

Vocabulary and Grammar: Critical Content for Critical Thinking

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Abstract

The status of direct instruction in grammar and vocabulary has fallen into decline during an era of whole-language philosophy that rejects teaching "skills in isolation." Grammar has been misunderstood and stereotyped as tedious, remedial, unteachable, and useless. These areas of knowledge must be restored to their necessary place in language arts programs for gifted children, who need educated vocabularies and grammar competence of exceptional quality.

Although the direct instruction of vocabulary and grammar is sometimes missing in programs for gifted children, these rigorous content areas are prerequisite to the highest fulfillment of curricular goals in language arts. The dictum that "skills should not be taught in isolation" should be modified when the result is that critical knowledge, such as a strong foundation in Latin etymology, will not be taught at all. If gifted secondary students are to think clearly about language or in the medium of language, high-level intellectual components must be in place. These components include an array of operations sometimes referred to as critical thinking or higher order thinking. These thinking skills, however, fail unless they deploy a necessary system of right word use and right grammar, which are also high forms of mental process. In fact, once internalized, the precise intellectual implementation of vocabulary and grammar is of such complexity that it might be more accurate to say that the other thinking skills depend from, rather than rest on, mastery of vocabulary and grammar. VanTassel-Baska (1988) has written that gifted students need an understanding of syntactic structure, vocabulary development, analogies and etymology, and an

appreciation of semantics, linguistics, and language history. According to VanTassel-Baska: "A sound verbal arts program for the gifted needs to include a strong language study element that allows students to understand the English language from a variety of perspectives" (p. 167). Gifted programs typically emphasize higher order operations, but when these operations are conducted with wrong words or grammar, the result is not sound. Reasoning operations using wrong words misdirect thought to wrong phenomena indicated by the wrong words, and incondite grammar structures create false logical relationships that misrepresent the relationships intended.

It could be said that complete higher order thinking is a collection of interacting systems: a diction system, a grammar system, a system of logic, a system of cognitive operations, and others beyond the scope of this article. (Mental operations in the affective domain, for example, are possibly stereotyped as nonintellectual, but appropriate affective reactions to other intellectual phenomena are fundamental indications of deep comprehension.)

Vocabulary

High-level word use of the kind necessary in critical thinking or creative writing involves more than the common task of finding a usable word that has approximately the right meaning. Certainly, this is part of what is involved, but a closer look at the behavior of words in thought reveals much more subtle and complex roles for words.

Reading as Word Use

One form of word use that may escape notice is the way the intelligence uses words during reading. Many discussions of

word use center on the generation of words by our internal thought, but, in fact, the encounter with individual words that takes place during reading is also a form of word use, and an interesting one.

In our encounter with printed words, we respond in several ways. One response is word recognition, ranging from the subconscious recognition of a well-known word, to the appreciation of a well-known word freshly used ("Shut up, he explained"), to the appreciative recognition of a word understood, but rarely encountered. A second response is nonrecognition, ranging from a barely perceptible awareness of an unknown word we skip over, to the full curiosity stop we make when we focus on the unknown word, work out its pronunciation, examine it for elements of familiarity or kinship with known words, or even pursue the word into the dictionary, to the study of its meanings and etymology. At the extreme, this can extend to looking up the word in the lengthy detail of the *Oxford English Dictionary*, which contains an example of each word's use from every century of English language history.

These latter responses to words known and unknown are clearly of a high order. Educators can effectively model the curiosity stops and the extended acquainting that advanced lovers of words enjoy, teaching gifted students to proceed past the superficial level of word use when reading.

