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ABSTRACT
                This paper describes a classification scheme
developed to examine the effects of extensive reading on primary and
second language vocabulary acquisition and reports on an experiment
undertaken to test the model scheme. The classification scheme
represents a hypothesized hierarchy of the degree and type of mental
processing required by various kinds of vocabulary exercises. These
categories include: (1) selective attention; (2) recognition; (3)
manipulation; (4) interpretation; and (5) production. This hierarchy
was tested in an English-as-a-Second-Language (ESL) classroom by
comparing the vocabulary gains of learners in a thematic reading
program with those in the same reading program in which some readings
were replaced by vocabulary enhancement activities. Results indicated
that although both groups in the reading program experienced
substantial gains in word knowledge, those performing vocabulary
enhancement techniques along with reading activities learned more
words and achieved greater depth in their knowledge of these words
than those students exposed to extensive reading alone. Three
appendixes provide copies of a vocabulary exercise analysis sheet,
examples of vocabulary exercises, and vocabulary scoring categories.
(Contains 30 references.) (MDM)

ED 369 291

Enhancing Vocabulary Acquisition through Reading:
A Hierarchy of Text-Related Exercise Types

M. Wesche and T. Sima Paribakht

Abstract

Research evidence suggests that extensive reading for meaning is a major vehicle for L1 and L2 vocabulary acquisition (Nagy, Herman and Anderson 1985; Krashen 1989; Elley 1991), but the process is slow and outcomes for given words are unpredictable. In a recent ESL classroom experiment, reading indeed led to substantial gains in word knowledge, but gains were significantly greater when selected text-related vocabulary exercises replaced some reading practice (Paribakht and Wesche 1993). This paper will describe the classification scheme used in the selection of vocabulary exercise types for this experiment, its development and its subsequent refinement in the context of ongoing research.

The classification scheme represents a hypothesized hierarchy of the degree and type of mental processing required by various kinds of vocabulary exercises, in accordance with current understanding of how learners acquire new knowledge of the target language from novel input (cf. Gass 1988). Development procedures included a comprehensive review of ESL vocabulary textbooks to collect reading-based exercises, analysis and categorization of exercises, and selection of key types meeting specified criteria. The categories are: 1) **selective attention** to specific words through visual signalling, 2) **recognition of** target words and their meanings, 3) grammatical and morphological **manipulation** of words and word elements in context, 4) **interpretation** of word meanings in relation to other words or discourse functions, and 5) **production** of the target word in appropriate contexts.

The exercise classification scheme and the Vocabulary Knowledge Scale (VKS) developed by the researchers to measure gains in vocabulary knowledge both reflect a view of initial vocabulary acquisition as a multistage iterative process involving various exposures to new words in meaningful contexts. These accord with an information processing perspective. The classification scheme and examples, its theoretical rationale and evidence for its validity will be discussed together with its implications for vocabulary research and teaching.

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Vocabulary Acquisition through Reading: L1 Research

