

Dictionary Based Learning — The Personal-Best Route to Vocabulary Power, Reading Comprehension, and High Stakes Test Taking Success

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Introduction

WHY THIS BOOKLET WAS WRITTEN. . . . This is a short booklet: but a helpful one, I feel. The motivation behind it can be summed up in two phrases: late bloomers and high stakes testing.

Late bloomers. . . . We all know from direct experience that human being mature at different speeds. Many twelve-year-old girls are taller than twelve-year-old boys who get their full growth later on. Many boys who were too small to make the football team in high school attain varsity-level size and strength in their early twenties.

Intellectually and socially, many young Americans mature more slowly than their classmates in school. Today's C-level student in high school may well become an A-level student on the college level, just as today's university Phi Beta Kappa may well be tomorrow's graduate-study drop out. Whatever human beings are, to come right out with it, they are certainly too unpredictable to justify predictions regarding the ultimate shape of their lives, enough so that it is manifestly silly, not just wounding, for any instructor to say to a student, "You have no talent and no future."

There's plenty of directly accessible evidence for this optimistic view of human potentiality. Right now any of us can check the turnout for a 20th high school reunion against its senior yearbook to see how many high-visibility stars actually show up.

We can also check via the National Center for Educational Statistics any 4-year college's entering freshman enrollment, their 4-year completion rate, and the number of graduating seniors each year. If we do, we'll discover that over half of our baccalaureates, unable to win admission as freshmen, get their degrees through the back door as transfer students from low cost open admission two-year colleges.

Simply put, what's here is driven by a desire to encourage late bloomers and those who think of themselves as such by offering them some practical personal-growth options, especially in connection with using the American dictionary as a learning tool, not just an occasionally consulted reference source.

High stakes testing. . . . Young people have always had to take and pass tests in connection with earning educational credit and degrees. But today test construction and test proctoring have become big business, to the degree that worldwide companies like Pearson Educational Measurement and Thomson Prometric offer hundreds of different tests at hundreds of different locations, domestic and foreign, to aspiring test takers in search of career and academic advancement.

A high stakes test, it should be noted, marches to its own drummer. Our state bar exams, for example, have absolutely no connection with America's multi-layered educational-credit system: elementary, secondary, postsecondary, and graduate. Consequently, as opposed to for-credit courses, these exams can be taken again and again by candidates of any age and background. Far more than high-priced college courses, high stakes tests represent equal opportunity in action for both late bloomers and the precocious, for the persistent as well as the brilliant, for tortoises as well as hares.

By way of illustration, the records of the July 2005 State of California bar exam (available online) indicate that a very expensive academic degree does not

guarantee career success, especially where that success depends upon professional performance and - more and more these days - professional-competence tests. By way of illustration, it's worth noting here that the July 2005 bar exam results in California show first-time pass rates of only 42% and 33% for UC Berkeley (with a cited academic completion rate of 93%) and UCLA (\$90,000 3-year tuition for out-of-state students).

In contrast the Ventura and Santa Barbara Colleges of Law, where tuition is only \$36,000 for 3 years, have pass rates of 44% and 45%, and Concord College of Law (a very low cost correspondence school) has a pass rate of 50%, i.e., 21 successful candidates out of 40. Personal study and personal test scores are what pave the highway of opportunity for Americans today, not academic records in a registrar's computer somewhere.

The common denominator for most of our high stakes tests can be summed up in three words: vocabulary, vocabulary, vocabulary! Anyone who examines library copies of our four pre-professional tests, which call for a total of 16 hours test taking time, will discover that over 8 hours, including writing samples, are devoted to the English vocabulary in one form or another, more than enough to justify the assertion that plenty of personal best time, concentration, and a good dictionary will take a late bloomer much further than sitting in a stuffy classroom discussing the news of the day.

There is of course much more to high stakes test taking than vocabulary questions. Mathematical literacy is essential, and so is a knowledge of basic science, including a knowledge of the basic terminology of whatever field of specialization (medicine, engineering, psychology, etc.) we choose to be tested on. Let's say, then, that Vocabulary Power and Reading Comprehension will get us through the front door of almost any high stakes test, but not much further when it

comes to specialized preparation for specialized subjects and disciplines. . . . But when we're on the outside looking in, that kind of encouragement can mean a great deal to anyone — enough so to justify taking what's here very seriously in personal-best terms.

A note on practicality. . . . Most parents and teachers will agree, I'm sure, that talking about learning can be more complicated than the process itself.

So I feel obliged to point out that I've tried out what's here with many different kinds of learners, ranging from second graders to seventy plus, all of whom were quite comfortable with the learner-helper-dictionary partnership.

As far as dictionaries go, I want to point out that what's here will work with any standard family-size dictionary. Like Tolstoy's happy families, all dictionaries are "lexicographical" in the same way. This is to say that they all cover the same high-frequency 20,000 words and vary only in their coverage of slang, proper names, and technical terminology.

From this point of view, Australia's Macquarie Dictionary will work for Americans just as well as Webster's New World Collegiate Dictionary will work for Australians, and the Oxford English Dictionary will work across the board just as well as American Heritage, Merriam Webster, Random House, or even William Dwight Whitney's New Century Dictionary from many decades back. The only requirements, as in any personal-best program, are those of consistency and optimism.

Practically considered, there's a recognized need today, I feel, for a standard, internationally acceptable dictionary-based vocabulary achievement scale for rating and ranking the difficulty levels of both vocabulary tests and individual test questions. So I hope what's here will strengthen the role of English today —

American, British, Australian, South African, etc. — as an internationalist language and a unifying force in our world economy.

WHAT TO EXPECT FROM THIS BOOKLET. . . . The main concerns of what's here can be summed up in five phrases: personal best learning, definitional literacy, meaning-in-context literacy, dictionary-based learning and testing, and dictionary-based standards for measuring vocabulary difficulty.

Personal best learning. . . . It's apparent that the USA is becoming more and more of a personal best nation. Apart from a few trainers and group sessions here and there, the physical fitness industry serves solitary Americans (“Bowling Alone,” as the Robert Putnam book recently put it). And each of those solitary calorie-burners marches to a personally different drummer as far as when the effort takes place, what form it takes, and how it's measured.

What holds all of these different personal best fitness programs together are three basic elements, sometimes abbreviated as ACT, namely, accurate measurement, crossover impact, and time efficiency. The first of these keeps track of the effort (time, distance, calories, repetitions, etc.), and the second keeps track of how the effort links up with desirable results (weight loss, cardiac improvement, competitive sports improvements, etc.). The third attempts to design programs that will achieve desirable results in a manner that is both convenient and productive.

Right now personal best physical fitness programs are by ACT-standards far ahead of most mental fitness programs. Hence the need for a program like DBL that breaks new low-cost ground in vocabulary learning in the measurement department, especially for personal best learners — very much like using the home dictionary as a “home intellectual gym.”

Multiple-meaning literacy. . . . Many cultural literacy tests ask us to match a description up with the name of the person it describes, as in the Jeopardy-style statement clue, “He was the first president of the United States” — Answer: “Who was George Washington?” Crossword puzzles follow the same pattern in giving us a definition first along with a spelling clue, as in “to take into the mouth and swallow for nourishment” (3 letters) — Answer: EAT. To “go blank on a word” is fundamentally a problem of multiple-meaning literacy, since we “know what we want to say” (a specific meaning) but can’t think of the specific word that matches up with that meaning, especially as represented by a particular definition in a family size dictionary.