Elements and Factors Involved in Word Choice

Advanced word choice can employ many criteria, from accuracy, to tone, to aesthetics. These options are, in turn, rendered moot in the face of a thin, poorly understood mental word bank. Among the decisive reasons for selecting one word over another are:

1. Precision. *Azure* over the less specific *blue*.
2. Eliminating modification. A preference for writing with nouns and verbs, rather than resorting to modifiers to enhance weak nouns or verbs. *Colossus* over *giant statue*.
3. Plain talk. Strunk and White's (1999) preference in their classic style manual, *The Elements of Style*, for a good, ordinary word over an erudite one. *Abundance* over *plethora*, *cowl-like* over *bovine*.
4. Tone. Agreement in tone between word and content. Academic diction in journals, slang in story dialogue.

4. Brevity. Fewer syllables for impact. *Fast* over *lightening quick*.
5. Meter. Choosing a word that supports the rhythm of the sentence. Ending a sentence with a syllable that is stressed.
6. Poetics. Word sound that enhances meaning. Abraham Lincoln's *o's* and *u's* in "Fourscore and seven years ago, our fathers brought forth upon this continent . . ."


Instructing Vocabulary

In order to make choices among words, students must internalize a bank of words that provides choices; students must be, in the primary meaning, instructed. The acquisition of such a vocabulary base can (and must) occur through reading, especially in the classics that have strong vocabularies, through a deliberate vocabulary program of well-selected words, through the study of the Latin and Greek foundation of English, and through the study of foreign languages that have strong English cognate connections, such as Latin and Spanish (Thompson & Thompson, 1996, p. 174).

The popular strategy of building vocabulary exclusively through reading literature contains pitfalls, including the weak vocabulary of some of the most emphasized titles in American education, including John Steinbeck's *Of Mice and Men*, Ernest Hemingway's *The Old Man and the Sea*, and J. D. Salinger's *The Catcher in the Rye*.

The entire advanced vocabulary in Steinbeck's *Of Mice and Men*, one of the most frequently taught titles in American schools, consists only of *junction*, *recumbent*, *morose*, *imperious*, *dejection*, *grizzled*, *mollify*, *pugnacious*, *plaintive*, *apprehension*, *profound*, *complacent*, *derision*, *subside*, *reprehensible*, *bemused*, *wry*, *aloof*, *avert*, *crestfallen*, *writhe*, and *retort*.

The vocabulary of *The Catcher in the Rye*, a feature curriculum title, is even weaker: *ostracize*, *incognito*, *nonchalance*, *atheist*, *bourgeois*, *putrid*, *inane*, *pedagogue*, *harrowing*, *stenographer*, *reciprocate*, and *affect*.


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The Old Man and the Sea, a prominent Hemingway title, also fails to build student vocabularies; its contributions are *benevolence, thwart, bodega, oakum, phosphorescence, congregate, fathom, plummet, effectual, iridescent, gelatinous, filament, carapace, myriad, annul, tentative, pectoral, gunwale, skiff, coagulate, rigor mortis, undulate, cumulus, cirrus, rapier, burnish, sustenance, placid, malignant, juncture, and perceptible.*

Tom Sawyer, on the other hand, has a vocabulary base of nearly 300 advanced word uses. *Pride and Prejudice* has over 270. *Uncle Tom's Cabin* has over 700, and even *The Wind in the Willows* has nearly 200 strong word uses (Thompson, 2000).

From a vocabulary standpoint, all classics are not equal. School systems that focus student reading on colloquial American titles should not expect to increase students' vocabulary banks. It is clear that reading literature will not increase student vocabulary unless the selected literature contains words unknown to the students when they begin. There must, in other words, be a degree of vocabulary discomfort for students. This challenge is particularly necessary for gifted children whose vocabularies may be years above what the class is reading. Clark (1988) has noted that:

Often gifted children will come to school reading significantly beyond their age peers. Care must be taken . . . that the scope of material presented is difficult enough to tap the extent of this growth. "Top" reading groups may still be far below the gifted reader's capability. (p. 337)

Classic Words

An examination of the vocabulary of classic American and British literature discloses a core of vocabulary that is consistently found in English-language literature. Thompson (1998) has identified over 100 words that are found frequently in the classics, including *countenance, profound, serene, manifest, languor, acute, prodigious, grotesque, sublime, allude, exquisite, condescend,*

clamor, singular, placid, incredulous, tremulous, odious, visage, venerate, amiable, vivid, sagacity, vulgar, melancholy, abate, undulate, traverse, repose, wistful, palpable, pallor, and superfluous.