What is known about how new vocabulary knowledge is acquired? Research on this issue has been much more extensive for first than for second language acquisition, and offers valuable insights for second language researchers and educators. Research in first language reading underlines the high correlations between measures of reading comprehension and vocabulary knowledge (Thorndike 1974; Curtis 1987; Sternberg 1987), and indicates that gains in one are related to gains in the other (Beck, McKeown and Omanson 1987). Reading is seen as the major vehicle for vocabulary acquisition in literate L1 learners beyond the first few thousand words in common oral usage (Nagy, Herman and Anderson 1985; Nation and Coady 1988), and related L2 research confirms that introducing a reading "flood" where learners are motivated and focused on meaning leads to measurable gains in vocabulary knowledge (Elley and Mangubhai 1983; Ferris 1988; Krashen 1989). Yet gaining new vocabulary knowledge through reading — or otherwise, is a long and complex process. It involves establishing relationships between formal, functional and semantic concepts, the organization of concepts into networks and the elaboration and automatization of knowledge about individual words (see discussion in Stoller and Grabe 1993). This process is characterized by incremental gains, which build different aspects and degrees of word knowledge. Research on L1 vocabulary learning (Stoller and Grabe 1993; Nagy and Herman 1985, 1987) indicates that knowledge of new words is gradually elaborated through multiple exposures in various — mainly written — discourse contexts. Saragi, Nation and Meister's (1978:76) study suggested that a minimum number of exposures for a word to be learned through reading is around ten, and that such learning also depended on other factors such as the presence of clear cues to the meanings of unknown words and the similarity of the new words to known words in the L1. Other L1 research suggests that learning through incidental exposure is most effective when students know how to take advantage of it, for example, being aware of word families and productive affixes for analyzing words into parts, knowing when and how to use contextual cues, and how to get help from a dictionary. Other research, however, indicates that attempts to infer the meanings of unknown words from context often lead to wrong guesses (Bensoussan and Laufer 1984), and many researchers have noted that even if the learner succeeds in inferring the correct meaning of the unknown word in the given context, this does not necessarily lead to its acquisition, as the immediate communicative need will have been met. Another finding from L1 research emphasizes the importance of relevant background knowledge to the learning of new lexical items, so that new semantic network connections can be formed relating the new

information to already existing schemata. All of the above perspectives from L1 reading research are suggestive for L2 vocabulary acquisition research and teaching practice.

A Reading Approach to L2 Vocabulary Acquisition

The importance of reading in vocabulary acquisition is apparent, but the actual learning which takes place is slow and unpredictable, and the process by which it occurs is little understood. Much vocabulary learning through reading is apparently "incidental" in the sense that normally there is no instructional manipulation nor is there an intention to learn words on the part of the learner. From the perspective of a language teaching program which aims at developing learners' reading proficiency and related receptive vocabulary, a reading-based, incidental learning approach may be adequate. But for programs which aim at developing learners' production skills, rapid vocabulary expansion and some measure of influence over what is learned, such an approach would appear insufficient. Stoller and Grabe (1993) argue that related instructional intervention or informed learner intention could make the process more predictable and efficient. In our own research, we have been experimenting with a reading enhancement or "reading plus" approach to vocabulary instruction. While recognizing the value of the reading process as the best way we know to bring learners into meaningful contact with less frequently occurring words, our goal is to supplement theme-based reading practice with a variety of tasks and exercises. These will target certain words which are judged useful to and learnable by a given group of learners, creating the need for them to analyze and communicatively use the words in several different ways, in order to consolidate and elaborate learners' knowledge of the words and make them more accessible for later use.

A Theoretical Framework

Much current research in both L1 and L2 vocabulary acquisition is implicitly or explicitly based on an information processing view of learning. Such a framework (applied to second language acquisition, among others, by Carroll 1974; McLaughlin, Rossman and McLeod 1983; McLaughlin 1987; Gass 1988; Hulstijn 1990) provides a broadly descriptive account of how ambient data — in this case lexical items which are read or heard — may become mentally represented and eventually stored in the human mind as knowledge and manifested in performance. It considers processes such as the perception and comprehension of forms and form-meaning relationships, their mental association with existing knowledge and their eventual production.

In our work we have found the account by Gass (1988) useful as a metaphorical characterization of how new lexical elements may over time become integrated into the learner's mental lexicon and ultimately available for receptive and productive communicative use. Although originally proposed for language acquisition — particularly grammatical development — from speech data, we believe the framework is also relevant for vocabulary acquisition from written data. Gass describes five stages in the selection and internalisation of ambient language data, or input. These are: "1) apperceived input, 2) comprehended input, 3) intake, 4) integration, and 5) output" (1988:201).

Apperceived input refers to the subset of novel language data that is in some sense "noticed" by the learner and related to some prior knowledge. Frequency of occurrence (very high or very low), salience, affective factors, the availability of relevant prior knowledge and learner attention to features of the language input may all play some role in determining what is apperceived from the available sensory information. That bit of language which is apperceived interacts with a parsing mechanism which attempts to segment it into meaningful units. Apperception, an internal cognitive act, may be seen as a priming device which picks up certain parameters to attend to (e.g., vowel length, affix shape).