Crossword puzzles are splendid tests of multiple-meaning literacy, especially tricky spelling clues like “to absorb or pay for” (3 letters) — Answer: EAT, as listed under definition 6 of the Random House Webster’s College Dictionary and illustrated with the sentence, “The builder had to eat the repairs.” Section One shows how any family dictionary, not just Random House, can be used as a learning tool in improving basic vocabulary power (i.e., definitional literacy) and also as a test-construction tool for measuring how much improvement is taking place. It closes with an illustrative game-style two-participant dialogue for use on any study level, ranging from third grade to pre-professional testing candidate.

Meaning-in-context literacy. . . . Many high-stakes tests pride themselves on measuring high-level reading skills, namely our ability to distinguish between a word’s literal meaning and a less tangible figure-of-speech meaning, as in “What’s eating you?” But high-level test questions in this area have over the years been very, very frustrating to many test takers, especially those who want an

authoritative explanation of why EAT has a literal meaning in “What are you eating?” and a figurative meaning in “What’s eating you?”

Section Three solves this problem by using the dictionary as the source of the phrases and sentences in which the target word appears, as in the question, “Which definition best fits the meaning of EAT in the sentence, “The builder had to eat the repairs”? (a) to take into the mouth and swallow for nourishment,” (b) “to make (a hole, passage, etc.), as by gnawing or corrosion,” (c) “to absorb or pay for.”

It also includes an illustrative two-participant dialogue showing how these authoritative right-or-wrong dictionary based questions can be quickly pulled out of a dictionary for use in an informal learning-review session.

Dictionary-based learning and testing. . . . Sections One and Two both emphasize the role of up-front test construction in vocabulary learning. The success of the Scripps spelling bee, for instance, owes a great deal to the fact that the participants know in advance their target words (usually 800 single-definition words) and the three clues they’ll be given, namely, pronunciation, part-of-speech, and definition, as in “/hal’i toh”sis/. . . noun. . . a condition of having offensive-smelling breath.”

American college-size dictionaries can fairly be called “full-service vocabulary power tools.” Each one of them offers a test designer roughly 70,000 single-word entries, 200,000 definitions, and over 70,000 illustrative phrases or sentences for specific definitions. Consequently, personal-best learners can select their target words FIRST and study their dictionary entries, including etymologies and the sequence-logic of definitions.

After this, much later, it’s a simple matter — as in our two dialogues — to ask a fellow-learner or family member to construct a few “sampling questions”

from the dictionary entries for those target words. As for target-word lists, these are currently available from professional educators, in libraries and on the internet — enough so to serve a wide range of ages, abilities, and interests (medical vocabulary, for example).

More ambitiously, what's here does not rule out large-scale classroom testing or even online testing. But the goal here has been to present a very simple, practical, and above all understandable system, which in itself is certainly a feature that designers of more ambitious programs will welcome and use.

A dictionary-based scale for measuring the difficulty of vocabulary questions.

. . . As matters stand, the New York Times tells us that its crossword puzzles vary in difficulty. But it doesn't specify the degree of variation; nor does it tell us exactly why one specific puzzle — or one puzzle question — is more difficult than another.

The same uncertainly holds today for professionally designed vocabulary questions and tests. . . . We all know the variation is there. But we don't have a tool for measuring that variation across the board in the same way that we can measure variations in body weight, calorie consumption, distance run, and exercise intensity, etc. Sections One and Two both present such a scale, based on the work of George Kingsley Zipf and on key entry features: word-familiarity and definition-sequence.

TO CONCLUDE. . . . I hope the above introduction come across as too heavy handed to some readers — “academic,” in the worst sense of the word. But our mainstream English vocabulary is where we **all** live: second graders and seventy-year-old senior citizens (if their minds stay clear). Ideally it should work for us individually in a productive manner, not just give us trouble and make us feel

inadequate. Linguistically considered, each of us is a late bloomer. So I hope what's here makes sense across the board to Americans of all ages and educational levels.

Whatever civilization is, it's certainly a Big Vocabulary. As indicated by the size of our dictionaries, that's what American civilization has and why it's more than just a "culture." As I said at the outset, this is a short booklet: a small bungalow, not a mansion. But its concerns are large. . . . Useful too, I hope, especially for personal best learners. . . . and encouragingly so. . . .

SECTION ONE. . . . What about the home life of words? — a dictionary-based awareness test for elementary and middle schoolers

Is this country quietly moving toward outright lexiphilia? Right now, according to www.dictionaryproject.org, almost five million (4,873,827) elementary and middle schoolers, with an emphasis upon third graders, have received free family-size dictionaries at the local level from various service organizations, including Rotary, Kiwanis, Verizon, and even the Grange. So why not a new dictionary game to stand up against the temptations of video gaming?

Dear Elementary and Middle Schoolers. . . . By now you've probably learned from experience that reading is a giant guessing game, especially when it comes to deciding what a word means in a particular sentence. Here's a small-scale guessing game which deals exclusively with individual words, those interesting little creatures that fly in and out of our heads before returning to their individual dwelling places in the Land of Word-dom.

Each resident in the Land of Word-dom is different. So your dictionary is bound to treat each one differently, sometimes surprisingly so. Does TREAT, for example, get more lines in your dictionary than INTERESTING? At this point we

can only guess. But once we open up the dictionary we can tell whether we've guessed correctly or not. Even better, we can improve our guessing skills with practice, along with our ability to read with both speed and comprehension.

Guess and grow. . . . Our new dictionary game gives you eleven questions to play with. To make our description simple, we'll use the same target word, namely, QUESTION itself, and present each question via six elements: question number, category (in parentheses), number of points (also in parentheses), specific question-wording, correct answer, and a comment. After this, we'll give you a chance to do some guessing on your own in Appendices One and Two.

The dictionary source we're using is the 2001 Random House Webster's College Dictionary. But any other dictionary will do as long as it covers about 70,000 words and 200,000 definitions (roughly 1,500 pages).

Q1. (headword status).... (2 points).... Does this word (QUESTION) appear as an entry (in boldface type) exactly as spelled (yes or no)?.... Answer: yes....

Comment: If our target word had been "questions," the correct answer would be no. Your family dictionary will list only the basic spelling as a headword, not regularly "inflected" forms like plurals and past tenses. If your target word is an irregular form like RAN (past tense of RUN), its listing will refer you to the full entry for RUN.

Q2. (homographs).... (2 points).... Is this word a homograph (yes or no)?....

Answer: no.... Comment: Homographs (literally "same written form") are words which are spelled the same but differ in origin, and are sometimes even pronounced differently, as in LEAD 1 (the verb) and LEAD 2 (the metal). Your family dictionary will use numerals to distinguish between numerals.

Q3. (syllables). . . . (4 points)... How many syllables does this word have, according to its first listed phonetic transcription (one or two, three, four, more than four)?.... Answer: two.... Comment: A headword’s phonetic transcription appears immediately after it, very much like the entry hall to its home. For QUESTION, the Random House phonetic transcription, /kwes"cheuhn/, indicates that it has two syllables. Some family dictionaries divide the headword itself into syllables; but these indicate where hyphens go in printing, not actual pronunciation.

Q4. (stress). . . . (5 points) Which syllable, if any, gets the most emphasis, or primary stress, in its pronunciation (one, two, three, four, none of these)?.... Answer: one.... Comment: The “double apostrophe” after /kwes/ in the phonetic description of QUESTION tells us it gets the primary stress. One-syllable words like RUN don’t have any primary stress indicated, while four-syllable words like PRONUNCIATION /preuhnun'see ay"sheuhn/ may also have a “secondary stress” indicated with a single apostrophe. . . . Later on you may want to learn how to transcribe phonetically. But for now your natural ability to recognize primary-stress syllables is an important language skill — and well worth practicing.

