# LEARNING STRATEGIES FOR UNDERSTANDING INFORMATICS VOCABULARY

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#### Abstract

Vocabulary is one of the supporting factors in the success of language learning. Developing the ability to communicate in English either in spoken or written form includes listening, speaking, reading, and writing. One of the most important aspects of language learning is vocabulary. Understanding vocabulary is considered important in the process of language learning or the development of a person's ability in a controlled language. Not all vocabularies have the same meaning. All understanding will depend on the context.

**Keywords**: learning, understanding, vocabulary, strategy, context

# **Background**

The most important and crucial in every language is vocabulary. In communication, especially in verbal communication, word is an unsure which should be used for speakers. We can combine the word into phrase, clause, sentence, and paragraph grammatically. The sentence will create an idea. Therefore, vocabulary is an unsure that is important in communication.

Vocabulary learning strategy is a language learning strategy than can be defined as "specific action taken by the learners to make learning easier, faster, more enjoyable, more selfdirected, more effective, and more transferable to new situations." (Oxford, 1990, p. 8).

According to Fank and Lewis (1974, p. 4), vocabularies are the parameter to measure person's intellegency. Language is a system that has a pattern. Understanding the vocabularies are the good concept for learners for the first. Every learners have many obstacles for understanding word by word in English text or conversation. It is

because the learners do not have vocabularies to support their English. On the other hand, the English learners sometimes forget about the context for understanding English text and conversation.

The shortcut for this problem is that the learners can take and open dictionary for searching the meaning of each words, but it will take time. To avoid this situation, the learners have to know about the learning strategies especially in vocabulary problem.

# The Importance of Vocabulary

There are so many words in our different environment with context. McManis (1998, p. 197) states that "What is context: is it simply the reality which fills in meaningful details by a theory such as the invariant core theory? No, it is not. Context can be divided into four subparts of which reality is but the first." The exposure in using every word give the understanding the new vocabulary meaning. According to Cameron (2001, p.

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47), learning the new words is not the simple way. Learning vocabulary is not only about the words but also the meaning of phrase in different context. Some learners of a foreign language know very well that words are essential and lack of difficulties leads them communication situations. It is generally accepted that vocabulary is the heart of learning a foreign language, but the acquisition of the large numbers of vocabulary items may be one of the most difficult aspects of learning a foreign language for most foreign learners.

The learners have to focus in context. Context use have placed considerable emphasis on the value of reading and the importance of context in the learning of world meaning. The learners actually do the most of their learning of new vocabulary independently, it makes sense to encourage them to adopt personal plans to enlarge their vocabularies overtime.

Using vocabulary strategies has revealed differences among learners in terms of their strategy use. Successful vocabulary learners were found to be active strategy users who were conscious of their learning and took steps to regulate it, whereas poor learners displayed little awareness of how to learn new words or how to connect new words to the knowledge.

The importance of vocabulary as a very essential unsure of any language as well as language the core point of communication learning. Schmidt (2000) defined that vocabulary is a set of lexemes which includes single words, compound words, and idioms. Vocabulary concerns not only in simple words in all their aspects but also complex and compound words as well as the meaningful units of language. Vocabulary often seems to be the least systematised and the least wellcatered for all aspects of learning a foreign language, for example listening, speaking,

reading, writing, grammar, or pronounciation.

The grammatical or other type of linguistics knowledge can be employed in communication or discourse without the meditation of vocabulary because vocabulary is shown to focus much more than knowledge or single words.

Hedge (2000, p. 110) affirms that there is a lack of attention to vocabulary. Since vocabulary learning is a part of language, it is worth mentioning in the present investigation that strategies should be indispensable parts of vocabulary learning. In learning vocabulary items, it is useful in order that they can learn how to discover them by practising and expanding their vocabulary. The meaning of vocabulary depends on the context absolutely, for example:

- (1). Cancer is her zodiac.
- (2). There are many different options when it comes to treating <u>cancer</u>.

According to these sentences, there are different meaning in 'cancer'. In the first sentence 'cancer' is a name of zodiac in astrology for someone who born in June to July. In the second sentence, the 'cancer' is a medical term that is a disease caused by uncontrollable growth of cells.

- (3). Megan Fox is a <u>cast</u> of Transformer movie.
- (4). My leg was a cast for graduation.

