

From Fiction to Fact: Academic Vocabulary Training for Young English Language Learners

Examples of Specialized (Technical) Words within Disciplines

FICTION ¹	#	AM HISTORY ²	#	MATHEMATICS ³	#	LIFE SCIENCE ⁴	#
WESTING	361	MISSOURI	61	DECIMAL	468	ORGANISMS	393
WEXLER	156	WAGONS	41	DECIMALS	330	JPG	365
SYDELLE	135	OREGON	38	TRIANGLE	217	WIKIMEDIA	340
THEO	133	FE	35	INTEGERS	189	BACTERIA	316
OTIS	118	JACKSON	34	DENOMINATOR	176	DNA	278
PULASKI	108	MORMONS	32	TRAVIS	146	FUNGI	188
BAUMBACH	99	KANSAS	29	RECTANGLE	145	ORGANISM	157
HEIRS	90	THOREAU	29	SUBTRACT	107	TRAITS	157
DOUG	88	OHIO	28	SUBTRACTION	106	NUTRIENTS	156
DENTON	55	WHALING	27	ZERO	100	GNU-FDL	152
THEODORAKIS	52	ELLEN	26	GRID	98	MOLECULES	137
MCSOUTHERS	51	MANJIRO	25	TANIA	97	CHROMOSOMES	131
DOORMAN	47	PIONEERS	25	CONGRUENT	95	REPRODUCTION	125
PLUM	42	VIRGINIA	24	NUMERICAL	88	MAMMALS	121
BARNEY	36	LINCOLN	23	NUMERATOR	87	REPRODUCTIVE	120
HEIR	35	ABOLITIONISTS	22	UNDERLINE	87	MEMBRANE	119
NORTHROP	35	BOWDITCH	22	PARALLELOGRAM	84	DIGESTIVE	118
MADAME	33	SALEM	22	MEDIAN	81	PATHOGENS	114
SHIN	32	EMERSON	21	DENOMINATORS	77	DIOXIDE	113
WINDKLOPPPEL	31	POLK	20	ISAAC	77	CC-BY-SA	112
INTERN	28	FORT	19	PERCENTS	76	PROTISTS	105
DRESSMAKER	24	NATHANIEL	19	MARC	75	RESPIRATORY	104
CRUTCH	23	TELEGRAPH	19	INTEGER	74	PREY	95
WINDSOR	23	JEFFERSON	18	REAL-WORLD	74	ECOSYSTEM	94
SIKES	21	MELVILLE	18	HOWSTUFFWORKS	68	IMMUNE	89
DUMB	17	OBERLIN	18	HUNDREDTHS	66	CARDIOVASCULAR	88
BABA	16	PHILADELPHIA	18	PERIMETER	65	CHROMOSOME	86
BRAID	16	PONY	18	CYLINDER	59	DARWIN	85
ALICE	15	ANDREW	17	LARRY	56	PHOTOSYNTHESIS	85
CORPSE	15	JULIA	17	POLYGON	56	LYMPH	83
ERICA	15	LOUIS	17	CIRCUMFERENCE	54	RESPIRATION	81
ROSALIE	15	TH-CENTURY	17	PARENTHESES	54	CC-BY	79
BERTHE	14	CALHOUN	16	KYLE	53	NUCLEUS	79
FIREWORKS	13	CINQUE	16	ISABELLE	51	FOSSIL	77
FLASK	13	FRONTIER	16	DILEMMA	49	ALLELE	76
RUG	13	LUCY	16	ANDERSEN	47	AMINO	74
SNOWBOUND	13	PEALE	16	SINGLE-VARIABLE	44	OFFSPRING	72
WESTINGTOWN	12	STANTON	16	GCF	43	BIOLOGY	68
GRACIE	11	ABRAHAM	15	SUBTRACTING	43	AQUATIC	67
PODIATRIST	11	MORSE	15	INVERSE	42	DOMINANT	65
CRUTCHES	10	ADAMS	14	VERTEX	41	ARCHAEA	64
LIMPED	10	DESTINY	14	QUOTIENT	40	VERTEBRATES	63
MA	10	EXPEDITION	14	HSW	39	ATP	62
RECEIPT	10	HOUSTON	14	CUBES	37	ENZYMES	62
SUSPICIOUS	10	ILLINOIS	14	DIVISOR	37	EUKARYOTIC	62
THIEF	10	OXEN	14	JONAH	37	GLUCOSE	62
WPP	10	SIERRA	14	QUADRILATERAL	37	NITROGEN	62
CHIN	9	SUTTER	14	RECTANGULAR	36	CELLULAR	61
DUMMY	9	ABOLITIONIST	13	RENAME	36	FLICKR	60
EASTMAN	9	ANTISLAVERY	13	KEVIN	35	SKELETAL	60
HALLOWEEN	9	BUREN	13	POLYGONS	35	DIABETES	59
TAPESTRY	9	ANNA	12	MATHPLAYGROUND	34	TERRESTRIAL	59
UTTERED	9	BLUBBER	12	BOX-AND-WHISKER	33	TRAIT	59
DISGUISE	8	CADY	12	PROTRACTOR	33	UTERUS	59
FLUNG	8	CATLIN	12	RECTANGLES	33	ALLELES	58
GOWN	8	CROCKETT	12	STEM-AND-LEAF	33	HOMEOSTASIS	58
HEIRESS	8	NEVADA	12	ZEROS	33	INTESTINE	58
JIMMY	8	OVERLAND	12	ALGEBRAIC	32	PHYLUM	58
LIMP	8	SECESSION	12	DIVISIBLE	32	PNG	58