Q5. (part of speech). . . . (4 points)... What part of speech is first listed for this headword (noun, verb, adjective, other)?.... Answer: noun.... Comment: When we use words in sentences they usually fit into basic categories that we recognize at a glance. Dictionaries list the major ones as abbreviations: n. for Noun, v. for Verb, adj. for adjective, v.t. for Transitive Verb, and v.i. for Intransitive Verb. . . . Later on you may want to learn more about grammatical terms. But for now your ability to guess these five will help your reading comprehension immensely.

Q6. (definitions). . . . (3 points).... How many numbered definitions (1, 2, 3, etc.) appear in the entry for this headword (1 or 2; from 3 to 8; more than 8)?.... Answer: 17.... Comment: Frequently used words, like Swiss army knives, have lots of uses, or definitions. Special purpose words, like PNEUMONIA, are less frequently used and therefore have only one or two definitions. . . . A dictionary usually lists the most frequently used definition at the beginning of an entry. So don't be surprised if a high-number definition strikes you as odd and unfamiliar, as in "to challenge, dispute," which is the 13th definition listed for QUESTION.

Q7. (part-of-speech total). . . . (3 points).... What is the total number of parts of speech listed for this headword (one, two, three or more)?.... Answer: three (n., v.t., and v.i.).... Comment: Frequently used words acquire new part-of-speech uses, not just new meanings (in speech) and new definitions (in the dictionary). . . . Regarding RUN, for example, you're probably quite skillful by now in figuring out the part-of-speech difference between "Nan can run" and "Dan hit a home run."

Q8. (derivation words). . . . (3 points).... What, if any, is the total number of related words (not numbered and usually in boldface print) that appear in the entry for this headword (one or two, three or more)?.... Answer: one or two (QUESTIONER).... Comment: Both Latinate English and Anglo-English can derive new words from existing words by adding suffixes or prefixes, as in the addition of -ER to QUESTION, or even -ATION to DERIVE. Dictionaries list these suffixes and prefixes, including their hyphens, as separate headwords in boldface print.

Q9. (date). . . . (5 points)... What is the first date listed for this headword (before 1000, 1000-1499, 1500-1799, 1800 and after, none listed)?... Answer: 1000-1499... Comment: Random House lists the entry date as 1250-1300. These dates are based upon the date of the document in which the word actually appears, usually as cited in the Oxford English Dictionary (New English Dictionary on Historical Principles) or the more recent Middle English Dictionary (Ann Arbor, Michigan).

Q10. (source). . . . (3 points)... What language is listed as the source for this headword (Old English; Latinate, including Greek; none of these)?... Answer: Latinate... Comment: Like parts of speech, word sources (etymologies) are listed via abbreviations: OE for Old English and many –L and –Gk combinations for Graeco- and Latinate sources: L and Lat. for Latin; ML, LL and NL for Medieval Latin, Late Latin and New Latin; Gk, MGk, and ModGK for Greek, Medieval Greek, and Modern Greek.

It's important to identify the **earliest** listed source, as opposed to intermediate stages like French, Spanish, and Italian. . . . QUESTION, for instance, is etymologized as [1250-1300; (n.) ME questio(u) n, questiun < MF question < L quaestio = quaes-, s. of quaerere to ask]. The directional angles (<) tell us it came into Middle English from a Middle French word which came from a Latin word. . . . In a college dictionary of 70,000 headwords, 10% have Old English sources and 80% have Latinate sources. The remaining 10% come from elsewhere: German, Dutch, Norse, Hindi, American Indian, Arabic, etc.

Q11. (cross references). . . . (4 points). . . How many cross-references (in capital letters) are listed for this headword (one or two, three or more, none)... Answer: one or two (BEG). . . Comment... Cross references link the headword to other

headwords via etymology, prefixes, suffixes, and usage. For vocabulary learners they help to fix headword-definition partnerships firmly in the memory. The cross reference BEG, for example, takes us definition 8 and the phrase “beg the question,” including its special meaning among debaters, “to avoid the issue.”

KEEPING SCORE AND IMPROVING . . . This is a dictionary-based guessing game in which each player, including adults, is equally in the dark. So our scoring system gives players a point for each guessing-choice in a question: two points for a 2-choice question, three points for a 3-choice question, etc. Consequently, our 11 questions add up to a total of 34 points. This means that any score over 17 points indicates a pretty high level of vocabulary awareness — and reading comprehension.

Just as important, our scoring system opens the door to personal best improvement in vocabulary awareness and reading comprehension. Appendix One, for example, presents our eleven questions linked in sequence to eleven headwords from the Pledge of Allegiance, along with a sample test performance by an adult that was corrected via the Random House Webster’s College Dictionary – WordGenius® (CD ROM version).

Appendix Two presents additional eleven-word targets taken from familiar documents: Lincoln’s Gettysburg Address, The Lord’s Prayer, America, the Beautiful, Declaration of Independence, Shakespearean sonnets, etc. . . . There’s no reason why you shouldn’t pull your own targets out of the air on your own. Newspapers, books, conversation, television — these can all provoke your curiosity and self-questioning. . . . Self esteem, too, as you surprise yourself with your personal-best progress!

TO CONCLUDE. . . . For Americans in general, especially elementary and middle schoolers, these eleven questions are very much like a very short travelers guidebook to the Land of Word-dom and the dictionaries that attempt to describe it in detail. But what's here certainly indicate that, invisible or not, the Land of Word-dom is an immensely complicated, very much like the twinkling lights we see from an airplane flying over a large city late at night.

Most of those lights, we know, represent houses and neighborhoods, each of which is connected with other houses and neighborhoods in many different ways, just like a network of telephone or internet connections. A family size dictionary, practically considered, is nothing more than a "tele-word book" with plenty of historical gossip. In addition to basic address information (spelling, pronunciation, part of speech, etc.), a good dictionary also tells us what our word-neighbors do for a living (definitions), where they come from (etymologies), and even who their relatives are (derivations and cross references).

As preschoolers, all we need to know is our home address and phone number. As elementary and middle schoolers, though, we need to know much more: our neighborhood, our city or town, our nation, along with our connectedness to Planet Earth the universe as a whole. More than any book in a city library, a good dictionary (print or CD ROM) opens up that connectedness in a way that we can remember and put to use word by word and definition by definition.

So welcome to the Land of Word-dom. Let's hope our eleven questions open the right doors for you, and that your personal-best vocabulary power grows by leaps and bounds year after year after year.

APPENDIX ONE. . . . Using the eleven-question sequence with eleven different word-targets.

As we've seen, our eleven dictionary-based "guessing questions" can deal with a single target word like QUESTION. But they can also deal one by one with eleven different word targets. By way of illustration, here are eleven headwords taken from the Pledge of Allegiance, each of which is linked to a specific question.

The expression "1-PLEDGE," for example, indicates that our first question applies to PLEDGE, while 2-ALLEGIANCE indicates that our second question applies to ALLEGIANCE, etc. More formally, then, here are our eleven question-word correspondences. . . . 1-PLEDGE, 2-ALLEGIANCE, 3-FLAG, 4-UNITE, 5-STATE, 6-REPUBLIC, 7-STAND, 8-NATION, 9-GOD, 10-INDIVISIBLE, 11-JUSTICE.

By way of showing the whole process at work, here's the author's own guessing performance on these eleven question-word correspondences on Jan.13, 2007). Each guess is then followed by the correct answers and the number of points earned, if any. Random House Webster's College Dictionary – WordGenius® (a CD ROM version) was source used to locate correct answers.

- 1 yes. . . ./ yes (2)
- 2 no. . . ./no (2)
- 3 1 or 2. . . ./1 (4)
- 4 two/2 (5)
- 5 noun. . . ./ noun (4)
- 6 between 3 and 8. . . ./ 4 (3)
- 7 3 or more. . . ./ 3 –vi, vt, n (3)
- 8 3 or more. . . ./2 (0!!!)
- 9 before 1000. . . ./before 900 (5)
- 10 Linate. . . ./Linate (3)
- 11 three or more. . . ./ two (0!!!)