With the same word 'cast' for these sentences, it still have a different meaning. The 'cast' in the first sentence is the actress who act in a movie. In the second sentence the 'cast' is one of the medical term that is a hard bandage that is wrapped around a broken bone to keep it in place.

(5). <u>Sting</u> will perform in the biggest concert tonight.

# (6). It may <u>sting</u> when I insert the needle.

'Sting' in the first sentence is the name of singer and in the second sentence 'sting' is sharp and temporary pain for medical vocabulary.

These examples of the sentences conversations prove that vocabulary learning is not a simple matter and in recent years, there is a renewed interest in the role of vocabulary in English as a second language. Be careful with the words especially for learners who are in medical field. Generally accepted that vocabulary is the heart of language learning. Rubin and Thompson (1994, p. 79) point out, "one can not speak, understand, read or write a foreign language without knowing a lot of words". Therefore, vocabulary learning is at the heart of mastering a foreign language." Moreover, Taylor (1992, p. 30) states that "vocabulary permeates everything language learners or language teachers do in an English class, whichever skill or language point is being practised."

Understanding any foreign language is impossible without knowing words whether in the spoken or the written forms (Hall, 2000, p. 43). The language learners with large and rich vocabulary are believed to improve their listening, reading, speaking, writing, and thinking abilities. Therefore, vocabulary is a key indicator of language learners.

# The Vocabulary Strategies

Here are some strategies for learning vocabulary:

#### A. Contextualisation

This means putting new vocabulary words to sentences to help you remember them and to test if you are using them correctly. You can use these sentences when talking to an English speaker to see if they understand.

#### B. Elaboration

This means relating new information to information you already knew. For example, if you know the meaning of information, it is easy to remember that the verb is to inform, and that informative is an adjective, and that an informant is someone who gives information.

# C. Inferencing

This means using available information to predict or guess the meaning of; for example: new vocabulary items, if you know that you are reading about football and you know that a field is often a large area covered in grasss, than you can guess that a footbal field is a large, grassy area for playing football.

# **D.** Translation

You can read a story in a newspaper in your own language first, then read the same story in an English newspaper. Most of the story will probably be the same, so the story in your own language will help you to prepare for reading in English. For example, it will give you vocabulary and when you read the English story and there are some vocabulaties that you do not know, then you can use your knowledge of the story to guess the meaning of new vocabulary.

## E. Personalisation

You can write down the vocabulary item, for example word or phrase are important for you, where you first saw it, and when you used it, for example you may have heard that item in a movie you liked and used the item when you talked about the movie with your friends.

# F. Keeping your own dictionary

Writing entries for the dictionary will help you to learn words and using your own dictionary can be faster than a normal dictionary.

# G. Grouping

You can group words into different areas, such as words in the different courses you study. For example for medical students can group the vocabulary into:

- Computing term vocabulary
- Software/Hardware system vocabulary
- Program vocabulary
- Computing equipment vocabulary

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# H. Practice, practice, and practice

Learning a word will not help you very much if you promptly forget it. Research shows that it takes from ten to twenty repetitions to really make a word part of your vocabulary. It helps to write the word both the definition and a sentence you make up using the word perhaps on an index that can later be reviewed. As soon as you can learn a new word, start using it. Review your index periodically to see if you have forgotten any of your new words.

These are the learning strategies that can be adopted for learning vocabulary. A limited vocabulary keeps the ideas and feeling from expressing the learners thougt and feelings. On the other hand, a large number of rich vocabulary give the learners the right words to use at the right time. Both vocabulary and grammar are essential but when we compare vocabulary and grammar, vocabulary is much more important and should receive more attention than grammar.

Regarding vocabulary in communication, it is apparent that vocabulary is basic in learning to communicate effectively in listening, speaking, reading, and writing. The importance of vocabulary becomes a basic for daily communication. If language learners do not recognise and understand the meanings of the key words used by those who address them, they will be unable to participate in the conversation, even if they know the morphology and syntax.

# **Informatics Vocabulary**

Here are some examples of informatics vocabulary for computer, technology, and informatics English learners:

#### Adobe Acrobat Reader

Acrobat Reader is software that allows you to view a PDF document (a document that can be seen but not changed). It can be downloaded free of charge from Adobe.