Adapted from Gardner (2013, pp. 72-73) 1 = *The Westing Game* (Raskin, 1978); 2 = *A History of the US: Liberty for All* (Book 5) (Hakim, 1994); 3 = CK-12 Middle School Math—Grade 6 (Brockett, et al., 2010); 4 = CK-12—Life Science: Honors for Middle School (Brainard, et al., 2011)

Examples of Core English Words within Disciplines

FICTION	#	AM HISTORY	#	MATHEMATICS	#	LIFE SCIENCE	#
APARTMENT	56	SLAVE	99	FRACTIONS	408	ORGANISMS	393
TOWERS	53	SLAVERY	99	MULTIPLICATION	172	COMMONS	796
MURDERER	49	INDIANS	69	SIMPLIFY	135	DOMAIN	342
BOMB	25	SLAVES	55	OPERATIONS	110	ORGANS	266
STARED	25	SPANISH	32	ESTIMATION	106	OXYGEN	207
BOMBER	24	SAILORS	26	ROUNDING	92	EVOLUTION	192
ELEVATOR	21	COMPROMISE	24	SQ	71	HUMANS	167
HURRIED	13	SETTLERS	23	VIDEOS	68	FOODS	149
LEANED	13	INDEPENDENCE	23	GRAPHS	60	CYCLE	134
STUPID	12	MEXICANS	22	REWRITE	58	GENETIC	126
NODDED	12	BLACKS	21	PM	53	PROTEIN	124
STARING	11	CLAY	20	DISCOUNT	50	PROTEINS	124
WINDY	10	FOUGHT	19	ASKS	46	BONE	124
REMARKED	10	TERRITORIES	19	MULTIPLES	44	GENE	116
SHOUTING	10	DECLARATION	17	COORDINATES	42	GOV	108
VICTIM	10	ARTISTS	16	TENTHS	40	STRUCTURES	104
ATTORNEY	10	CHURCH	16	SLICES	36	ORGAN	102
DRIVEWAY	9	RAILROADS	16	THOUSANDTHS	35	SOURCES	99
PAUSED	9	MINERS	16	SUBSTITUTE	34	SELECTION	92
BET	8	CREW	15	CORRESPONDING	32	GENES	90
CORPORATION	8	TRADERS	14	SCORE	30	SUMMARY	90
CLEARED	7	TRAINS	12	WHOLES	30	PRESSURE	87
BOMBS	7	CIVIL	12	ESTIMATING	30	OBJECTIVES	85
ENGAGEMENT	7	SOUTHERNERS	12	PINTS	27	SUPPLEMENTAL	85
PARTNERS	7	CONSTITUTION	12	SIMPLIFYING	26	CHEMICALS	83
DECORATOR	7	DEMOCRACY	12	DISTRIBUTIVE	25	THEORY	82
MT	7	SAIL	12	SUPPLEMENTARY	24	INTERNAL	81