As an example of the prevalence of such words, the adjective *odious* can be found in Toni Morrison's *Song of Solomon*, Joseph Heller's *Catch-22*, George Orwell's *1984*, Aldous Huxley's *Brave New World*, Virginia Woolf's *Mrs. Dalloway*, E.M. Forster's *A Passage to India*, Joseph Conrad's *Heart of Darkness* and *Lord Jim*, Robert Louis Stevenson's *Treasure Island* and *Dr. Jekyll and Mr. Hyde*, Mark Twain's *Tom Sawyer*, Henry James' *The American*, George Eliot's *Silas Marner*, Frederick Douglass' *The Narrative of Frederick Douglass*, Herman Melville's *Moby Dick*, Nathaniel Hawthorne's *The House of the Seven Gables* and *The Scarlet Letter*, Charlotte Brontë's *Jane Eyre*, Emily Brontë's *Wuthering Heights*, William Thackeray's *Vanity Fair*, Walter Scott's *Ivanhoe*, Mary Shelley's *Frankenstein*, Jane Austen's *Pride and Prejudice*, Mary Wollstonecraft's *Vindication of the Rights of Woman*, Jonathan Swift's *Gulliver's Travels*, John Milton's *Paradise Lost*, William Shakespeare's *The Tempest, Much Ado About Nothing, As You Like It, A Midsummer Night's Dream*, and Christopher Marlowe's *Doctor Faustus* (Thompson, 2000). The publication dates of these works range from 1594 to 1977, a span of 383 years, and they are, of course, only a small fraction of the important books that use the word *odious*.

One clear strategy for building an effective vocabulary bank is to concentrate on words that have high profiles in strong literature. This direct word study will have the concomitant effect of making it easier for students to read strong literature, which will then continue to reinforce and supplement the vocabulary the students have learned.

The Latin and Greek Base

As Parker (1989), VanTassel-Baska (1988), and Thompson (1990) have noted, a second direct strategy for building an advanced vocabulary bank is to learn the Latin and Greek heritage that underlies English diction. Students who have learned several hundred of the most common Latin and Greek stems in English will have an inestimable advantage. Advantages include:

1. Efficiency. Each stem students learn will be found in dozens or even hundreds of words. To know that *pre* means *before* is to know, in an almost effortless way, part of the meaning of *previous, pre-*

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ordained, precedent, precognition, and dozens of other words. The intercombinations of stems within words magnifies the learning effect; learning several hundred stems allows students to understand the meanings of thousands of words. Parker noted that, "One of the most efficient ways in which students can be taught to build broad and effective vocabularies is through the study of etymology—or the origins of words" (Parker, p. 198).

2. A sense of history. Students who perceive the ancient origins of their own words enjoy an enhanced appreciation of cultural history that changes their sense of themselves and their society.

3. Comfort with big words. Students who know the meanings of dozens or hundreds of stems have a different experience when they encounter a word like *infralapsarianism* or *supererogatory*. The consternation or bafflement they might have felt is ameliorated by the recognition of familiar elements such as *infra*, *lapse*, *super*, *rogat*, and when the student learns that *supererogatory* is an adjective referring to someone doing more than what is asked of him, the word makes sense because *super* means over, and *rogat* means ask.

4. An enhanced awareness of the world. To a surprising degree, there are words for things we have never noticed. Once, for example, someone learns the word *invidious*, the striking frequency of invidious praise becomes obvious. Since the Latinate diction of higher learning contains a great number of extraordinary words that we do not often encounter, even in classic novels, it is also effective in calling our attention to things we never saw until we learned the words for them.