#### ADSL

Asymmetric digital subscriber line (ADSL) is a type of digital subscriber line (DSL) broadband technology that is used to connect to the Internet. It uses standard telephone lines to deliver high-speed data communications (up to 24 megabytes per second).

# Analogue

Analogue is a conventional method of transmitting data. Standard landline telephones use analogue technology. It is distinct from digital technology, which provides for greater quality and speed of data transmission.

# **Assistive Technology**

Assistive technology refers to any software or hardware that acts to assist and improve the functional capabilities of people with disabilities. Examples include wheelchairs, prosthetics, voice-to-text technology and text-to-speech technology.

#### Attachment

An attachment is a document sent with an email message. Many types of files can be sent this way (e.g. Word documents, PDFs, Excel files, JPEGs). Be wary of attaching large files because these can take a lot of time for the recipient to download. If you have a large file, it is considered good practice to compress the file using software such as Winzip before attaching it.

# **Back-end**

Back-end refers to the part of an application that performs an essential task not apparent to the user.

# **Backward compatible**

If software is backward compatible, it is compatible with earlier (superseded) versions of the same software. For example, the Microsoft word-processing program Word 2010 can read files created in the 2003 version of the same program, so it is backward compatible.

#### Bandwidth

Bandwidth refers to the maximum amount of data that can travel a communication path in a given time, usually measured in seconds.

#### Bit

A bit (short for binary digit) is the smallest unit of measurement in computing. 8 bits make up 1 byte.

## **Bluetooth**

Bluetooth is a wireless communication technology intended to replace cables. It allows short-range connections between two or more Bluetooth-compatible devices such as mobile phones, tablets, headsets or medical equipment.

#### **Bookmark**

A bookmark is a saved link to a particular Web page. Microsoft Internet Explorer denotes bookmarks as "favourites."

# **Boolean Operators**

Most search engines (e.g. Google) allow you to limit your search or make it more specific by using words such as "and", "or" and "not". These words are known as boolean operators because of their origin as terms in logic.

#### **Boot (Re-boot)**

To boot (or re-boot) is to load and initialise the operating system on a computer. Think of it as starting up your computer. In Windows, you can use the key combination CTRL and ALT and DEL as a "soft" boot. This means restarting the computer rather than turning it completely off and on again, which could cause damage to your computer's hard disk under some circumstances.

#### **Bounce Back**

An email message that cannot be delivered and returns an error notification to the sender is said to "bounce back". If you receive such an error notification, check that you have typed the address correctly.

#### Broadband

Broadband is a type of communication technology whereby a single wire can carry more than one type of signal at once; for example, audio and video. Cable TV is one technology that uses broadband data transmission.

#### **Browser**

A software program that allows you to surf the web. Popular web browsers include Google Chrome, Mozilla Firefox, Microsoft Edge and Internet Explorer.

#### Cache

When you download (read) a web page, the data is "cached," meaning it is temporarily stored on your computer. The next time you want that page, instead of requesting the file from the web server, your web browser just accesses it from the cache, so the page loads quickly. The downside to this is that if the cached web page is often updated, you may miss the latest version. If you suspect that the web page you're seeing is not the latest version, use the "refresh" button on your browser.

# CAD

Computer-aided design (CAD) is a type of software that allows users to create 2D and 3D design and modelling. CAD is used by architects, engineers, artists and other professionals to create precise technical drawings.

#### Chip

A chip is a microprocessor that performs many functions and calculations that make your computer run. Your computer's chip is also referred to as the CPU (Central Processing Unit) or the processor.

# **Cloud Computing**

Cloud computing refers to the storing and accessing of data and programs over the Internet instead of on another type of hard drive. Examples of Cloud services include iCloud, Google Cloud and Dropbox.

# Compression

Compression is the reduction of the size of a file. Compressed files take up less

memory and can be downloaded or sent over the Internet more quickly.

#### Content

Content refers to a website's text and information, as opposed to its design and structure.

#### Cookie

A piece of code or data created by a web server and stored on a user's computer. It is used to keep track of the user's usage patterns and preferences.

## **CPU**

The central processing unit (CPU) is the brains behind your computer. The CPU is responsible for performing calculations and tasks that make programs work. The higher the speed of a CPU, the faster the CPU undertakes the calculations and tasks.

#### **Cybercrime**

Cybercrime is any type of illegal activity that is undertaken (or relies heavily) on a computer. There are thousands of types of cybercrime, including network intrusions, identity theft and the spreading of computer viruses.

