org/nawl-new-academic-word-list.
- Childs, M. (1995). Good and bad uses of TOEIC by Japanese companies. In Brown & Yamashita (Eds.), *Language testing in Japan* (pp. 66–75). JALT.
- Coady, J. (1993). Research on ESL/EFL vocabulary acquisition: Putting it in context. In T. Huckin, M. Haynes, & J. Coady (Eds.), *Second language reading and vocabulary learning*, (pp. 3–23), Ablex.
- Coxhead, A. (2000). A new academic word list. *TESOL Quarterly*, 34(2), 213–238. Dolch, E.W. (1936). A basic sight vocabulary. *The Elementary School Journal*, 36(6), 456–460.
- Engels, L.K. (1968). The fallacy of word-counts. IRAL, 6(2), 213–231.
- Hirai, M. (2002). Correlations between active skill and passive skill test scores. *Shiken: JALT Testing & Evaluation SIG Newsletter*, 6(3), 2–8.
- Hirsh, D., & Nation, I.S.P. (1992). What vocabulary size is needed to read unsimplified texts for pleasure? *Reading in a Foreign Language*, 8(2), 689–696.
- Iwamoto, M., & Kramer, B. (2020). NGSL Coverage of the SHS Entrance Exam and the National Center Test. *The Language Teacher*, 44(5), 3-7.

- Krashen, S.D. (1985). The input hypothesis: Issues and implications. Longman.
- Krashen, S.D., & Terrell, T.D. (1983). *The natural approach: Language acquisition in the classroom.* Prentice Hall Europe.
- Laufer, B. (1989). What percentage of text lexis is essential for comprehension? In C. Lauren & M. Nordman (Eds.), *Special language: From humans thinking to thinking machines* (pp. 316-323). Multilingual Matters.
- Laufer, B. (1992). How much lexis is necessary for reading comprehension? In H. Béjoint & P. Arnaud (Eds.), *Vocabulary and applied linguistics* (126–132). Macmillan.
- Nation, P. (2000). *Learning vocabulary in another language*. Cambridge University Press.
- Nation, I.S.P., & Beglar, D. (2007). A vocabulary size test. *The Language Teacher*, 31(7), 9^{-13} .
- Stoeckel T., & Bennett, P. (2015). A test of the New General Service List. *Vocabulary Learning and Instruction*, 4(1), 18.
- West, M. (1953). A General Service List of English Words. Longman, Green, and Co.

Author's Bio

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18 Invited Chapter Browne The NGSL Project