REFINE	7	SENATE	12	DEFINITELY	23	BEHAVIORS	81
TWIN	7	OWNERS	11	MILLILITERS	23	ACIDS	78
ANYHOW	6	POEM	11	PERCENTAGES	23	VIRUS	77
APPOINTMENT	6	LIBERTY	11	PLOTS	22	HYPOTHESIS	72
CHAIRMAN	6	LABOR	10	KILOMETER	21	DRUG	70
MESS	6	MARCH	10	CENTIMETER	18	POPULATIONS	69
SKIES	6	AFRICANS	10	DIMENSION	16	DISCUSSED	66
CANDLE	6	POEMS	10	FORMULAS	16	PHOTOS	62
CHEER	6	MOUNT	10	TRANSFORMATIONS	15	SUBSTANCES	60
DOORWAY	6	PASSENGERS	10	ASSOCIATIVE	14	ADAPTATIONS	59
GHOSTS	6	FREED	9	OPPOSITES	14	SEXUAL	55
MEDAL	6	HAPPINESS	9	EQUIVALENCE	14	TRANSPORT	54
PATTED	6	PRESIDENTS	9	PENNIES	14	WASTES	53
CHILDISH	5	MILLS	9	ADOPTION	13	VIRUSES	53
EXPECTING	5	MISSIONS	9	CALCULATING	13	ENVIRONMENTAL	53
GEE	5	BANKS	8	OPTIONS	13	ENVIRONMENTS	52
LAUGHING	5	DEMOCRATIC	8	THEATER	13	ATMOSPHERE	52
REMAINED	5	HEADING	8	PHRASES	13	MARINE	52
SHHH	5	LEADER	8	ABSOLUTE	12	MAINTAIN	52
TELEPHONE	5	BELONGED	8	SIDED	12	CONCENTRATION	51
APARTMENTS	5	CAMPED	8	SQUARED	12	EFFECTS	51
FRAMED	5	CIVILIZATION	8	SHADED	12	BIOLOGICAL	48
INVESTIGATOR	5	PORTRAIT	8	FRACTIONAL	11	ADAPTED	48
RESERVATIONS	5	BOATS	7	GRAPHED	11	DETECT	46
WHEELED	5	MINISTER	7	INTERVAL	11	EVOLVED	44
CONFESS	5	MINISTERS	7	EIGHTHS	10	GLOBAL	44
DISPOSABLE	5	SETTLE	7	SPENDING	10	MALES	44
PIN	5	RIDERS	7	COMPATIBLE	10	DIVERSITY	44
SQUEEZED	5	DECK	7	CLASSROOM	9	GENETICS	44
CARD	4	FLAG	7	GALLON	9	CONTROLS	44
DADDY	4	SAILING	7	REORDER	9	DISORDERS	43
RADIO	4	TRAPPERS	7	SIMPLIFIES	9	FUELS	43
SLIGHT	4	WEALTHY	7	SURVEYS	9	CONTRACT	42
UNLOCKED	4	CATCHERS	6	MULTIPLIER	9	FATS	41
YOUNGSTER	4	FAIRNESS	6	SPECIFIED	9	TUBE	41
APOLOGIZED	4	HISTORIAN	6	TILE	9	PRODUCING	41

Adapted from Gardner (2013, pp. 76)