Comprehended input, Gass's second stage, is distinguished from Krashen's (1982, 1985) concept of "comprehensible input" in that the learner controls the effort expended in comprehension, and thus, to some extent, the success achieved in comprehension. There are different levels of comprehension (e.g., general meaning, detailed structural analysis), and these may differentially lead to **intake**. Not all comprehended input becomes intake, as some is comprehended only momentarily for purposes of general comprehension (as in conversational interaction), then lost when there is not enough time for sufficient analysis.

Intake is the process of attempted integration of linguistic information. The level of analysis achieved during the comprehension phase may help determine what becomes intake. Since intake is a process which mediates between target language input and the learner's existing internalized rules, it is not merely a subset of input but rather a distinct phenomenon. That which is taken in may differ from what was apperceived or comprehended.

Integration of part of all of the intake is the next stage, consisting of changes to the internalized second language rule system based on the new information. This may directly follow the earlier stages, or some of the intake may be stored without further analysis until

such time as the learner can integrate it. The impetus for integration is some kind of initial recognition by the learner that modification is needed, due to lack of fit between the apperceived input and the learner's grammar. Evidence for integrated knowledge may be found in the output, in intuitions, or (unobservable) changes in the strength of existing rules.

Finally, the role of **Output** — or language production — in the acquisition process may be important in that it forces the learner to analyze the grammar — in Swain's (1985) words to move from semantic to syntactic processing. In Gass's framework, **Output** (or, in our view, preparation for output) may be important in converting more comprehended input to intake.

In summary, the acquisition of new L2 knowledge — in this case vocabulary items and features — and their integration into a learner's internalized language system is viewed as a multistage process in which many factors play a role. It is also an iterative process in which new knowledge may reach a higher stage or its mental representation strengthened in cumulative encounters with a given word. Factors such as language universals and transfer from the first language play different roles at different points — e.g., in the case of transfer, both an initial filtering role and a subsequent processing role. Some stages involve motivation and intention, while others are more purely linguistic. Those factors which are under the learner's immediate control or which may be influenced by the external environment (and thus pedagogy) are seen as having the strongest effect at the levels of apperceived input and output, i.e., at the beginning or end of the sequence for a given encounter with a word, while the middle processes are less accessible to direct manipulation. In our view, pedagogy can influence the middle processes, however, by setting tasks which require deeper analysis and thus trigger ongoing iterations of the sequence or parts of it, as the learner strives to successfully complete the tasks.

Even when new knowledge of lexical items is to some extent integrated, the resulting changes to the mental lexicon are far from complete. Skill acquisition in an information processing framework proceeds in terms of two kinds of gradual changes that restructure and automatize internal representations over time so that the learner can handle increasingly complex representations and operations with the same limited processing capacity. The first is the change over time in mental representations from *declarative* knowledge (internalized rules and memorized chunks of language) to *procedural* knowledge (being able to use strategies and procedures to process second language data both for further acquisition and for use). (These concepts are based on Anderson 1982, as discussed in Hulstijn 1990, and others). The second

development, from *controlled* to *automatic* processing of a given sequence of mental representations, results in a reduction in the amount of cognitive processing capacity required in subsequent processing of the same sequence, as the learner moves from the need for attentional control to novel associations through repeated activation of the same sequence to automatic arousal of it as an interconnected system. (These concepts are based on Schneider and Shiffrin (1977) and Shiffrin and Schneider (1977), and interpretations by McLaughlin *et al.* (1983), McLaughlin (1987).)