5. Scientific and technical language. The vocabularies of science, mathematics, technology, and numerous professions such as law are constructed from Latin and Greek elements. Students who have a solid base of Latin and Greek stems will feel comfortable in the familiar linguistic environment of these contexts.

6. Spelling. For thousands of words, the simple secret to their spelling is that they are simple combinations of two or three stems in a row. If we insert a slash to indicate separation of stems, we see that words such as *circum/vent*, *omnipotent*, *mesol/morph*, *pyrol/phobia*, *acrol/nym*, *xenol/phobia*, *osteol/cyte*, *circum/spect*, *megal/lith*, *equil/nox*, *matril/cide*, *pseudol/pod*, *orthol/dox*, *sacrol/sanct*, and *bibliol/phile* are simply two stems in a row—easy spelling for any student familiar with the stems.

7. The inner poetry of words. A primary element in the appreciation of words is the inner life of words, something that is not visible in dictionary definitions. For thousands of words, the Latin or Greek etymology reveals surprising imagery, that can make even familiar words more meaningful. The word *respect*, for example, contains the stems *re* (again) and *spect* (look). To respect others often involves a moment when we are looking again at them, seeing something in them that we never suspected was there. To be circumspect is to be cautious, but the internal imagery shows the cautious person looking (*spect*) around (*circum*).

8. Test preparation. Many achievement tests contain vocabulary sections that contain Latin-based words at their higher levels of challenge. The vocabulary questions of the SAT, for example, are organized by degree of difficulty, with the last, most difficult questions showing a concentration of Latin-based words such as *supercilious*.

Clearly, there are numerous convincing reasons for including a rigorous vocabulary-building program based on Latin and Greek stems. As Parker (1989) has noted:

Today's gifted students may not have the command of English that they need, but their repertoires can be greatly increased through the study of etymology. This then, should be one of the major focuses of the language program for gifted students. (p. 198)

Foreign Language

The study of selected foreign languages pays strong benefits to English vocabulary. According to Van Tassel-Baska (1998), "The programs of study for the English language will be augmented immensely by a concurrent foreign language study program" (p. 457). Thompson and Thompson (1996) have written that:

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the presence of cognates that strengthen the student's vocabulary in the native language. . . . Frequently a word learned in the foreign language, such as the Spanish word for tear, *lágrima*, will have a cognate in English that is erudite or unfamiliar to the student: *lachrymose*. (p. 179)

Students will develop an ordinary repertoire of words through the activities of ordinary life, but these experiences will not expand vocabulary

beyond the ordinary language limits encountered in television and popular culture. In order to build the large word bank they need for higher order thinking about language, students need direct vocabulary strengthening through the study of Romance languages, systematic immersion in the language of classic literature, and a grounding in the Latin and Greek origins of English diction. With these components in place, students can think intelligently about whether one word is more appropriate than another, more specific than another, more consonant than another with the rhythm and orchestration of the sentence, or more resonant in meaning than another. They can bring an array of criteria—cognitive, affective, and aesthetic—to critical thinking about word choice.

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Grammar: Critical Thinking About Thinking

Grammar has been stereotyped as tedious, unteachable, and remedial, unfit for emphasis in language arts programs for gifted children. In fact, grammar instruction is sometimes (needlessly) tedious, and Gallagher (1975) has urged educators to go beyond the "sterile presentation of grammar and syntax" (p. 198). Grammar, however, is sometimes successfully taught, has symmetries and mysteries enough to fascinate the dullest mind, and is an introspective and metacognitive way of thinking about our own ideas—perfect for the higher level ruminations advocated for

gifted children. Like direct instruction in vocabulary, direct instruction in grammar has been deplored by whole-language dicta that forbid anything being taught in isolation.