Examples of Frequent Phrases within Disciplines

FICTION	AM HISTORY	MATHEMATICS	LIFE SCIENCE
<p>2-WORD PHRASES OTIS AMBER 97 SAM WESTING 92 FLORA BAUMBACH 72 SYDELLE PULASKI 71 JUDGE FORD 66 MR HOO 65 SUNSET TOWERS 52 WESTING HOUSE 48 DENTON DEERE 45 GRACE WEXLER 35 BARNEY NORTHRUP 33 COFFEE SHOP 25 JAKE WEXLER 25 WESTING PAPER 25 MR MCSOUTHERS 24 ALL RIGHT 23 DOUG HOO 23 THANK YOU 23 DELIVERY BOY 22 GRACE WINDSOR 22 MRS WEXLER 22 WINDSOR WEXLER 22 ED PLUM 20 UNCLE SAM 17 MRS WESTING 16 PAPER PRODUCTS 16 SANDY MCSOUTHERS 16 STOCK MARKET 16 OF COURSE 15 TURTLE WEXLER 15 BERTHE ERICA 14 MS PULASKI 14 CLEANING WOMAN 13 ERICA CROW 13 MR WESTING 13 MRS BAUMBACH 13 TRACK MEET 12 ANGELA WEXLER 11 LOOK AT 11 ORIENTAL RUG 11 PARKING LOT 11 SOUP KITCHEN 11 TEN THOUSAND 11 A FEW 10 GAME ROOM 10 VIOLET WESTING 10 WESTING GAME 10 FRENCH DOORS 6 LOOKING FOR 6 STARING AT 6 BACK IN 5 DOWN ON 5 HAND OVER 5 GET AWAY 4 GET BACK 4 HELD UP 4</p> <p>3-WORD PHRASES SAMUEL W WESTING 26 GRACE WINDSOR WEXLER 22 WESTING PAPER PRODUCTS 16 BERTHE ERICA CROW 13 I DON'T KNOW 11 TEN THOUSAND DOLLARS 11</p>	<p>2-WORD PHRASES UNITED STATES 90 NEW YORK 49 SAN FRANCISCO 22 MOUNTAIN MEN 21 THE UNION 21 PONY EXPRESS 18 NEW ENGLAND 17 ST LOUIS 17 YEARS LATER 17 SUPREME COURT 16 ABRAHAM LINCOLN 15 NEW MEXICO 15 A LOT 14 AS WELL 14 ROCK ISLAND 14 SALT LAKE 14 MISSOURI COMPROMISE 13 ANDREW JACKSON 12 WAGON TRAIN 12 WOMEN'S RIGHTS 12 NATIVE AMERICANS 11 SANTA ANNA 11 SOUTH PASS 11 CIVIL WAR 10 FREE STATES 10 PACIFIC OCEAN 10 PRESIDENT POLK 10 SLAVE STATE 10 MANIFEST DESTINY 9 SAM HOUSTON 9 WHITE PEOPLE 9 DRED SCOTT 8 FREE STATE 8 GEORGE WASHINGTON 8 NEW ORLEANS 8 RUN AWAY 8 BRIGHAM YOUNG 7 CAPE HORN 7 HERMAN MELVILLE 7 IOWA CITY 7 JAMES BUCHANAN 7 JEDEDIAH SMITH 7 SENECA FALLS 7 SLAVE OWNERS 7 SOUTH AMERICA 7 UNDERGROUND RAILROAD 7 CLIPPER SHIPS 6 KANSAS-NEBRASKA ACT 6 NATHANIEL BOWDITCH 6 PIKES PEAK 6 PUBLIC SCHOOLS 6 ROCKY MOUNTAINS 6 SIERRA NEVADA 6 SPERM WHALE 6 STEPHEN DOUGLAS 6 WALT WHITMAN 6</p> <p>3-WORD PHRASES SANTA FE TRAIL 11 GREAT SALT LAKE 10 ELIZABETH CADY STANTON 8 FUGITIVE SLAVE LAW 8 HENRY DAVID THOREAU 8 AS MUCH AS 7 AS SOON AS 7 BOYS AND GIRLS 7 RALPH WALDO EMERSON 7 THE WHITE HOUSE 7 DECLARATION OF INDEPENDENCE 6 JAMES K POLK 6 LEWIS AND CLARK 6 JOHN JAMES AUDUBON 5</p>	<p>2-WORD PHRASES LOOK AT 478 FIGURE OUT 368 HOW MANY 306 HOW MUCH 170 THINK ABOUT 151 WHOLE NUMBERS 135 EQUAL TO 129 REAL LIFE 126 MIXED NUMBERS 124 WHOLE NUMBER 122 MIXED NUMBER 109 DECIMAL POINT 104 PRACTICE DIRECTIONS 