An information processing framework provides a plausible account of incidental vocabulary acquisition through reading. It can also account for more efficient vocabulary acquisition through supplementary instructional intervention of the kinds suggested by research on vocabulary acquisition through reading; intervention which directs learners' attention to and analysis of unfamiliar words encountered in reading texts. Such a framework suggests that while some incidental vocabulary acquisition may be expected if a relatively limited number of novel stimuli are repeatedly present in contexts in which their meaning may be comprehended to some degree (i.e., through reading for meaning), instructional planning and intervention at certain points should make the process more efficient. First, careful selection of reading texts can assure their interest, thematic coherence, relevance to learners' existing knowledge, and appropriate difficulty level (and thus their comprehensibility, as well as the presence of an appropriate proportion of novel words or word uses). Secondly, various means can be used to increase the frequency of occurrence and physical salience of particular target words, so that they will be **apperceived** by learners. Certain text features and the use of exercises requiring different levels of comprehension of the target words, using review and reformulation and ensuring adequate processing time, can increase the amount of **comprehended input** which will become **intake** for the mental lexicon. What is then **integrated** will largely depend on existing lexical knowledge structures and the complexity and transparences of the new knowledge to be integrated. (The relative ease of learning concrete nouns as opposed to discourse connectives, for example, probably has to do with both the relative semantic transparency and the greater functional autonomy of the former.) Instructional intervention requiring **output** of target words may require that they be more precisely comprehended, that new form-function-meaning associations be established or that existing ones be strengthened.

Classification Schemes for Vocabulary Teaching Practice

The desirability of systematic vocabulary instruction has been recognized by practitioners and researchers in several ways. Many current ESL textbooks include a vocabulary practice section. In addition, a number of specialized vocabulary teaching textbooks have appeared on the market in recent years. The programs they present generally consist of a variety of techniques and tasks designed to facilitate and provide practice for vocabulary development. These tasks and exercises present words by using different (individual or combined) stimuli (i.e., written, non-verbal and aural/oral) (see also Carter, 1987). Examples of the techniques include unpaired or paried word lists with or without L2 equivalents respectively, a key-word technique using a combination of aural (a similar sounding L1 word) and visual (image of a familiar L2 word) associations (see Oxford and Crookall, 1990), and menemonic association techniques (with a similar sounding L1 word) (see Cohen and Aphek, 1980).

Attempts to date in the literature to categorize vocabulary tasks and exercises have used quite different criteria. These include, among others, the degree of contextualization of the vocabulary items to be learned, certain linguistic features of the items to be learned, and elements of the learning process which presumably apply to any word to be learned. Oxford and Crookall (1990) present four categories of vocabulary teaching techniques based on their degree of linguistic and extra-linguistic contextualization. These are: *decontextualizing techniques* (e.g., use of word lists, flash cards and dictionary use), *semi-contextualizing techniques* (e.g., word groupings, visual imagery and semantic mapping), *fully contextualizing techniques* (e.g., practicing the four language skills where a full context for the target words in provided), and finally, *adaptable techniques* that reinforce other techniques at any part of the contextuality continuum. For efficient vocabulary learning, these authors suggest the use of a variety of techniques within each category that would appeal to learners' different learning styles (e.g., visual, aural, tactile and kinaesthetic).

Another example of categorization of vocabulary exercises appears in Taylor (1990), and reflects what is meant by "knowing" a word. Exercises are presented in categories corresponding to different aspects of word knowledge, including use norms, linguistic level or features and translation equivalence. The categories are:

1)   frequency of occurrence

2) word register
3) word collocation
4) word morphology
5) word semantics
6) word polysemy and the relationship of sound to spelling
7) knowledge of the equivalent of the word in the mother tongue

In our research we developed a classification scheme that reflects a hypothesized hierarchy of the degree and type of mental processing required by various kinds of reading-related vocabulary exercises (Paribakht and Wesche, 1993). It accords with the empirical findings on successful vocabulary acquisition as well as with an information processing view of vocabulary acquisition, as discussed above. It emphasizes the initial stages of learning an unfamiliar word or learning more about a word which is somewhat familiar (as opposed to the mastery of subtle and multiple associations for meaning and use which is typical of the complex lexical networks of advanced learners). Thus Gass's (1988) characterization of the stages leading from ambient linguistic data to initial internalization of new knowledge seems to us the most appropriate framework available for our categorization. The exercise types covered by the proposed classification are all based on learners' meaningful initial exposure to the words through interesting extended texts at an appropriate difficulty level; thus we have termed it a *reading plus* system.

