Teaching & Learning Vocabulary for Reading Skill Development and Utilizing Technology for It

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Abstract: Strengthening the stock of vocabulary is an unavoidable necessity for developing reading skill. Since a learner of language must develop reading skill, he/she should give due attention to vocabulary. The teachers also should adopt all possible steps to enrich students’ vocabulary. In the class room teachers can teach vocabulary both directly and indirectly. Various materials like text books, dictionaries, pictures and real things can be used for teaching vocabulary. Teachers can teach the meanings of words by using synonyms, antonyms, hyponyms and contexts etc. All these things will be much easier for a teacher if he/she uses multimedia projector and laptop with internet connection in the class room or shows these things in internet where the campus is Wi-Fi equipped. Teachers can show corpuses, online dictionaries and vocabulary teaching and testing websites. This article focuses on some important aspects of vocabulary, its relation with reading skill, the aspects of vocabulary teachers should focus, and the approaches he/she should follow for enhancing the stock of vocabulary.

Keywords: Expressive vocabulary, receptive vocabulary, reading skill, corpus, multimedia projector, WiFi

1. Introduction

Vocabulary is the sum of words, phrases and idioms which form a language. Since the term ‘vocabulary’ denotes not only single word, but also phrases made up of two or three words and multi words idioms, such as ‘call it a day, or ‘a bolt from the blue’ it’s better to use ‘vocabulary items’ rather than ‘vocabulary words’ while talking or writing about vocabulary. If we think about reading skill development there is no alternative to vocabulary development. Among various ways of teaching and learning vocabulary, the most attractive one is use of technology. By using internet through laptop and multimedia projector the teacher can make the class attractive and the students also can have a large stock of vocabulary by working with many valuable websites. This article deals with what aspects of vocabulary teachers should emphasize, what methodologies or approaches can be used for effective teaching of vocabulary and how information technology can be used for teaching and learning vocabulary.

2. Some important aspects of vocabulary

The vocabulary can be categorized as expressive and receptive vocabulary. Expressive vocabularies are those vocabularies which we use for expressing ourselves through writing and speaking and receptive vocabularies are those vocabularies which we use for receiving information through listening to speech and reading. It’s almost impossible to say exactly how many words there are in English. The Global Language Monitor, which tracks language trends, especially in the media, has counted up to 988,968 words. Webster’s Third New International Dictionary, Unabridged, together with its 1993 Addenda Section, includes around 470,000 entries. Counting words is, however, a complicated business as it is not exactly determined what we mean by a word. If we think about the word RUN, we find that many words are derived from it, such as, run, runs, running, ran, runner and runners. Should we count these as one “word” or six? How do we count different uses of the same word? For example, is the verb run in run a marathon the same as the verb in run a company? Is it the same as the noun a run? How do we deal with idiomatic uses like run out of gas, feel run down, or a run of bad luck? And, of course, new words are being added to the language all the time. The Internet especially has given us lots of new words like podcast, netizen, and blog, as well as new meanings such as surf as in surf the web. (Jeanne Mc Carter-2007, p-1) Despite such difficulties, researchers have tried to estimate how many words native speakers know so that they can assess the number of words learners need to learn. Estimates for native speakers vary between 12,000 and 20,000 depending on their level of education. One estimate is that a native speaker university graduate knows about
20,000 word families (Goulden, Nation, and Read, 1990), not including phrases and expressions. Current learners' dictionaries such as the Cambridge Dictionary of American English include “more than 40,000 frequently used words and phrases.” This huge number of items presents a challenge that would be impossible for most English language learners, and even for many native speakers. Fortunately, it is possible to get along in English with fewer than 20,000 words. Another way of deciding the number of words learners need is to count how many different words are used in an average spoken or written text. As some high-frequency words are repeated, it is said that learners can understand a large proportion of texts with a relatively small vocabulary. So, for example, learners who know the most frequent 2,000 words should be able to understand almost 80 percent of the words in an average text, and a knowledge of 5,000 words increases learners’ understanding to 88.7 percent (Francis and Kucera 1982).