Total score (34-6) 28 points.

COMMENT. . . . I should point out here that I'm a former English teacher and know quite a bit about dictionaries in general. Even so, I feel I was pretty lucky in some of my guesses. I would have been satisfied with anything over twenty points, to tell the truth. . . . I'm not sure how I would have done if all eleven questions had dealt with PLEDGE or if the question-word correspondences had started further down on the word list, as for instance, 1-ALLEGIANCE, 2-FLAG, 3-UNITE, 4-STATE, 5-REPUBLIC, 6-STAND, 7-NATION, 8-GOD, 9-INDIVISIBLE, 10-JUSTICE, 11-PLEDGE.

Remember, though, "Eleven Questions" is simply a dictionary-based guessing game, nothing more. If it opens some doors for elementary schoolers and their families, that's just marvelous. If it doesn't, it can still be a lot of fun — for everyone involved.

APPENDIX TWO. . . . **Practical "Eleven Questions" Formats**

Preliminaries. . . . Practically considered, the most practical questioning format has always been that of the spoken word (*viva voce*, it used to be called).

Appendix One therefore presents our eleven questions in spoken-word form. This means that each answer can immediately be checked in a family dictionary, even an old one. Our basic vocabulary, especially multi-definition words, is still the same as it was for the Merriam Webster 1913 Unabridged Dictionary, which is now in public domain and available online via www.dictionary.com.

For written format or online testing, it's worth noting that each question fits a standard multiple-choice format, and that the quickest way to check answers is via a CD ROM version of our five major family dictionaries: American Heritage College, Merriam-Webster Collegiate, Random House College, Random House Unabridged, and Webster's New World College. Online versions of other

dictionaries (MW Unabridged and Oxford), though more time consuming, can also work well.

Word targets. . . . Any word list will do as a target source, including spelling lists. For flexibility, though, a standard text, song lyric, or poem offers the advantages of familiarity and memorability. By way of illustration here are 11-word target groups, each of which presents so-called “content” words (nouns, verbs, adjectives), as opposed to “helper” words (prepositions, auxiliaries, conjunctions, pronouns, etc.). . . . For convenience, all words are here cited in their headword form.

>**Lincoln’s Gettysburg Address.** . . . 1-FOURSCORE.... 2-YEAR.... 3-FATHER.... 4-BRING.... 5-CONTINENT.... 6-CONCEIVE.... 7-LIBERTY 8-DEDICATE 9-PROPOSITION 10-MAN.... 11-CREATE

>**The Lord’s Prayer.** . . . 1-HEAVEN.... 2-HALLOW.... 3-NAME.... 4-KINGDOM.... 5-COME.... 6-WILL.... 7-DO.... 8-EARTH.... 9-GIVE.... 10-BREAD.... 11-FORGIVE

>**America, The Beautiful.** . . . 1-BEAUTIFUL.... 2-SPACIOUS.... 3-SKY.... 4-AMBER.... 5-WAVE.... 6-GRAIN.... 7-PURPLE.... 8-MOUNTAIN.... 9-MAJESTY.... 10-FRUIT.... 11-PLAIN.

>**On Chapman’s Homer,** by John Keats. . . . 1-TRAVEL.... 2-REALM.... 3-GOLD.... 4-KINGDOMS.... 5-SEE.... 6.... WESTERN.... 7-ISLAND.... 8-BARD.... 9-FEALTY.... 10-BROAD.... 11-EXPANSE.

Eleven questions targeting one word or eleven questions targeting eleven different words — these are the guessing options open to us. And the best part is that we doing our guessing completely in our head if we memorize our 11 question categories via their initials as hh-ss-pd-pdd-sc and their points in the same groupings 22-45-44-335-33. . . . And what’s here simply scratches the surface as far as target words go.

The newspaper, television, school, the speech of your friends and neighbors — your life is filled with word targets flying around you. Why not take aim at a few of them and try your luck with a round or so of ELEVEN QUESTIONS?

SECTION TWO. . . . dictionary-based vocabulary learning and achievement-scale scoring — an encouraging two-player scenario

Good games have interesting scoring systems. Thanks to cumulative scoring, a Monopoly game can last for over a week, and so can a two-player game of Blackjack in which the dealer and player switch roles back and forth. The same is also true of vocabulary learning partnerships that award more points to an 11-letter answer (PHTHIRIASIS) for the queried definition, “crab lice infestation,” than to a 3-letter answer (BED) for “a piece or part forming a foundation or base.”

Crossword puzzles and spelling bees both employ definition-first questions, and spelling bees rely upon dictionary-listed definitions, thereby drawing from a potential question pool of over 200,000 target word-definition questions in an American college-level dictionary. So the only thing new about our mentor-learner vocabulary learning game is its linking of correct answers to points earned to an achievement scale.

The appended dialogue between Mentor and Learner explains how this particular achievement scale works via a sequence of question-answer exchanges,

including partial credit earned by successful guesses based on extra clues. As will be apparent the questions themselves are far easier to construct than the expensive multiple-choice questions currently in use in conventional testing programs. So the approach invites attention by home schoolers, professional tutors, and Americans working on their own — including senior citizens fighting cognitive senility (e.g., going blank on words).

APPENDIX. . . . **a do-it-yourself game for two participants**

Dear participants. . . . This game calls you to take turns playing two roles. One is that of an information provider or MENTOR who uses a dictionary. The other is that of a LEARNER who makes choices and earns points. By way of illustration, here is a sample dialogue, along with explanatory comments in brackets. As you'll see, the game is much like vocabulary games that passengers in an automobile play during a long, long drive. What's new about it is its emphasis upon the dictionary as a question-source and as a basis for determining the difficulty level of specific questions.

MENTOR. . . . Welcome to our game. . . . How many letters do you want your dictionary-listed target word to have? [NB. Hint: words with few letters are usually easier to guess than words with many letters.]

LEARNER. . . . Four letters.

MENTOR. . . . I'll be using the Random House Webster's College Dictionary, 2nd Edition, 2001 (RHC). [NB. Any desk dictionary can be used as long as it's large enough, that is, 1200 pages or more. . . . RHC devotes 1427 A-to-Z pages to headwords and their definitions.]. . . . On what page do you want me to begin

searching for your headword? [NB. A dictionary's entry words or "headwords" customary appear in boldface and in a non-inflected form (singular for nouns, infinitive for verbs).]

LEARNER. . . . Page 202.

MENTOR. . . . Thank you. . . . The first target word meeting your letter requirement that appears on page 202 or thereafter has 15 definitions. . . . Which definition do you want me to give you as a guessing clue?

LEARNER. . . . Definition #1.

[**Note**]. All dictionaries list the most familiar definitions at the beginning of an entry. Definition #1 would therefore be more helpful than Definition#10. . . . On the other hand, Definition #10 gives participants a chance to win more points. Our point-earning formula for each target word is therefore based on an vocabulary achievement scale that has three elements: (L): number of letters plus (DN) definition number) divided as a whole by (TD) total number of definitions.

The result, which indicates the target word's level of difficulty, is then multiplied by 100 to produce the number of points earned via what we call a "vocabulary achievement scale. . . . By way of illustration: A correct target-word answer for Definition#10 would earn 90 points $\{(L4+DN10)/TD15=.90 \times 100=90\}$, while a choice of Definition#1 for the same target word would earn only 33 points $\{(L4+DN1)/15=.33 \times 100=33\}$.]. . . . I know this sounds new and complicated. . . . But what's a game — think of baseball or Monopoly for a minute — without interesting rules?