Again, the injunction not to teach anything in isolation must be weighed against the probability that essential knowledge will not be taught at all. Many things, such as mathematics and Latin, are effectively taught in isolation, and it is difficult to grasp why crucial intellectual components such as grammar, with its system of interlocking subsystems, are harmed by focus.

This article is not the place for a detailed description of grammar. It is appropriate here, however, to highlight some of the factors that illustrate the high order and complexity of grammar and that integrate it with other reflections that we term critical thinking. This can be done with a few observations:

1. Sentences do not occur in nature. Sentences are cerebral in their genesis. In illuminating the simultaneous language systems (parts of speech, parts of sentence, phrases, clauses) that operate and interact in sentences, grammar constitutes thought in reflection on itself. This metacognitive purity gives grammar a supreme intellectuality matched by few forms of academic endeavor.

2. Grammar is elegant. Like many systems that appeal to gifted individuals, grammar is elegant. It seems unlikely that English grammar, with only eight kinds of words, two sides of a sentence, several phrases and a handful of clauses and sentence purposes, could support such vast constructions as the *Holy Bible*, or the plays of Shakespeare, or the novels of Jane Austen, or the *Narrative of Frederick Douglass*. And yet, eight kinds of words are enough: a little noun system (noun, pronoun, adjective), a little verb system (verb, adverb), some connections (conjunction, preposition), and an interjection. Using only eight parts to build both a subject and a predicate in each idea, English grammar produces the English language.

3. The inner theme of grammar is simplicity, even unity. This is the subtext of the rules: Let all in the sentence be one, let it be clear and agree that the center of the sentence be seen. The works of the sentence must move in harmony, like the wheels of a clock. The subject and the verb must be in agreement, the pronoun and its antecedent must be in agreement, the tenses of the verbs in the sentences must be in agreement with each

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other. Everything being in order, the sentence can depict a truth.

4. There are classically pure philosophical ideas in grammar, such as the difference between the one and the many. Is the sentence about one thing, or is it about many things? If it is about something that is one, then the subject must be singular and the verb must also be singular, and then both sides of the sentence will agree with each other and with the truth. If the sentence is about something that is many, then the subject must be plural, and the verb must be plural, and both sides will be in agreement with each other and with the truth. Perhaps this distinction sounds like logic chopping, but consider the difficulty that communication would face if our grammar did not have this divide, if every subject and verb pair were not forced into a perfect agreement about the number of the idea.

5. Grammar provides the paradigm of human binary thinking and allows us to understand the meaning of clarity. Each English clause has two sides: the subject side and the predicate side. These two sides are present in every English sentence, by every person, in every country, from the time of Chaucer to the present. The reason that they are always present, like the nucleus of every cell, is that there is no choice. The structure of the sentence is foretold by the structure of its source: the mind. Each sentence, which is the same as saying each idea, has two sides: one side to specify the topic and the other side to assert something about that topic. This binary structure of topic/assertion-about-topic, which we call subject/predicate, must be there because it is how the intelligence processes communications. For this reason, the basic sentence structure of subject-side and predicate-side is also the paradigm for clarity itself: Notice that, in a sentence, we need these two sides, in a paragraph of sentences we need these two sides, and in an essay of paragraphs we still need these two sides. No matter what level of organization, we still need to know first what are we talking about and second what are we saying about it. Grammar is a function of thought; the best structures of grammar are the natural structures of thought at their clearest. Thompson (1995) has noted that "through grammar we can view the delicate relationships which give form and pattern to the phenomena of the mind" (Thompson, p. i).

6. Punctuation, in turn, is a function of grammar. Oscar Wilde was once asked what he had done that day; he replied that he had spent the whole morning putting in a comma, and the whole afternoon taking it out. Students who learn to think critically and who want to convert their educations and skills into inspiring careers will need to punctuate what they write for their audiences; and, in order to do this, they will need to perceive clauses and phrases and complex sentences and appositives because it is these phenomena that are punctuated. Any attempt to learn tricks to punctuate without understanding grammar will misfire because it is specifically the grammar structures that are set off by punctuation.