2.1 Connection between reading skill development and vocabulary development and necessity of both aspects of language

We find that there is a close relation between vocabulary and reading skill, i.e., a capability and competence of comprehending any written text. It is to be mentioned here that, the importance of reading skill development is so great for some very practical reasons. In the first place English is the medium of instruction for many educational programs and most of texts, reference books and academic writings are available in English either in original text or in translation. So reading skill helps a student collect huge data on the subject of his/her study. Although various factors, like basic knowledge of the sentence structure and grammar, understanding the meanings of vocabulary items and background knowledge of the topic dealt with in that written text contribute to its comprehension, knowledge of vocabulary is the prime factor in this regard. One of the oldest findings in educational research is the strong relationship between vocabulary knowledge and reading comprehension. Word knowledge is crucial to reading comprehension and determines how well students will be able to comprehend the texts they read. Vocabulary experts agree that adequate reading comprehension depends on a person’s knowing between 90 and 95 percent of the words in a text (Hirsch, 2003). Readers who do not recognize at least 90 percent of the words will not only have difficulty comprehending the text, but they will miss out on the opportunity to learn new words. The Report of the National Reading Panel (2000) concluded, “The importance of vocabulary knowledge has long been recognized in the development of reading skills. As early as 1924, researchers noted that growth in reading power relies on continuous growth in word knowledge” (pp. 4–15). Rupley, Logan & Nicholas, (1998/99) opine “Vocabulary is the glue that holds the stories, ideas and content together...making comprehension accessible for children.” As vocabulary is one of the major factors of comprehension, teachers of English language as well as learners should give due attention to it.

2.2 The aspects of vocabulary learners should know

Learning vocabulary is a challenge for learners, partly because of the size of the task, and partly because of the variety of vocabulary types to be learned, including single words, phrases, collocations, and strategic vocabulary, as well as grammatical patterning, idioms and fixed expressions. There are many aspects of vocabulary items, which learners should acquire. Richards (1976) and Nation (2001) list the different things learners need to know about a word before they can claim to have successfully learned it. These include:
* The meaning(s) of the word
* Its spoken and written forms
* What “word parts” it has (e.g., any prefix, suffix, and “root” form)
* Its grammatical behavior (e.g., its word class, typical grammatical patterns it occurs in)
* Its collocations
* Its register
* What associations it has (e.g., words that are similar or opposite in meaning)
* What connotations it has
* Its frequency

It would be unrealistic to teach everything there is to know about a word at the first time it is presented to students – and any such attempt would make for some very tedious lessons. Obviously we need to make choices about how much we teach on a first presentation. For example with the word like, in addition to its sound and spelling we might choose to teach only one of its meanings (to enjoy, find something to be pleasant) with one grammatical pattern (I like+ singular or plural noun) and some associated vocabulary (I like football/cartoons; I can’t stand game shows). At a later date we can add other meanings such as to be similar to (I have a car like that) or add more grammatical patterns such as like+ to+.
verb (I like to play tennis). (Jeanne Mc Carten 2007) Additionally, even from the elementary level, it is important to include in vocabulary lessons not just single words, but also larger “chunks” such as collocations, phrases, or expressions, even whole sentences, as well as strategic vocabulary (Sökmen-1997). By building up a stock of expressions as well as individual words, students can assemble the language they need to communicate more fluently.

2.3 Direct and indirect teaching of vocabulary

In its analysis of the research on vocabulary instruction, the National Reading Panel (2000) found that vocabulary should be taught both directly and indirectly. Direct instruction means teaching specific words, such as teaching vocabulary prior to reading a selection. It is estimated that students can be taught explicitly some 400 words per year in school (Beck, McKeown & Kucan, 2002). Another example of direct instruction is the analysis of word roots and affixes (suffixes and prefixes). However, one cannot teach students all of the words they need to learn. Vocabulary instruction must therefore also include indirect instruction methods, such as exposing students to lots of new words and having them read a lot by designing a syllabus, giving assignments and taking regular tests. Indirect instruction also includes helping students develop an appreciation for words and experience enjoyment and satisfaction in their use (Baumann, Kame'enui & Ash, 2003). One of the ways of direct instruction is providing direct meanings of the words. Teachers should provide direct, explicit instruction in specific words. Teachers must remember that direct instruction of specific words is only one component of effective vocabulary instruction.

2.4 Words the teacher should choose to teach

Teachers should focus on words that are important to the text, useful to know in many situations, and that are uncommon in everyday language but recurrent in books (Juel & Deffes, 2004). The following guide was adapted from J.D. Cooper and used in the Texas Reading Academy (Texas Center for Reading and Language Arts, 2002).