A Hierarchy of Vocabulary Exercise Types

In developing this categorization system, we developed a compendium of exercise types based on an extensive examination of L2 vocabulary teaching textbooks. These exercises were then analyzed and grouped into 5 distinct categories, according to the learning activity required, as follows:

Selective Attention

This exercise category uses different techniques to draw the learner's attention to the target word. Its aim is to ensure that students "notice" or *apperceive* the target word, corresponding to the first stage in acquisition of the word or novel knowledge about it in Gass's (1988) framework. This type of exercise is often used as an advance organizer, and is the least demanding type for the learner. Examples include:

- providing a list of target words in the beginning of a text and asking the students to read the list and notice where they appear in the text. A variant is to have them underline the target words every time they appear in the text.
- boldfacing, italicizing, circling, colouring or other visual signalling of the target words in the reading text.

Recognition

In recognition exercises all necessary elements are provided and the learners are asked only to recognize the target words and their meanings; thus they require only partial knowledge of the target vocabulary items. These exercises require association of the written word form with at least one of its meanings, i.e., that learners move from apperception to at least some level of input comprehension (*comprehended input* and possibly *intake* in Gass's terms). Examples include:

- matching the target word with a definition or synonym (usually more definitions synonyms than words are provided).
- recognizing the meaning of the target word from a multiple choice of meanings.
- choosing the correct picture after seeing or hearing the target word.
- choosing the right word to label a picture.
- seeing or hearing the target word in the L2 and giving its equivalent in L1.

Manipulation

Manipulation exercises involve rearranging and organizing given elements to make words or phrases, drawing on students' knowledge of morphology and grammatical categories. In other words, they require structural analysis of the target words and thus a deeper level of processing than the previous categories. In Gass's framework manipulation exercises require more precise comprehension of target words. Examples include:

- giving derivations of words (i.e., changing the grammatical category of the target word, such as from noun to adjective, or from verb to noun).
- using stems and affixes to construct words.

Interpretation

Interpretation involves more precise semantic analysis including the relationship of target words with other words in given contexts (e.g., collocations, synonyms and antonyms). This further semantic analysis again contributes to aspects of input comprehension and provides information for *intake* and *integration* of new items into lexical networks. Examples include:

- finding the odd word in a series of collocationally related words.
- understanding the meanings and grammatical functions of the target word in the text (i.e., in a given context) and recognizing words or phrases which could be substituted in the text.
- classifying words according to their discourse functions (e.g., discourse connectives classified by type — cause and effect, contrast, addition).
- multiple choice cloze exercises.
- guessing the meaning of target words in context.

Production

Production exercises, which require recall and reconstruction of words, are the most demanding type. These exercises require the learner to retrieve and produce the target words in appropriate novel contexts. This will involve re-encountering the words and processing them more deeply with varied associations. In order to successfully do these exercises, learners will need to have developed control of syntactic, semantic and possibly functional aspects of the target word. Thus they require a deeper level of lexical processing, again augmenting *comprehended input* which in turn contributes to *intake* (Gass 1988). Examples include:

- open cloze exercises.
- labelling pictures.
- answering a question requiring the target word.
- seeing or hearing the L1 equivalent or an L2 synonym and providing the target word.
- finding the mistake in idiom use in a sentence and correcting it.

Further classification of the collected exercise types was according to the following features, which can be used to better select exercises to meet specific objectives of instructional programs.