7. A strong knowledge of grammar is also an essential factor in the highest level of interpretation of literature. Like poets changing meter, great prose writers are adept at shifting grammar structures to make them consonant with the phenomena of the plot. In Shakespeare's *King Lear*, Cornwall is stabbed and staggers into death as his wife Regan looks on indifferently:

I have received a hurt.
Follow me, lady. Turn out
that eyeless villain; throw
this slave upon the dunghill. Regan, I bleed
apace. Untimely comes this hurt; give me
your arm. (act III, scene vii)

The grammar of the passage is a masterpiece. In just 31 words, there are 7 clauses, which is barely 4 words per clause for 7 clauses in a row. Outside of children's literature, it is difficult to think of any comparable passage in literature. A student who does not know what a clause is has little chance to see the beauty of this tragic grammar that uses clause structure to heighten the gasping words of a dying man. Only students who have the options of grammar available to their minds will see and appreciate the full artistic control of the great writers.

8. Prescriptive grammar instruction is correct. There are, in fact, language standards in the

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professional world that students will be expected to observe, and it is no disservice to these students to prepare them to meet such standards. Van Tassel-Baska (1988) has noted that, "In a language program for the gifted, clearly it is necessary to adopt a diagnostic-prescriptive approach to teaching grammar and usage..." (p. 167). Gallagher (1975) listed as one of the objectives in language arts, "To apply the conventions of general American-English usage, put to use whatever function or variety of language is appropriate to the occasion" (p. 177).

Conclusion

If language arts for gifted children is to be an area of high accomplishment, then it must be predicated upon the highest quality knowledge. We cannot adopt a position that relegates advanced vocabulary or grammatical precision to the category of things not to do. Such an approach leaves too much to chance and erroneously interprets the high academic nature of these topics. A challenging program for gifted students should reach exceptional levels of accomplishment in vocabulary, grammar, writing, the amount and quality of literature, and the experience of critical thinking about these different aspects of language and how they interact. This will, moreover, involve the detailed learning of specific content, an honorable and deeply human process that has been denigrated as "rote memorization," but is one of humanity's highest faculties in the authentic acquisition of high-level knowledge.

References

- Clark, B. (1988). *Growing up gifted* (3rd ed.). Columbus, OH: Merrill.
- Gallagher, J. J. (1975). *Teaching the gifted child*. Boston: Allyn and Bacon.
- Parker, J. P. (1989). *Instructional strategies for teaching the gifted*. Boston: Allyn and Bacon.
- Strunk, W., & E. B. White. (1999). *The elements of style* (4th ed.). New York: Longman.
- Thompson, M. (1990). *The word within the word*. Monroe, NY: Trillium Press.
- Thompson, M. (1995). *The magic lens*. Unionville, NY: Royal Fireworks Press.
- Thompson, M. (1996). Formal language study for gifted students. In J. VanTassel-Baska, D. Johnson, & L. N. Boyce, (Eds.) *Developing verbal talent* (pp. 149-173). Boston: Allyn and Bacon.
- Thompson, M. (1998). *Classic words*. Unionville, NY: Royal Fireworks Press.
- Thompson, M. (2000). *Classic words*. [computer software]. Indianapolis, IN: Thompson & Thompson.
- Thompson, M., & Thompson, M. (1996). Reflections on foreign language study for highly able learners. In J. VanTassel-Baska, D. Johnson, & L. N. Boyce (Eds.), *Developing verbal talent* (pp. 174-189). Boston: Allyn and Bacon.
- VanTassel-Baska, J. (1988). *Comprehensive curriculum for gifted learners*. Boston: Allyn and Bacon.
- VanTassel-Baska, J. (1998). *Excellence in educating gifted & talented learners* (3rd ed). Denver: Love.