MENTOR (CONTINUING). . . . Thank you. . . . Here's Definition#1 of your target word: "an open, relatively shallow container of pottery, glass, etc., used esp.

for holding or serving food.” If you want to guess now, answer Yes. If you want to stop answer No. If you want an initial-letter clue, answer Clue.

LEARNER. . . . Yes.

MENTOR. . . . Please spell out your guess letter by letter.

LEARNER. . . . D-I-S-H.

MENTOR. . . . Congratulations! Your correct guess of DISH has earned you 33 points. Do you want to play another hand? Please answer Yes or No.

LEARNER. . . . Yes.

MENTOR. . . . Welcome to a new hand in our game. . . . How many letters do you want your dictionary-listed target word to have?

LEARNER. . . . 5.

MENTOR. . . . On what page do you want me to begin searching for your headword? LEARNER. . . . 410.

MENTOR. . . . Thank you. . . . The first target word meeting your letter requirement that appears on page 410 or thereafter has 15 definitions. . . . Which definition do you want me to give you as a guessing clue?

LEARNER. . . . Definition #10.

MENTOR. . . . Thank you. . . . Here’s Definition#10 of your target word: “to put forward, submit, or register formally: to ***** an objection; to ***** a bid.” If you want to guess now answer Yes. If you want to stop answer No. If you want an initial-letter clue, answer Clue.

LEARNER. . . . Clue.

MENTOR. . . . Thank you. . . . Here's the initialized form of your target word. . . .
E****. . . . If you want to guess now answer Yes. If you want to stop answer No.
If you want a pronunciation clue, answer Clue.

LEARNER. . . . Yes.

MENTOR. . . . Please spell out your guess letter by letter.

LEARNER. . . . E-N-T-E-R.

MENTOR. . . . Congratulations! Your correct guess has earned you 105 points.
[The help of a clue requires that the multiplication factor be reduced from 100 to
70 so that our formula produces a lower number, $\{5+10\}/15=1.5 \times 70=105$]. Do
you want to play another hand? Please answer Yes or No.

LEARNER. . . . Yes.

MENTOR. . . . Welcome to a new hand in our game. . . . How many letters do you
want your dictionary-listed target word to have?

LEARNER. . . . Six letters.

MENTOR. . . . On what page do you want me to begin searching for your
headword? LEARNER. . . . 744.

MENTOR. . . . Thank you. . . . The first target word meeting your letter
requirement that appears on page 744 or thereafter has 3 definitions. . . . Which
definition do you want me to give you as a guessing clue?

LEARNER. . . . 3.

MENTOR. . . . Thank you. . . . Here's Definition#3 of your target word: "a large brightly colored silk or cotton kerchief often used for turbans." If you want to guess now, answer Yes. If you want to stop answer No. If you want an initial-letter clue, answer Clue.

LEARNER. . . . Clue.

MENTOR. . . . Thank you. . . . Here's the initialized form of your target word. . . . M****. . . . If you want to guess now answer Yes. If you want to stop answer No. If you want a pronunciation clue, answer clue.

LEARNER. . . . Clue.

MENTOR. . . . Thank you. The pronunciation of your target word may appear in either spoken form or in phonemic transcription form. The phonemic transcription form of your target word is /mad"reuhs/. If you want to guess now answer yes. If you want to stop answer No.

LEARNER. . . . Yes.

MENTOR. . . . Please spell out your guess letter by letter.

LEARNER. . . . M-A-D-R-U-S.

MENTOR. . . . Sorry. . . . The correct dictionary spelling of your target is

MADRAS. . . . Do you want to play another hand? Please answer Yes or No.

LEARNER. . . . Yes.

MENTOR. . . . Welcome to a new hand in our game. . . . How many letters do you want your dictionary-listed target word to have?

LEARNER. . . . 6.

MENTOR. . . . On what page do you want me to begin searching for your headword? LEARNER. . . . 1015.

MENTOR. . . . Thank you. . . . The first target word meeting your letter requirement that appears on page 1015 or thereafter has 2 definitions. . . . Which definition do you want me to give you as a guessing clue?

LEARNER. . . . 1.

MENTOR. . . . Thank you. . . . Here's Definition#1 of your target word: "any of several large-eared, hopping lagomorphs of the family Leporidae, usu. smaller than the hares and characterized by bearing blind and furless young in nests." If you want to guess now, answer Yes. If you want to stop answer No. If you want an initial-letter clue, answer Clue.

LEARNER. . . . Yes.

MENTOR. . . . Please spell out your guess letter by letter.

LEARNER. . . . R-A-B-B-I-T.

MENTOR. . . . Congratulations! Your correct guess has earned you 300 points. Do you want to play another hand? Please answer Yes or No.

LEARNER. . . . No.

MENTOR. . . . Well done! . . . Your total score is 438. . . . Do you want to make a record of this score?

LEARNER. . . . Yes.

MENTOR. . . . Would you like to switch roles?

LEARNER. . . . Yes.

COMMENT. . . . In this dialogue the target words have been chosen randomly from a college dictionary page by page. But they could just as easily have been chosen from an established word list like the Dolch series, one of the many lists currently available on the internet (www.graduateshotline.com, etc.), or even the 700-word glossary of medical terms (some of them with more than one definition) that appears at the end of the Mayo Clinic Family Health Book.

Needless to say, chosen target words could also have been studied in advance, using whatever mnemonic techniques work for individual learners. Practically considered, the test taking experience by itself will have substantial learning impact, enough so to justify echoing Lewis Carroll's Queen of Hearts. . . . "Test (execution) first, then the studying (trial)!" . . .

At least two learners working together are essential, though. . . . And a lot of fun!

SECTION THREE. . . . Reading comprehension skills and dictionary-based home testing — Samuel Johnson style

Official and quasi-official tests of reading comprehension are increasingly important these days, as indicated by Question 54 from a recent Florida Comprehensive Assessment Test booklet. . . . "In his response to Abigail Adams' letter [it precedes this question] of March 31, 1776, John Adams wrote the following. . . . Your letter was the first intimation that another tribe, more

numerous and powerful than all the rest, were grown discontented. . . . Based on information in Abigail Adams' letter [quoted earlier], what is the "tribe" to which John Adams might be referring? . . . F. ancestors, , , G. . . . husbands. . . . H. ladies. . . . I. tyrants.”

COMMENT. . . . For seventh graders and their parents, multiple meaning questions like these are cognitive nightmares, even for those who can sniff out John's covert sexism and come up with (H) as the officially correct answer. Even for more literal-minded youngsters, to whom a tribe is a tribe is a tribe, the equation of “ladies” with “tribe” may make perfect sense on the surface. But who of us could explain to a literal-minded seventh-grader (many of them are still just that) exactly why this is so? And how on earth could we use a current dictionary to get our point across?

Or in more focused, practical terms, what can parents and teachers do that will help literal-minded young Americans to recognize and comprehend what a multiple-meaning word means in a specific meaning-in-context test question — demonstrably so?

Dictionaries as test question sources. . . . To most Americans, tests in general are quite mysterious. Who designs them? Where do the questions come from? Who decides what the correct answers are? Where do we go to complain? Questions like these are simply out of bounds for our current alphabet soup of high-stakes tests: FCAT, ACT, SAT, GMAT, GRE, LSAT, MCAT, etc.

In contrast, the drivers tests we take in most states are crystal clear, largely because they are explicitly based upon a printed study handbook which in turn is based upon the state vehicle code. Consequently, since test taker know exactly

where the questions come from, they know what to study and how to measure their progress by testing themselves, often with the help of a friend or family member.