95 TEACHING TIME 94 ICE CREAM 91 TECHNOLOGY INTEGRATION 87 MENTAL MATH 75 PLACE VALUE 73 LESS THAN 72 SURFACE AREA 71 NUMBER LINE 66 COORDINATE GRID 65 WORK ON 65 GREATER THAN 64 LOOKING AT 59 UNCLE LARRY 56 CIRCLE GRAPH 55 SIMPLEST FORM 54 COMMON DENOMINATOR 52 MORE THAN 52 WORKING ON 52 CUSTOMARY UNITS 50 ACCORDING TO 49 SIXTH GRADE 48 MRS ANDERSEN 47 REAL-WORLD PROBLEMS 47 DIFFERENCE BETWEEN 44 DIVIDED BY 40 FINAL ANSWER 40 COMMON FACTOR 36 IMPROPER FRACTION 36 COMMON MULTIPLE 35 AMUSEMENT PARK 33 STEM-AND-LEAF PLOT 31 NUMERICAL EXPRESSION 30 ROLLER COASTER 27 BOX-AND-WHISKER PLOT 25 CIRCLE GRAPHS 25 DISTRIBUTIVE PROPERTY 25 DIVIDE BY 25 INVERSE OPERATION 24 MULTIPLICATION PROBLEM 24 NEW YORK 24 RECTANGULAR PRISM 24 COMMON MULTIPLES 18 PRIME FACTORIZATION 18</p> <p>3 WORD PHRASES CHECK YOUR WORK 172 A FEW MINUTES 125 ON YOUR OWN 116 TIME TO PRACTICE 103 REAL LIFE EXAMPLE 99 SUMS AND DIFFERENCES 41 DOUBLE BAR GRAPH 35 FRONT END ESTIMATION 35 GREATEST COMMON FACTOR 33 LEAST COMMON MULTIPLE 33 ADDITION AND SUBTRACTION 30 LOWEST COMMON DENOMINATOR 27 MULTIPLICATION AND DIVISION 22 READ AND UNDERSTAND 22</p>	<p>2-WORD PHRASES SUCH AS 411 FOR EXAMPLE 267 PUBLIC DOMAIN 247 WIKI IMAGE 236 WIKI FILE 203 NERVOUS SYSTEM 154 BLOOD CELLS 114 CARBON DIOXIDE 112 LESSON OBJECTIVES 85 LESSON SUMMARY 85 REVIEW QUESTIONS 85 READING SUPPLEMENTAL 83 BLOOD VESSELS 81 DIGESTIVE SYSTEM 69 NATURAL SELECTION 68 IMMUNE SYSTEM 67 CARDIOVASCULAR SYSTEM 60 LIVING THINGS 57 AMINO ACIDS 56 RESPIRATORY SYSTEM 55 CELLULAR RESPIRATION 52 REPRODUCTIVE SYSTEM 49 BLOOD PRESSURE 38 LIVING ORGANISMS 38 CELL DIVISION 36 EUKARYOTIC CELLS 36 LOOK AT 36 THINK ABOUT 36 AIR POLLUTION 35 WATER POLLUTION 35 NERVE IMPULSES 31 SEEDLESS PLANTS 31 SMALL INTESTINE 30 BREAK DOWN 29 EXCRETORY SYSTEM 28 UNITED STATES 28 BROKEN DOWN 27 LYMPHATIC SYSTEM 27 ORGAN SYSTEMS 27 SKELETAL SYSTEM 27 HEART DISEASE 26 SEXUAL REPRODUCTION 26 CELL MEMBRANE 25 LARGE INTESTINE 25 NATURAL RESOURCES 25 LYMPH VESSELS 24 PLASMA MEMBRANE 24 REPRODUCTIVE ORGANS 24 ASEXUAL REPRODUCTION 23 BONE MARROW 23 CARDIAC MUSCLE 23 INTERNAL ORGANS 23 CONNECTIVE TISSUE 22 SCIENTIFIC METHOD 22 CIRCULATORY SYSTEM 21 OXYGEN-RICH BLOOD 21</p> <p>3 WORD PHRASES PUBLIC DOMAIN ## 139 SHOWN IN FIGURE 124 DO YOU THINK 116 CHECK YOUR UNDERSTANDING 85 AS WELL AS 54 WHITE BLOOD CELLS 48 RED BLOOD CELLS 47 AS A RESULT 43 IN ORDER TO 36 BE ABLE TO 30 THEORY OF EVOLUTION 20 FEMALE REPRODUCTIVE SYSTEM 12 MALE REPRODUCTIVE SYSTEM 12 COMPARE AND CONTRAST 11</p>