* Before instruction, preview the text, even when using text that has pre-selected vocabulary words.
* Read the passage and identify vocabulary words you think students will find unfamiliar. Ask yourself: “How difficult is this passage to understand?”
* Select words that are important to understanding the text.
* List words, which you predict, will be challenging for your students. You may not be able to teach all of these words. Research supports teaching only a few words before reading.
* Determine which words are adequately defined in the text. Some may be defined by direct definition and others through context. Expand on these words after reading, rather than directly teaching them before reading.
* Identify words students may know based on their prefixes, suffixes and base or root words. If structural elements help students determine words’ meanings, don’t teach them directly.
* Consider students’ prior knowledge. Words can be discussed as you activate and build prior knowledge. Words can also be extended.
* Determine the importance of the word. Ask yourself: “Does the word appear again and again? Is the word important for comprehending the passage? Will knowledge of the word help in other content areas?” (Cooper, J.D. (1997).

2.5 Clarifying and explaining words

Once specific words are chosen, the vocabulary instruction must be analytical and substantial for words to “really stick” (Juel & Deffes, 2004). Teachers must provide clear explanations and examples of the meanings of these words in various contexts, and provide students with opportunities to discuss, analyze, and use the words. Simply looking up a definition in a dictionary is not enough. Have students rewrite definitions in their own words, provide examples of situations where the word could be used, supply synonyms (and antonyms when possible) and create sentences using the word that clearly show the meaning. Sometimes it is useful to have students use more than one new word in a single sentence because it forces them to look for relations among words (Stahl, 1999). This kind of direct vocabulary instruction is particularly important for students with learning disabilities (Juell & Deffes, 2004). Direct instruction of specific words can include the following ways:

  Synonym: Teachers can present items that convey the same or nearly same meaning. Such as for teaching the meaning of the word ‘bright’ it can be said that ‘bright’ is synonymous to ‘shining’. It can also mean ‘meritorious’, such as bright students means meritorious students.

  Antonym: In order to make the meaning of one item teachers can present the opposite item, such as the word
'bright' is opposite of 'dim' as in 'dim light'. It may also be opposite of 'dull' as in 'dull student'.

Hyponyms: A new word can be defined by mentioning some other words that serve as specific examples of a general concept, such as dog, lion, mouse, cow, goat are hyponyms of 'animal'.

Co-hyponyms or coordinates: While dog, lion, cow and goat are hyponyms of animal, these animals are co-hyponyms/subordinates of each other.

Definition: A new word or item can be defined as in the dictionary to make its meaning clear. Such as the word 'bright' can be defined as a thing which emits or reflects much light, such as a bright room is a room which is reflected with much light and a bright student is one who is endowed with much light of knowledge.

Illustration: By showing pictures, white board drawing and diagram a teacher can help the student understand the meaning of a new word, such as in order to present the word 'volcano' the teacher can show a picture of volcano or can draw one on the board.

Realia: New words can also be presented by showing real things, such words/phrases like 'modem, pen drive, and 'digital camera, can be presented by showing these things in the class.

Demonstration: A new word can be presented through acting out or miming, such as the meanings of the words like 'snore' 'drag' and 'wrestle, can be shown through acting out and miming.

2.6 Analyzing the words: teaching spelling, pronunciation and word roots

It is extremely necessary to teach the spoken and written forms, i.e., pronunciation and spelling of the word. Spelling knowledge applies not only to the ability to encode words during writing; importantly, it also underlies individuals’ ability to decode words during the process of reading (Templeton, 2003a, 2003b). Students’ spelling knowledge is, therefore, a powerful foundation for their reading and their vocabulary development. The majority of English words have been created through the combination of morphemic elements, that is, prefixes and suffixes with base words and word roots. If learners understand how this combination process works, they possess one of the most powerful understandings necessary for vocabulary growth (Anderson and Freebody, 1981). This understanding of how meaningful elements combine is defined as morphological knowledge because it is based on an understanding of morphemes, the smallest units of meaning in a language.

2.7 Teaching grammatical aspects of the words

Teaching grammatical behavior of the words is an excellent way of enriching students’ vocabulary. While focusing on a word teachers should indicate its grammatical label. If the word is a noun, its singular and plural forms should be indicated. Its derivatives also should be taught showing the difference through examples. For example while teaching the word ‘breath’ teachers should say that it's a noun and the verb form from it is ‘breathe’. Then with two examples, such as, if a person takes breath, he is alive and if a person breathes, he is alive the difference should be made clearer.

2.8 Indirect vocabulary teaching: encouraging to wide reading

Teachers can encourage the students for wide reading saying to them 'The more you read, the more vocabulary you learn'. Increasing the opportunities for such encounters improves students' vocabulary knowledge, which in turn improves their ability to read more complex text. "In short, the single most important thing a teacher can do to improve students' vocabulary is to get them to read more." (Texas Reading Initiative, 2002). Students should read different types of text at different levels, including text that is simple and enjoyable, and some that is challenging.