# Cybersecurity

Cybersecurity refers to measures designed to protect your computer, device or network from cybercrime. This involves preventing unintended and unauthorised access, change and damage.

# **Device Driver**

A device driver is a small program that allows a peripheral device such as a printer or scanner to connect to your PC.

#### Domain

A domain is a set of computers on a network that are managed as a unit.

# Download

Downloading is the method by which users access and save or "pull down" software or other files to their own computers from a remote computer via the Internet.

#### DV

DV stands for digital video.

#### **Email**

Email or electronic mail is a way of sending messages over the internet.

Popular email programs include Outlook, Mozilla Thunderbird, Gmail and Yahoo Mail.

# Encryption

Encryption is the process of converting electronic data to an unrecognisable or encrypted form, one that cannot be easily understood by unauthorised parties.

#### Ethernet

Ethernet is the most common way of connecting computers on a network with a wired connection. It is a type of local area network (LAN) technology, providing a simple interface for connecting multiple devices.

#### **Firewall**

A firewall is a barrier that acts as a security system to protect trusted computer systems and networks from outside connections and untrusted networks, such as the Internet.

## **FTP**

File transfer protocol (FTP) is a common method of transferring files via the internet from one host to another host.

#### Gateway

A point within a network that interconnects with other networks.

#### CIE

Graphics interchange format (GIF) is a graphics file format. Because GIF files are compressed, they can be quickly and easily transmitted over a network. GIF is one of the main graphics formats on the Internet.

#### Harddisk

The physical place where a computer stores information - applications and files - is known as its hard disk drive (HDD). The bigger the HDD, the more data it can store.

#### Homepage

The page that an Internet browser first opens up to. It is usually the starting point of an organisation's or individual's website.

# **HTML**

Hyper-text markup language (HTML) is a set of symbols inserted into files intended for display on the world wide web. The symbols tell web browsers how to display words and images - e.g. which colour, font

and type size to use - and they direct it to link to other pages on the world wide web via hyperlinks.

#### Internet

A set of interconnected networks that allow computers in different locations to exchange information. The Internet includes services such as the world wide web, electronic mail, file transfer protocol (FTP), chat and remote access to networks and computers.

#### **ISP**

An internet service provider (ISP) is a company that provides access to the Internet. In Australia, widely used ISPs include Bigpond, iinet and Dodo.

#### Intranet

An intranet is basically a private, internal internet specific to an organisation or group.

# Java

Java is a programming language that is commonly used in the development of client-server web applications.

#### **JPEG**

JPEG stands for Joint Photographic Experts Group, which was the committee that created the file format known as JPEG. The format is commonlyl used for photos displayed on the world wide web.

#### LAN

A local area network (LAN) is a system that connects computers and other devices that share a common communications line and wireless link, generally within a limited geographical area such as a home or office building.

#### Malware

"Malware" is short for malicious software. It refers to a software program that has been developed to do harm to other computers. Types of malware include viruses, worms and spyware.

## Megabyte

A measure of computer processor storage and real and virtual memory. A megabyte (Mb) is 2 to the 20th power bytes, or 1,048,576 bytes in decimal notation.

# Megahertz

Megahertz is the unit used to measure the speed of a computer's processor (e.g. 2.8Ghz)

#### Modem

A modem is a device that allows computers to transmit information to each other via ordinary telephone lines.

#### Online

If a computer (or computer user) is online, it is currently connected to a network or to the Internet. Online also refers to resources and services available on the Internet - e.g. online banking, online dictionary.

# Operating system

An operating system (OS) is the software that manages all of a computer's processes and allows programs and applications to run. The most prominent operating system is Microsoft Windows. Others include Mac OS X and Linux.

#### **PDF**

Portable document format (PDF) is a file type created by Adobe Systems Inc. PDFs can be read using free software called Adobe Acrobat Reader or another PDF reader.

## **Phishing**

Phishing is a type of email fraud in which the perpetrator sends out emails that appear to come from a legitimate service or reputable company, such as a bank or an email service provider. These emails aim to lure recipients to reveal confidential information that the perpetrator can use for their financial advantage - for example, online banking log-in details and passwords.

# Plug-in

A software plug-in is a component that adds to a software program's functionality.