- identification of the *stage in reading* in which the exercise can be used (i.e., before, during or after reading a text).
- the *linguistic basis* of the exercise (i.e., whether it is primarily based on the visual/phonological or grammatical form of the word, on its meaning, or both)
- the *medium of presentation* of target words (i.e., their use in a written or an oral text).
- the *language skill(s)* required of the learner for completion of the exercise (i.e., speaking, reading, writing, listening or a combination of these). See Appendix A for the Exercise Analysis Sheet.

Evidence for Validity of Proposed Types of Exercises

One of the goals of our ongoing research is to validate the exercise types (and, ultimately the hierarchy), from theoretical and practical perspectives. We have carried out several studies attempting to establish the validity of the *reading plus* approach to vocabulary instruction, using vocabulary exercises selected after field testing from the proposed categories on the basis of their perceived feasibility and effectiveness. In this research, the *reading plus* program was based on thematically related readings for which certain words were selected for more systematic practice. For each word at least three exercises were used from different categories, the first of which was **selective attention**. The exercises sought to facilitate students' apperception of target words and subsequent movement to higher levels of knowledge of the target words (see Appendix B for examples of these exercises).

Pilot studies were carried out to develop and refine an instrument, **The Vocabulary Knowledge Scale (VKS)**, to track students' vocabulary gains, in terms of both the number of words they had some knowledge about and the depth of that knowledge. This instrument uses a five-point scale to capture different levels and aspects of word knowledge ranging from total unfamiliarity through recognition of the word and some idea of its meaning, to the ability to use the word with grammatical and semantic accuracy in a sentence (see Appendix C for the VKS and its scoring procedures, and Paribakht and Wesche 1993 for a more detailed description of the instrument). Like the proposed hierarchy of exercise types and Gass's

framework, the VKS reflects a view of vocabulary acquisition as a multistage iterative process, involving different levels and kinds of knowledge.

In our main study, we carried out an ESL classroom experiment in which vocabulary knowledge gains of learners in a thematic reading program (*Reading Only Treatment*) were compared with those in the same reading program in which some readings were replaced by vocabulary enhancement activities (*Reading Plus Treatment*).

Subjects were 38 young adult intermediate level ESL students in a university setting. The same subjects were exposed to both treatments, i.e., acted as their own controls.

There were 28 target nouns and verbs in the *Reading Plus Treatment* and 30 nouns and verbs in the *Reading Only Treatment*. Target words also included 10 discourse connectives in the *Reading Plus Treatment* for intra treatment comparisons.

In the *Reading Plus Treatment*, students read four selected texts (a total of four) on two themes and answered comprehension questions. They then did a series of vocabulary exercises from the proposed categories based on the target words from the two main readings. As noted above, students worked at least three times with each word using different exercise types in addition to encountering them while reading the main texts.

In the *Reading Only Treatment*, the students likewise read four selected texts on two themes and answered comprehension questions. However, instead of doing vocabulary exercises, following the reading of each main text, they read a supplementary text especially composed to again present the target words from the main text. The aim was to additionally expose students to the target words through reading only. An equal amount of total learning time was spent in the two treatments.

The results of the study indicated that while *Reading Only Treatment* led to substantial gains in word knowledge, gains were significantly greater in the *Reading Plus Treatment*. These differential treatment effects were both quantitative and qualitative. Learners learned more words in the *Reading Plus Treatment*. Furthermore, while *Reading Only Treatment* learners' knowledge of most target words stayed at the recognition level, many learners in the *Reading Plus Treatment* passed the recognition level knowledge of target words and achieved greater depth in their knowledge of these words.

These greater quantitative and qualitative lexical knowledge gains in the *Reading Plus Treatment* can be attributed to the use of vocabulary exercises and tasks which presumably demanded different kinds and levels of lexical processing of the target words by learners than did multiple encounters with the same words through reading. These exercises directed learners' attention to specific vocabulary items and required them to analyze and understand the meanings and functions of these words. Such varied levels of lexical processing required by different exercise categories appear to have moved learners' vocabulary knowledge from an "apperceived input" stage to an "intake" or higher stage (cf. Gass 1988). While such evidence cannot claim validity for the proposed categorizing scheme, the study has demonstrated some validity for the exercises themselves and their application within a reading program.