3. Teaching the use of dictionary

Teachers should teach the use of dictionaries, thesauruses, and other reference works. Exploring dictionary entries can be one important and effective component of understanding a word deeply. The entries can also help students determine the precise meaning of a word. Dictionaries can also provide helpful information about the history of a word and reinforce the interrelationships among words in the same meaning “families.” For example, a discussion of run-on entries illustrates how one word’s entry can include information about related words—the entry for entrap also includes entrap and entrapment. The usage notes in dictionaries often explain subtle but important differences among words—usually the appropriateness of one word over another in a particular context. Words for which the dictionary is essential may be entered in a student's vocabulary notebook. Dictionaries can also contribute to an interest in and attitudes toward words
that teachers and the students explore. The usage notes in dictionaries reflect a powerful and consistent research finding: every word/concept we know, and the degree to which we really know it, depends on the relationship of that word/concept to other words/concepts.

3.1 Multiple exposures to words

The growth of word knowledge is slow and incremental, requiring multiple exposures to words (Hirsch, 2003; Stahl, 2004). This means seeing the word in different contexts. Every time we encounter a word in context, we remember something about the word. As we encounter a word repeatedly, more and more information accumulates about that word until we have a vague notion of what it means. As we get more information we are able to define that word. "Vocabulary knowledge seems to grow gradually moving from the first meaningful exposure to a word to a full and flexible knowledge" (Stahl, 1999). Teachers should encourage students to actively construct links between new information and previously known information about a word.

3.2 Use of technology for teaching and learning vocabulary

For teaching vocabulary teachers traditionally use prescribed and non prescribed texts. Students can only be benefited from this teaching if they have those texts in front of them. Unless the students have texts in front of them it is very difficult to keep up the concentration which is extremely necessary for learning. From the practical experience it has been seen that, many students, specially in large classes, don't carry text books. Moreover it is not possible to carry dictionaries in the class room. So while the teachers discuss vocabulary or want to show use of words in the dictionary, only those students are benefited who have texts or dictionaries. Others pass idle time having had nothing to concentrate on. Technology can play a vital role in solving this problem. Now many educational institutions are making the campuses Wi-Fi equipped. In these campuses the students have internet access within the campus. Some digital educational institutions are being introduced as well now. By using a small notebook or laptop students can have access to unlimited sources of knowledge. Teachers also can use laptops and multimedia projectors to carry the students to the world of internet. By using internet through multimedia projectors the teachers can show multiple uses of words in the online dictionary. Teachers can show the corpus to show the words in different contexts, browse internet through multimedia projectors to take the students to various websites which provide students knowledge of vocabulary. Moreover using internet through multimedia projector is the only way to show the student the latest words which are always being introduced in the language. As these new words may only be available in the latest editions of the dictionaries it is really difficult to show them to the students without using internet.

3.3 Using corpus through multimedia projector

A corpus is basically a collection of texts which is stored in a computer. The texts can be written or spoken language. Written texts, like newspapers and magazines, can be entered into the computer from a scanner, a CD, or the Internet. Spoken texts, like conversations, are recorded and then the recordings are transcribed; that is, they are written down word for word, so that the texts of these conversations can be fed into the computer database. It is then possible to analyze the language in the corpus with corpus software tools to see how people really speak or write. Corpus tools help us analyze the huge amount of data in the Corpus. It can consist of millions of words. But in addition to providing the more statistical kinds of information the Corpus also gives us access to hundreds of texts which we can read in order to observe how people use vocabulary in context – a qualitative analysis. For example, it is possible to see what kinds of vocabulary people use to talk about a topic like music or celebrities, or how they repeat words, or avoid repeating words by using synonyms Using corpus is an extraordinary way of knowing about collocation, the way in which two or more words are typically used together. For example, we talk about heavy rain but not heavy sun, or we say that we make or come to a decision, but we don't do a decision. So, heavy rain and make a decision are often referred to as collocations and we say that heavy collocates with rain, or that heavy and rain are collocates of each other. With collocation software we can search for all collocates of a particular word, that is, all the words that are used most frequently with that word and especially those with a higher than anticipated frequency. The Corpus can show us the grammatical patterns that vocabulary forms – or the grammar of vocabulary. This is very helpful with verb complements, i.e., items and structures that must follow or that usually follow any particular verb, such as objects or infinitive verbs.
3.4 Using online dictionary through multimedia projector

It’s a known fact that dictionary is the best source of knowing the pros and cons of a word. But probably it will not be advisable to ask the students to carry dictionaries to the class room. In this regard technology has given us an unparalleled opportunity. By using projector and laptop in a non WiFi equipped campus the teachers can show the meaning, pronunciation, uses in examples and origin of some words in the online dictionaries, many of which are available in the internet and in the Wi-Fi equipped campus the students also can browse for the word as per the direction of the teachers. For example, if any student wants to know the meaning of the word ‘genocide’, the teacher at first can explain it in his own way, then he can show it in the online dictionary by typing the word in the search bar of search engines like Google, MSN etc. A result of this type has been shown below.