#### **POP**

A Post office protocol (POP) is an Internet protocol used by your Internet service provider (ISP) to handle email. A POP account is an email account.

#### **PPM**

Pages per minute (PPM) generally refers to the speed of a printer.

# Processor

The processor is the brains of your computer. It is responsible for performing calculations and tasks that make programs work. The faster the processor, the faster the computer works.

#### **Protocol**

A protocol is a standard or set of rules that computers and other devices use when communicating with one another.

#### **RAM**

Random access memory (RAM) is usually referred to as a computer's "memory" - it stores information used by programs. Generally, the larger your computer's RAM, the more programs it can run at once without slowing down.

# **Read-only**

A read-only file cannot be edited, modified or deleted.

#### Resolution

Resolution refers to the number of distinct pixels that make up the display on a computer monitor. It is denoted in DPI (dots per inch). The higher the resolution, the finer and smoother the images appear when displayed at a given size.

#### **ROM**

ROM stands for read-only memory. It is the part of a computer's memory that cannot be changed by a user. The contents of ROM remain even when the computer is turned off.

#### **SAAS**

SAAS stands for software as a service. It is a software distribution model whereby software applications are centrally hosted and licensed on a subscription basis.

# Search engine

A search engine enables a computer user to search information on the Internet. It is a type of software that creates indexes of databases or Internet sites based on the titles of files, keywords, or the full text of files. The most popular search engines are google.com.au, yahoo.com.au and Bing.com.au.

#### SSL

SSL, or secure sockets layer, is a protocol that allows Internet users to send encrypted

messages across the Internet. It is generally used when transmitting confidential information (e.g. personal data or credit card details). A web address that begins with "https" indicates that an SSL connection is in use.

#### **SEO**

SEO, or search engine optimisation, is the practice of making adjustments to certain aspects of a website in an effort to improve its ranking on search engines.

#### Server

A server is a computer that handles requests for data, email, file transfers, and other network services from other computers.

## Spam

Spam refers to unsolicited email messages sent for marketing purposes.

# Unzip

To unzip a zip file is to extract and decompress compressed files from it. If you are sent a zip file via email, you will need to unzip it before you can access the files inside it.

#### URL

A URL (unique resource locator) or web address is the string of characters you type into a browser to access a particular website or other resource on the Internet. (eg. http://www.ourcommunity.com.au)

#### Viral

If an online video, photo or article "goes viral", it experiences a sudden spike in popularity in a short period of time.

# Virus

A virus is a piece of programming code inserted into other programming to cause damage. Viruses can be sent in many forms but are often transmitted via email messages that, when opened, may erase data or cause damage to your hard disk. Some viruses are able to enter your email system and send themselves to other people in your list of contacts.

#### **WEP**

Wired equivalent privacy (WEP) is a security protocol used in wi-fi networks. It is designed to provide a wireless local area

network (LAN) with a level of security similar to that of a regular wired LAN. WEP-secured networks are usually protected by passwords. (See also WAP.)

#### Wi-Fi

Wi-Fi is a technology that allows computers and other devices to communicate via a wireless signal. Essentially, it means you can browse the internet without tripping over phone cords.

#### **WPA**

Wi-Fi protected access (WPA) is a security protocol used in wi-fi networks. It is an improvement on WEP because it offers greater protection through more sophisticated data encryption.

# Zip

To zip files is to archive and compress them into one file of smaller size using a program such as WinZip. It's a handy way to make files smaller before sending them via email.

Source: www.ourcommunity.com.au

#### Conclusion

To summarise, vocabulary can be learned effectively both in contect and isolation. The vocabulary learning is necessary for learning the core of basic vocabulary and important vocabulary that is used and serves in most situation. Appropriate language learning strategies result in improved proficiency and greater self-confidence.

Language learners with a limited vocabulary are likely to be handicapped in the learning progress. That is a key indicator of both one's ability to learn language. Of all the language skills, it is widely acknowledged that vocabulary is a very important part in English learning that no one can communicate in any meanigful way without vocabulary.

The biggest component of any language course is vocabulary. A large and rich vocabulary give language learners the right

words to use at the right time and also enable them to express their real thoughts, idea, and feeling. Expanding the vocabulary is one of the main goals of vocabulary learning strategy. The large vocabulary in medical especially will achieve success both inside and outside language ability.

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