The present researchers are currently conducting an introspective study in which learners report on their word learning activities in Reading Only and Reading Plus contexts using think aloud and immediate introspection and retrospection techniques in order to better understand these processes. The questions addressed in the study are the following:

1. What do students do cognitively when they encounter unknown words which they need to understand for reading comprehension?
2. What do students do cognitively when doing different kinds of vocabulary exercises?

By having learners reflect aloud on what they are doing when reading or carrying out different exercises, we hope to better understand the kinds of mental activities required by both treatments. In the case of the Reading Plus Treatment, do these correspond to our proposed hierarchy of exercises?

Pedagogical Applications

The vocabulary exercise types in the proposed categorization scheme are all text-based and engage students in pre-reading, while-reading and post-reading activities both in and out of the initial context. It would, therefore, be quite easy and practical to integrate them into an L2 reading program. Such a reading-based lexical syllabus would not only allow students to encounter numerous new words in the reading text, but would also bring to focus a selected

number of items for intensive practice, aiming at the development or learners' active vocabulary for productive use.

Conclusion

While the study reported here clearly indicates that both reading and reading accompanied by text-based vocabulary exercises lead to substantial vocabulary knowledge gains, the latter leads to more favorable outcomes. However, the processes by which these occur are not clear. By shedding some light on the way acquisition of vocabulary knowledge takes place through reading comprehension and doing vocabulary exercises, it may be possible to enhance these processes and make instruction more efficient.

Notes

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Appendix A — Vocabulary Exercise Analysis Sheet

<u>Clientele</u>

Age:

Education level: elementary / secondary / college / technical or professional

Proficiency level: beginner / low intermediate / high intermediate / advanced

<u>Activity</u>

_____ ___ ___

_____

_____

<u>Source Text</u>

1.   sentence / paragraph(s) / list / none / other   _____

2.   authentic / pedagogical

3.   if authentic, literary / non literary

4.   knowledge of the topic required / not required

5.   visual and text / text

6.   text type: process / definition / description / categorization / comparison-contrast / cause-effect / narration / generalization / problem-solution / spatial order

<u>Techniques</u>

Appendix B — Examples of Vocabulary Exercises

Grade 6 Experiment Finds Kids Can't Cut the TV Habit Entirely

1.   Circle the connectives in the following list of words, then find and circle them in the text.

despite	crafts	find out	loosen
cut down	give up	moreover	be aware of
			though

1.   It's something many of us have considered but few have the courage to do. Give up the television habit.

2.   Imagine — no more *Wheel of Fortune, Three's Company* or *Hill Street Blues.*

3.   A Grade 6 class at Park Manor senior public school in this town just north of Kitchener, is finding out just how difficult that can be.

4.   Since an experiment in TV withdrawal began February 16, only three of 28 students have cut out their boob-tube habit entirely.

5.   "You try to give it up — some kids in here just can't," says Jim De Bock, who hit upon the idea while teaching the class a trilogy by children's author John Christopher. The plot involved aliens who took over the Earth using the hypnotic effects of TV.

6.   It's hardly a new experiment. Stories abound of towns which tried to quit cold turkey or families unable to give up their TV addiction even for a month, despite being offered thousands of dollars.

7.   De Bock doesn't come across as your average teacher. His long, wispy beard and piercing blue eyes give him an eccentric, old-world look. Moreover, the ceiling of his classroom is adorned with a huge spider web made of black thread and, on the day of the interview, de Bock and many of his students wore T-shirts carrying the web design.

8.   "The web of knowledge," he explains. "Shake one strand and the whole thing moves."

9.   Though most of his students have been lured back to TV-watching, de Bock says the exercise has been useful in getting them to at least cut down. Some students who were watching four or five hours daily spoke of reducing to one or two hours or none on some days.

10.   Some of them have rediscovered old activities. "I never knew my guinea pig was so much fun until I stopped watching TV," says Matthew Schlueter.