A search of the said word has shown the author lots of sources to know about this word. When a site, http://dictionary.reference.com/browse/genocide, has been browsed the following information about the word has been received from different online dictionaries.

- **Gen.o.cide** [jen-uh-sahyd] noun: The deliberate and systematic extermination of a national, racial, political, or cultural group. Gen.o.cide [Origin: 1940-45;<Greek géno (s) race + -cide, Related forms: gen-o-cid-al, adjective


**Example Sentences**
* No other country can intervene to stop this violence since it is not considered genocide.
* They have since deleted a link to genocide campaign from the presidential genocide.
* It is only important because you labeled it genocide. [Source: World English Dictionary]

**genocide** — n : The policy of deliberately killing a nationality or ethnic group
[C20: from geno-, from Greek genos race + -cide ]

**geno'cidal** — adj

Word Origin & History

**genocide**
1944 apparently coined by Polish-born U.S. jurist Raphael Lemkin in his work “Axis Rule in Occupied Europe” [p.19], in reference to Nazi extermination of Jews, lit. “killing a tribe,” from Greek genos” race, kind” (see genus)+-cide. The proper formation would be *genticide. [Cultural Dictionary]

**genocide** [(j-en-uh-seyed)] :The deliberate destruction of an entire race or nation. The Holocaust conducted by the Nazis in Germany and the Rwandan genocide are examples of attempts at genocide. [The American Heritage® New Dictionary of Cultural Literacy, Third Edition Copyright © 2005 by Houghton Mifflin Company. Published by Houghton Mifflin Company]

3.5 Projecting the vocabulary teaching and testing sites in the class and encouraging the students to browse and work with those sites personally

Use of vocabulary teaching and testing sites can be a very enjoyable activity both in the class room and in personal study. There are so many sites which test learners’ strength of vocabulary. If the teachers spend a little time at every class in working with any of these sites it can contribute a great deal in students’ vocabulary growth. Teachers can also arrange competition among the groups of students. One of such valuable sites is www.vocabulary.com. This site tests learners’ vocabulary by arranging questions in sets of ten questions and allocating scores for the sets. Each question has four options. If the browser chooses right answer, it congratulates and encourages the browser excellently. If wrong answers are chosen, the site not only shows the correct answer, but also shows the meaning and use of the word in the context. At the end of the set, it shows the result and score obtained. The vocabulary questions are of several styles. In some questions a context is given and the browser is asked to fill up the gap with correct vocabulary taken from the four options. In some other questions directly the meanings are asked. Some specimen questions are as follows:

“We could have gone further in reducing America’s debt with **a sensible** compromise that both cut discretionary spending and raised revenues,” she said.

In this sentence, **a sensible** means:
To a vegetarian, the idea of eating a 52-ounce T-bone steak would seem preposterous—absolutely absurd. When the word preposterous was first used, it meant reversing the normal order of things—putting what was last first, and vice versa. Imagine putting on your underwear over your pants and you'll see that there is a kind of absurdity in something that's backwards, which is why preposterous came to mean "ridiculous". The word is often used as a part of an exclamation: a chef who is to cook with nothing but jelly beans might exclaim, "That's preposterous!"

4. Conclusion

To sum up, there is no alternative to enriching the stock of vocabulary if we really want to develop our reading skill. Without grammar we can understand a little, but without vocabulary we can't understand anything. Teachers' adopting right approach, using interesting materials, learners' interest and diligence and use of technology based activities and approaches will undoubtedly play an important role in enhancing students' strength of vocabulary. Technology has facilitated the learning of vocabulary to a great extent. By using laptop and projector teachers can provide more than enough information about the pros and cons of the words, phrases and idioms. The use of technology will also enhance students' interest and enjoyment. Just spending a few minute in the class and assigning different web based assignments to the group of students and arranging competition will undoubtedly show tremendous success. This web based activities can be started from the secondary level and can be extended to tertiary level. Marks can be allocated in the examination. A well devised plan in this respect will create lots of skilled reader who will be invaluable wealth for any country.

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