Our drivers test analogy invites the construction of FCAT-style meaning-in-context using an American college-size dictionary, especially one that follows Dr. Johnson's practice of presenting short phrases and sentences as illustrative examples of specific meaning-in-context definitions. As we shall see with respect to multi-definition word entries, roughly a third of all definitions are accompanied by such phrases or sentences — enough so to warrant more emphasis upon the American dictionary as both a test-construction tool and a learning tool.

An FCAT-dictionary question comparison. . . . The comparison presented in Appendix One presents a very strong case for tests, paralleling our FCAT example, that use a specific dictionary's phrases or sentences as the basis for meaning-in-context questions. Appendix Two takes this case even further by applying this FCAT-based construction technique to a randomly chosen group of words, namely, those in the first verse of the Star Spangled Banner (LIGHT, PROUD, GLEAM, etc.).

Appendix Two, simply put, uses meaning-in-context phrases and sentences from the dictionary itself, along with dictionary definitions, in questions like the following: “Which of the following dictionary definitions for LIGHT best fits its use in the sentence, “This table lamp won't light”: A. to guide or conduct with a light; B. to become illuminated when switched on; C. to set burning.”

The potential thrift and practicality of this dictionary-based method, incidentally, is indicated by the fact that the average American college-size dictionary (1500 pp., 70,000 headwords, 200,000 definitions) contains at least 80,000 meaning-in-context illustrative phrases or sentences suitable for use by do-it-yourself reading comprehension test designers.

A learner-helper dialogue. . . . Appendix Three moves our case for dictionary-based learning and test construction into a more informal setting, namely, a dialogue between two participants, LEARNER and HELPER, the second of whom uses the family dictionary to select reading comprehension questions at random and to score LEARNER's correct answers on a vocabulary-achievement scale.

Here are the four steps involved. . . . A. Pick an entry word from the family dictionary with a meaning-in-context passage in its entry, B. present the passage accompanied by its definition, C. present at least one other definition, and D. offer LEARNER a choice between those two or more alternatives — that's all there is to this simple do-it-yourself testing process

The simplicity of this process here should not obscure its importance. Test questions like these strike at the very heart of reading and listening comprehension, which is our ability to go beyond the words themselves to comprehend precisely what's in a specific phrase or sentence. Socially considered, it's an ability which varies greatly; not all second graders can explain what's funny about a riddle like “Why do contented cows need cow bells? . . . [answer] Because their horns don't work.”

Nor can all American senior citizens produce satisfactory answers to senile dementia diagnostic questions (CAT scans come later) like “What did Benjamin Franklin mean when he told his friends that they must all hang together if they didn't want to hang separately”? Second grader or seventy-year-old — it's our ability to jump past literal-mindedness that holds our civilization together, especially its laws, its science, its literature, and our national awareness.

The Jon Twing challenge. . . . What's here is not intended as a condemnation of the FCAT or other tests of multiple-meaning awareness (word analogies, synonym-

antonym relationships, etc.). Far from it. Those tests and their designers have recognized the multiple-meaning challenge and taken the first steps toward improving multiple-meaning literacy for Americans of all ages. So I'm fairly sure that what's in these three appendices will be taken as a logical extension of current psychometric practice, and a helpful one.

By way of illustration: Jon Twing, Executive Vice President of Pearson Educational Measurement, has recently called for the adoption of a national standard of educational measurement that will be “transparent, verifiable, and not too complex,” thereby tacitly admitting that what we today call “standardized testing” does not itself have a “standard” for Americans to use in deciding, for example, which spelling bee question is “more difficult” than another, or which crossword puzzle is “more difficult” — New York Times or Los Angeles Times?

What these three appendices do is to answer Jon Twing's call in very explicit terms. The first proposes the American dictionary as our central authority (they're all transparently the same as far as the most frequently used 20,000 words go). The second demonstrates that the American dictionary's resources can be used, verifiably so, as a standard for measuring the relative difficulty of vocabulary questions. The third demonstrates that an American dictionary can be used, simply and effectively, by anyone in his or her home learning program.

English as a foreign language — for everybody! But do Americans actually need to study and test their reading comprehension? The answer can be summed up in one short sentence: ENGLISH IS A FOREIGN LANGUAGE FOR EVERYBODY. Anyone who checks a few dictionary pages at random will quickly discover that only about 10% of the words listed have Old English sources, while 80% of them (largely technical terms) are explicitly identified as coming

from Graeco-Latinate sources, many of them coined in connection with post-1600 scientific progress.

This means that what we can legitimately call “Internationalist Latinate English” is equally difficult (or easy) for everybody on the planet: Americans, Australians, Africans, Arabs, Chinese, East Indians, Pakistanis, etc. It also means that our global economy now requires us to compete linguistically against East Indians and Arabs (immigrants or off shore) who may be far more fluent in ILE than many Americans born and schooled in the USA.

TO CONCLUDE. . . . Dr. Samuel Johnson’s definition of a Lexicographer as “a harmless drudge” has for many years been quoted with amusement. But I feel he was wrong, even back in 1755. If civilization is a Big Vocabulary, a civilized nation most certainly needs authoritative dictionaries as learning tools to guide its speakers, writers, teachers, and test designers. As I see it, Jon Twing of Pearson has clearly stated our need, and I hope what’s here represents a worthwhile step to answering his challenge.

APPENDIX ONE. . . . **Comparison of FCAT “tribe” question format with a dictionary-based “tribe” question format**

FCAT question. . . . Target word: TRIBE. . . . Reason for selection by FCAT test designers: Not available

>**Meaning-in-context passage:** “Your letter was the first intimation that another tribe, more numerous and powerful than all the rest, were grown discontented.” . . .
Passage source: Letter of John Adams to Abigail Adams, March 31, 1776

>**Definition alternatives presented:** F. ancestors, , , G. . . . husbands. . . . H. ladies. . . . I. tyrants.” . . . Source used by FCAT test designers to select definition alternatives: not available

>**Correct answer:** H. ladies.” . . . Reason why FCAT test designers selected H. as the correct answer, as opposed to the selection by a tendentious 7th grader of I. “tyrants” familiar with the anti-feminist tradition in New England (“scolds,” witches, etc.). . . . Not available.

COMMENT. . . . This question presents the test taker with two challenges. The first of these is the short-term memory challenge memory challenge of recalling what was in the letter by Abigail that John Adams is referring to. The second is that of deciding what John means by “tribe.” It’s worth noting here that many reading-comprehension questions in the National Assessment of Educational Progress (NAEP) also call for reading a passage, remembering what it says, and then answering questions about what it means.

For some test takers and their parents, the exclusion of neutral alternatives like “people” might raise difficulties, paralleling the use of SUFFRAGIST for both men and women supporters of women’s rights.

Dictionary-based question. . . . Target word: TRIBE. . . . Reason for selection: The target word is a high-frequency word with a high probability of multiple meanings and illustrative meaning-in-context phrases and sentences.

>**Meaning-in-context passage:** “an outburst against the whole tribe of theoreticians” . . . Passage source: The New Oxford American Dictionary. This

was the only college-size dictionary which listed an illustrative passage for TRIBE, as opposed to American Heritage, Merriam Webster, Random House, and Webster's New World.

>**Definition alternatives presented in sequence:** A. a social class in a traditional society of families or communities; B. (derogatory) a group or class of people or things; C. (in ancient Rome) each of several political divisions; D. (informal) family. . . . Basis for sequence of alternatives: alphabetical.

>**Source of definition alternatives:** New Oxford American Dictionary, under TRIBE, definitions 1, 2, 3, 5 out of seven appearing in the NOAD entry. . . .