Adapted from Gardner (2013, pp. 78-79)

The Word *Mummy* in Narrative (Fiction) and Expository (Informational) Texts

Narrative Contexts	Expository Contexts
<p><u>The Mummy, the Will, and the Crypt</u> (Bellairs, 1983)</p> <p>1. “The young man paused and grinned unpleasantly. ‘Do you know what a mummy looks like after it’s been unwrapped? Just a dried brown husk that used to be a human being, with holes for eyes?’” [emphasis added]</p> <p>2. “The other was stretched out, and his hand was layed flat on the floor. It was brown and withered, like the hand of a mummy.” [emphasis added]</p> <p>3. “A figure with hollow mummy eyes and a withered mummy face and clawlike mummy hands. Moving with an awful, tottering, unsteady gait, it came toward him.” [emphases added]</p> <p><u>The Vandemark Mummy</u> (Voight, 1991)</p> <p>4. “Phineas looked across the table, across the mummy’s face, to his father. Mr. Hall stared down at the wrapped figure, and at the portrait face that was held in place by wrappings, and then back down the length of the mummy to its feet, where Althea stood staring.” [emphases added]</p> <p>5. “He wasn’t sure he exactly understood that now, but he felt as if this ancient mummy stood for something truer than . . . all the money he could imagine winning in the lottery, truer than Donald Trump, truer even than the threat of nuclear war and nuclear accidents, AIDS, or the waste crisis.” [emphases added]</p> <p>6. “‘The Collection, as you will find, is a hodgepodge. There will be some pleasant surprises for you, or so I like to think. The mummy, which is its centerpiece, has a certain wistful appeal, being from the Roman era.’” [emphasis added]</p>	<p><u>Mummies & Their Mysteries</u> (Wilcox, 1993)</p> <p>7. “A mummy is the body of a human or animal in which some of the soft tissues (skin, muscles, or organs) did not decay after death. This makes a mummy different from a skeleton or a fossil.” [emphases added]</p> <p>8. “Drying isn’t the only way to turn a body into a mummy. Taking away all air from around the body will stop decay, since bacteria and fungi need air as well as water to live.” [emphasis added]</p> <p>9. “When the word mummy was first used in the English language in the early 1400s, it did not mean a body as it does now. Instead, it was the name of a medicine. Mummy comes from mumiya, an Arabic word for bitumen, a sticky oil now used to make roads.” [emphasis added]</p> <p><u>Tales Mummies Tell</u> (Lauer, 1985)</p> <p>10. “The ground froze and stayed frozen, except for the top few inches, which thawed each summer. In this natural deep freeze, the body of the baby mammoth was preserved for thousands of years. It became a mummy, which is the term now used for any well-preserved body, whether animal or human.” [emphasis added]</p> <p>11. “To find the age of the mummy, scientists made use of a built-in atomic clock. This is how the clock works: Certain kinds of atoms are radioactive they keep breaking down by giving off tiny parts of themselves. Among these atoms are those of carbon 14, which is a radioactive variety of carbon.” [emphasis added]</p> <p>12. “Copper Man is a South American mummy that formed naturally with the help of dry air and salts. This mummy was once a copper miner who lived and worked around A.D. 800 in the Atacama Desert of northern Chile.” [emphasis added]</p>

Adapted from Gardner (2004, p. 23) and Gardner (2013, p. 99)

Handout Sources:

- Cunningham, P.M. (1998). The multisyllabic word dilemma: Helping students build meaning, spell, and read “big” words. *Reading and Writing Quarterly: Overcoming Learning Difficulties*, 14, 189-218.
- Gardner, D. (2013). *Exploring Vocabulary: Language in Action*. London: Routledge
- Gardner, D. (2004). Vocabulary input through extensive reading: A comparison of words found in children’s narrative and expository reading materials. *Applied Linguistics* 25(1), 1-37.