11.   He's one of the few who have given up the tube entirely since the experiment began.

12.   Another is Ruth Knechtel, a shy girl who used to watch TV for five hours a day. "I don't miss it at all," she says.

13.   Gloria Brubacher, the third student going cold turkey, says she has been tempted to fall off the wagon when she hears her family enjoying the TV in the next room.

14.   Giving up the tube for a lifetime is another matter. Asked if she were prepared to do that, Brubacher broke into a nervous grin while her classmates chuckled. "No," was her unequivocal answer.

15.   De Bock plans to continue the experiment until the end of the school year and keep a record of his and the students' observations. "The main purpose was to try to loosen the powerful grip that television has on the creative mind," he says.

16.   Since cutting down on TV, de Bock says the students are reading more and faster, talking with their parents more and demonstrating better listening skills.

17.   Some of the activities named by students as substitutes for TV include reading, doing puzzles, drawing, playing cards or board games, playing with their pets, visiting friends, going to the park, skateboarding, skipping, bicycling, listening to the radio, working on crafts — even reading the business section of the newspaper.

18.   Dr. Judith Van Evra, a University of Waterloo psychology professor who has done research into the effects of television on children, says de Bock's experiment is useful to persuade children to reduce their TV consumption and discover other activities.

19.   She says studies show North American children watch an average of four to six hours of TV a day. She advises parents to be aware of what their children watch and to let them see a favourite program or two a day, but to make sure they do other things as well.

The Ottawa Citizen, April 9, 1986

2.   Match the study words in the left column with the appropriate definitions in the right column. There are more definitions than words.

moreover	to know about something
give up	activities requiring artistic skill
though	in spite of

loosen	to discover
be aware of	in addition
despite	to decrease
find out	to stop doing something
crafts	a survey in which people are asked their opinions
cut down	eventhough
	to make something less tight
	a general movement or development of events, fashions, attitudes

3. Read the text again and find the underlined words corresponding to the following definitions. There are more definitions than words.

Example: *1.*   *mind*   :   *intellectual ability or knowledge*

2.   :   to decrease

3.   :   to shout

4.   :   activities requiring artistic skill

5.   :   to know about something

6.   :   an unpleasant or boring task that must be done

7.   :   to make something less tight

8.   :   to stop doing something

9.   :   to discover

4. Match the verb in the middle with the appropriate preposition on the right and the appropriate synonym on the left.

Synonym	Verb	Preposition
renounce	cut	of
discover	be aware	out
know about	give	down
reduce	find	up

5. Here is a list of connectives. Read the text again and find words in the text which could be replaced with the words in the list. Each word in the list must be used at least once. It may be possible to replace a connective in the text with more than one of the words below.

    furthermore   although
    eventhough   in addition
    in spite of

6. Unscramble the following strings of words and make complete sentences.

    1. comfortable / in / you / loosen / are / seat / your / seatbelt / your / not

        sentence: _____

        _____

        _____

    2. to / everybody / a / invited / of / is / demonstration / Ukrainian / traditional

        sentence: _____

        _____

        _____

Appendix C — VKS and the Scoring Categories

Figure 1 VKS Elicitation Scale
Self-Report Categories

I.	I don't remember having seen this word before.
II.	I have seen this word before, but I don't know what it means.
III.	I have seen this word before, and I <u>think</u> it means _____. (synonym or translation)
IV.	I <u>know</u> this word. It means _____. (synonym or translation)
V.	I can use this word in a sentence: _____. (If you do this section, please also do Section IV.)

Figure 2 VKS Scoring Categories
Meaning of Scores

Self-report categories	Possible scores
I ⟶ 1	The word is not familiar at all.
II ⟶ 2	The word is familiar but meaning is not known.
III ⟶ 3	A correct synonym or translation is given.
IV ⟶ 4	The word is used with semantic appropriateness in a sentence.
V ⟶ 5	The word is used with semantic appropriateness and grammatical accuracy in a sentence.