>**Correct answer:** D (definition 5). “(derogatory) a group or class of people or things.” . . . Reason for characterizing this answer as “correct.” . . . Answer D is the phrase that the dictionary actually cites under definition 5 for TRIBE. Since this citation can subsequently be check by test takers, this kind of test question has a far higher of verifiable accuracy and authority than questions whose correct answers, rightly or wrongly, come across as production of designer whim.

>**Test question scoring:** The question's achievement-scale rating can be stated as 1.4. . . . Here's how the rating system works. . . . (a) Number of letters (we know TRIBE is more familiar than SERVANT because it has only 5 letters, as opposed to 7). . . . (b) Total number of definitions (we know TRIBE is more familiar than SERVANT because it has a total of 7 definitions, as opposed to just 3. . . . (c) Definition number (we know the 5th definition in an entry is more familiar than the 7th, though less familiar than the 1st (d) Formula — We add a and c and

divide the result by b to produce our rating. For TRIBE our formula, $(5+5)/7$, therefore produces a rating of 1.4.

For SERVANT, assuming the correct answer was definition 3 with the example public servant, our formula, $(5+3)/3$, would produce a rating of 2.7 — a higher level of unfamiliarity and hence a higher rating on our achievement scale. . . . Based on this scale, a correct answer to the SERVANT question would earn a higher score than a correct answer to our TRIBE question.

COMMENT. . . . Every lexicographer, from Samuel Johnson on, is an open target for critics, and so are the dictionaries that lexicographers produce, including the New Oxford American dictionary. But they are, after all, publicly available works whose entries can be quickly checked, so that a test designer who uses a current dictionary as source of both meaning-in-context passages, definition alternatives, and correct answers. The public transparency of this process makes designers of dictionary-based tests far less vulnerable to criticism and charges of bad faith than test designers who say in effect, “We’re the experts, so trust us and — even more important — trust our statistics.”

A NOTE ON TEST-CONSTRUCTION COST. . . . Dictionary-based test questions like these take no more than five minutes to type up, especially if the dictionary is available online or via CD-ROM. . . . Since each college-size dictionary (1500 pp.) on the average contains 70,000 entries and 200,000 definitions, a test designer has — in theory, at least — 70,000 potential meaning-in-context questions to draw from.

Practically considered, 50,000 of the entries (MYOCARDIUM, etc.) have only one or two definitions listed for them. The other 20,000 entries for our more

frequently used words handle the remaining 130,000 definitions, averaging out to about seven definitions per entry, with roughly a third of these containing one or more illustrative meaning-in-context phrases or sentences.

A dictionary-based test designer doesn't have to invent alternative answers, as in the FCAT question-construction approach. . . . Nor does the designer have to do much typing, since the phrase or sentence, along with the definitions, can be highlighted, copied, and pasted via a CD ROM version. Best of all, home learners themselves can use the listed word-entries as study targets before showing up to take a test, including practice tests administered by friends or family members.

To put it more dramatically: The FCAT construction cost per question, including statistical norming, can be fairly stated as at least \$100 per item, as opposed to a two dollars per item cost for dictionary-based items — or absolutely nothing if the learner elects to do his or her own list compiling and dictionary checking.

TO SUM UP. . . . The merits of our dictionary-based learning system (DBL), for both home learners and professional educators for three reasons, can be described with three key adjectives.

DBL is practical. . . . Anyone can use a desk dictionary as a meaning-in-context learning tool. Given a list of target words (there are many available online), anyone can locate their entry form, as with TRIBE, their numbered list of definitions, and a specific definition with a meaning-in-context passage to serve as target. This means any parent or friend can serve as test administrator and record keeper for a learner at any level of difficulty.

DBL is productive. . . . DBL may be a small stream on the home learner level, but it flows directly into the very, very large river of high stakes language skills testing, most of which focuses upon vocabulary power and reading comprehension — including eight hours of the 16 hours devoted to our four major pre-professional tests: GRE, GMAT, LSAT, and MCAT. Important though high school and college grades are, it’s test performance that matters more and more in a career-mobile society, as indicated by the rising status of crossword puzzle literacy.

DBL is public. . . . A college-level American dictionary is a public document that changes very little from decade to decade in its basic 20,000-word multi-definition vocabulary. But our so-called “standardized tests” are creations of the private sector — “standardized tests without standards,” they might be called. It’s inevitable that dictionaries will more and more function as learning-measurement tools, as indicated by the way in which our vocabulary achievement scale can be used to rate and rank each of our potential 80,000 meaning-in-context reading comprehension questions.

>A dictionary, a learner, and some personal-best energy — if the combination worked for Abraham Lincoln, why shouldn’t it work today for Americans — all of us!

APPENDIX TWO. . . . How to prepare study lists and meaning-in-context test questions for use in learner-helper partnerships, based on the Random House Webster’s Unabridged College Dictionary.

A2a. . . . A dictionary-based reading comprehension study list using the dictionary-entry (“headword”) form of words that appear in the Star Spangled Banner (light, proud, gleam, broad, stripe, fight, watch, gallant, stream, and burst)

PRELIMINARY NOTE. . . . The accompanying dictionary headwords are presented in terms of their probably familiarity level. Each one is followed by four numbers. The first number represents its number of letters (5 for LIGHT); the second represents the number of definitions listed in sequence for it (37 for LIGHT); the third number represents its word frequency (“familiarity”) level via its number of definitions divided by its number of letters ($37/5=7.4$ for LIGHT); the fourth number represents the number of illustrative meaning-in-context passages cited for it in the dictionary entry for that head word (6 passages listed for LIGHT).

Any learner can compile a study list like this on his or her own, and then hand it over to a friend or family member for use in creating meaning-in-context test questions.

light	5	37	7.4	6
watch	5	22	4.4	6
fight	5	19	3.8	3
broad	5	16	3.2	5
burst	5	14	2.8	7
stream	6	14	2.3	5
proud	5	10	2	4
gallant	7	10	1.4	3
gleam	5	5	1	2
stripe	6	6	1	1

STUDYING FOR A MEANING-IN-CONTEXT READING COMPREHENSION TEST. . . . Following the Queen of Hearts principle (“Test first, then the studying!”), it’s important for home learners to have a clear picture of how the tests they’ll be facing are put together — enough so to justify making up their own practice questions in advance.

Question construction. . . . A meaning-in-context test question first links a headword to one of its definitions, as in linking LIGHT to its 31st definition, “This table lamp won't light” (def. 31). It then lists this definition in random-alphabetical sequence with one or more other definitions, as in (a) “to guide or conduct with a light.” (def. 28); (b) “to become illuminated when switched on” (def. 31); (c) to “set burning” (def. 23).

The relative difficulty of questions like these can be determined by a vocabulary-achievement scale rating formula in which a target word's number of letters are added to the numerical-sequence number of the passage's definition and then divided as a group by the word's total number of definitions. LIGHT has 5 letters and its passage appears in definition 31. Since its total number of definitions is 37, $(5+31)/37$ gives us a difficulty rating of .9 — substantially higher than if our target passage had been viewing the portrait in dim light (def. 8), in which event its formula figures would have been $(5+8)/37$, and its rating would have been .38.

Answer scoring. . . . An informal learner-helper partnership opens the door to negotiation and point scoring alternatives. If the learner chooses a higher difficulty level, he or she is entitled to more points. On the other hand, if the learner choose to have only two answer alternatives, as opposed to three or four, he or she can expect to earn proportionately fewer points. The partnership can achieve these goals by multiplying the difficulty rating by the number of answer alternatives times ten. A .9 question would therefore earn 18 points for a 2-alternative correct answer, as opposed to 27 points for a 3-alternative answer.

As will be apparent to many, these scoring features are similar to those of Jeopardy and many card games. They introduce higher levels of personal choice

and rule complexity into the study-testing process, along with higher levels of concentration — all in the interests of improving meaning-in-context reading comprehension.