Practical Vocabulary Training Decisions for Teachers of ELLs in Academic Settings

1. Vocabulary training should benefit both ELLs and native English speakers in the classroom.
2. Vocabulary training should address words, word parts, and phrases with high utility = ***Big Bang for the Buck***.
 - A. Frequently used Greek and Latin roots and affixes that appear in many words in the content areas of education.

https://en.wikipedia.org/wiki/List_of_Greek_and_Latin_roots_in_English (one of many lists available)

<http://quizlet.com>
 - B. Academic Vocabulary List (AVL): <http://www.wordandphrase.info/academic/>
 - C. Content words and phrases that appear several times in the texts and/or topics that learners are required to read now or in the near future.
 - D. Words and phrases that are typically found in task instructions (*Answer the following question; Write a summary of, etc.*)
3. Design a curriculum to maximize the recycling of a smaller group of content words at one time, and provide ample practice with these smaller groups of words
 - A. Tight themes in the content areas
 - *Mummies and Bone Detectives* instead of *Mysteries*
 - *The Gold Rush* and *The Oregon Trail* instead of *Westward Movement*
 - *Bees* and *Butterflies* instead of *Insects*
 - B. Base the curriculum on informational texts, with theme-related fiction used to enrich and build fluency with high frequency words.
4. Find and use informational texts of varying difficulty levels that address the same content-area themes and contain some of the same vocabulary terms so that ELLs and struggling L1 readers can have better success at reading academic text, while staying on topic with the rest of the class.
5. Design a curriculum that allows words to be experienced in all four modalities (listening, speaking, reading, writing), preferably at or near the same time.
6. Approach vocabulary training with the aim of helping your ELLs become autonomous word learners.
7. Spend ample class time on direct word study, looking at words, word parts, and phrases from actual texts and tasks used in your classroom.
 - A. Morphological awareness raising (Greek & Latin roots, prefixes, suffixes)
 - B. Context dependent meanings of words with many meanings (*run, break, etc.*)
 - C. The phrasal nature of many English vocabulary items:
 - Idioms (*bit off more than we could chew, can't get off first base, etc.*)
 - Phrasal Verbs (*break up, break out, break down, etc.*)
 - Compounds (*cell membrane, carbon dioxide, etc.*)
 - Complex Discourse Markers (*on the other hand, in contrast, for instance, etc.*)
 - Academic Bundles (*The fact that . . . ; The point is . . . ; As a result of . . . , etc.*)
8. If your school has pull-out ELL instruction or private tutoring options, insist that these efforts are correlated with mainstream classroom content, including the vocabulary necessary to succeed in the mainstream setting.

The Nifty Thrifty Fifty

Word	Transferable Prefixes	Transferable Suffixes
antifreeze	anti	
beautiful		ful (y-i)
celebrate		ate
classify		ify
communities	com	es (y-i)
composer	com	er
continuous	con	ous
conversation	con	tion
deodorize	de	ize
different		ent
discovery	dis	y
dishonest	dis	
electricity	e	ity
employee	em	ee
encouragement	en	ment
expensive	ex	ive
forecast	fore	
forgotten		en (double t)
governor		or
happiness		ness (y-i)
hopeless		less
illegal	il	
impossible	im	ible
impression	im	sion
independence	in	ence
international	inter	al
invasion	in	sion
irresponsible	ir	ible
midnight	mid	
misunderstand	mis	
musician		ian
nonliving	non	ing (drop e)
overpower	over	
performance	per	ance
prehistoric	pre	ic
prettier		er (y-i)
rearrange	re	
replacement	re	ment
richest		est
semifinal	semi	
signature		ture
submarine	sub	
supermarkets	super	s
swimming		ing (double m)
transportation	trans	tion
underweight	under	
unfinished	un	ed
unfriendly	un	ly
unpleasant	un	ant
valuable		able (drop e)

Repurposed from Cunningham, 1998, p. 215