Learner strategies. . . . Broadly considered, seven correct answers out of ten questions represents a satisfactory goal, especially if the study time is limited to half an hour for ten words (146 definitions in this instance). Since learning styles vary, individual learners will have to decide for themselves how much attention to give etymologies, part-of-speech labels, the entry as a whole, the illustrative passages, and — most important — the “semantic logic” behind the sequencing of the numbered definitions. Each word is different, after all, and so are the roles which the speech community over time finds for it to play.

TO SUM UP. . . . For home learners, the primary requirement is a study list of multiple-meaning words with at least one illustrative meaning-in-context phrase or sentence. Practically considered, most 5-, 6-, and 7-letter words with 5 or more definitions will meet this requirement. If desired, a learner can start with any list (spelling, SAT, Dolch, etc.) and simply guess which ones meet this “familiarity” requirement as indicated by their word-frequency standings via our definitions-divided-by-letters formula.

Will the word LEARN meet this requirement? . . . With a score of 7/5, it certainly does. . . . How about FORMULA? . . . Surprisingly so (to me, at least), it does too, and with a score of 7/7! A college-size dictionary is like our society itself: It makes sense as a mainstream document, but it’s also filled with surprises, enough so that’s it worth our time to become familiar with how both of them actually work — ideally through hands on experience.

APPENDIX THREE. . . . **An Illustrative Learner-Helper Reading Comprehension Dialogue**

Scene. . . . Any comfortable setting, even a park bench, with two friends and a college-size dictionary (American Heritage, Merriam-Webster, Random House, Webster's New World, etc.). One friend plays the role of LEARNER. . . . The other plays the role of HELPER, which means using the dictionary — Random House (RH) in this instance — and asking the questions.

HELPER. . . . Let's start by picking a dictionary page. What are the first four digits (month and day) of your birthday?

LEARNER. . . . October 25th means 1025, I guess.

HELPER. . . . That means we'll start on page 1025 of RH and pick the first word meeting our three test-question requirements. Do you remember what they are?

LEARNER. . . . (1) 5, 6, or 7 letters, (2) at least five definitions, and (3) at least one illustrative meaning-in-context phrase or passage. . . . usually in italics.

HELPER. . . . That's right, and that means our target word jumps right out at us as READY. It has twelve definitions and is located near the bottom of the first column of page 1025. Our selected target passage, is "ready to forgive," which is cited for one of the following definitions. . . . A. inclined; disposed; apt. . . . B. not hesitant; willing. . . . Before you make an a-or-b choice of which definition you feel is actually listed for our target phrase, would you like to hear your target again?

LEARNER. . . . Yes.

HELPER. . . . Here it is. . . .READY. . . . ready to forgive. (a) inclined; disposed; apt. . . .(b) not hesitant; willing. . . . What's the letter of your choice — A or B?

LEARNER. . . . Just guessing, to tell the truth, but I choose B.

HELPER. . . . That's correct! And that means you've just earned 114 points. Do you remember how the formula works?

LEARNER. . . . Number of letters — 5 — plus number of the correct definition. . . . What was it?

HELPER. . . . Two.

LEARNER. . . . Divided by the total number of definitions, which you said was 12. . . . $(5+2)/12$ That gives me .83, which multiplied by twenty gives me 166 points. Is that right?

HELPER. . . . That's right. . . . Do you want to try another round?

LEARNER. . . . No. I'd rather switch roles.

HELPER. . . . That's fine with me.

NEW HELPER. . . . What's your birthday?

NEW LEARNER. . . . April 19.

NEW HELPER. . . . That puts us on page 419. . . . And that gives ERROR as a target with 8 definitions, among which is a deviation from accuracy or correctness; mistake I was in error about the date. Do you want two definitions to choose from, or three.

NEW LEARNER. . . . I'll take three.

NEW HELPER. . . . Here they are: I was in error about the date. . . . A. a deviation from accuracy or correctness; mistake. . . . B. the condition of believing what is not true. . . . C. the holding of mistaken opinions. . . . Are you ready.

NEW LEARNER. . . . Yes. . . . My choice is C.

NEW HELPER. . . . You're wrong. The correct answer is B.

NEW LEARNER. . . . That doesn't seem right to me. . . . What's the difference between an opinion and a belief?

NEW HELPER. . . . I don't know. . . . But this is a right-or-wrong dictionary game, isn't it?

NEW LEARNER. . . . Yes.

NEW HELPER. . . . So that means your answer is wrong, according to the dictionary. Do you want to play another round?

NEW LEARNER. . . . No.

NEW HELPER. . . . Do you want to switch roles?

NEW LEARNER. . . . No. . . . I don't want to play anymore.

NEW HELPER. . . . Would you rather start with a list and study it first?

NEW LEARNER. . . . Yes.

NEW HELPER. . . . Me too.

COMMENT. . . . RH's entry for BELIEF indicates that it's a stronger word and has more to do with factual matters than OPINION, which has more to do with judgments and estimates. Since the judicial profession constantly mandates definitional distinctions like this, this kind of two-player game might be excellent preparations for aspiring debaters, lawyers, and judges. . . . But it might also be good preliminary training for third graders — and fun too!

This dialogue format is intended to emphasize the one-on-one practicality of multiple-meaning practice testing. But it should be obvious, I feel, that the multiple-choice feature makes it practical for use with large groups and even online. Even more important, the number of well-formatted questions that will be available to a program is staggering, since at least a third of the 200,000 definitions in a college-size dictionary are accompanied by illustrative meaning-in-context phrases or sentences.

The more reading-comprehension questions, the more progress and the more growth in confidence and self esteem — isn't that a sound policy for any educational program?

NOTES AND ACKNOWLEDGEMENTS

Echoing a classic formulation, the premise behind this booklet could be described as calling for “Mark Hopkins at one end of the log with a student at the other end, and a **college size dictionary** between them.” But I hope that this kind of learning drama will in time be translated into electronic form, since all of the dictionaries I've cited are now available in electronic form. Along these lines I am very grateful for the help and encouragement I've gotten from Richard Phelps, Jimmy Kilpatrick, and Michael Shaughnessy; also my Australian friends, Richard Baker and Alfred Papella of EIS.

Going further back, I must express my indebtedness to the late Herbert Dean Meritt and the late Robert W. Ackerman, who introduced me to Anglo Saxon studies and medieval lexicography at Stanford; also to Gertrude Schuelke, who taught me Gothic, Old Norse, Old Saxon, Old High German, and Middle High German, along with Gale Keith Meadows, who taught me Old French, Provençal, and Anglo-Norman (“a fair field needing folk,” as Ruth Dean once put it).

As might be expected in an academic climate warming up to hot-eyed critical disputations and creative writing, the philology courses I took — soon to disappear, alas — were sparsely populated, intimate, and wondrously good fun. . . . enough so that I often regret taking the Road More Traveled By later on.

My family, now a large one, has also been a source of inspiration and insight to me (is there anyone more intellectually honest than a seven-year-old?). . . . My dear wife Jane as always has been my editor and scribal conscience throughout, and my gratitude to her — again, as always — is immense.

A final, encouraging note. . . . When I was 15, I never dreamed that I would learn to play the piano passably and make a living at it. . . . When I was 30, I never dreamed that I would earn a PhD. . . . When I was 40, I never dreamed that I would write plays and compose music. . . . When I was 50, I never dreamed that I would write a novel, much less get it published. . . . When I was 60, I never dreamed that I would someday be doing government-sponsored research. . . .

Nor did I dream that I would be giving the foregoing pep talk to California students, individually and in the classroom. . . . encouragingly so, I like to feel. . . . both in the past and right now as I bring this short monograph. . . to. . . its. . . end.
