

# 5: Reading Skills

## Introduction

Reading is one of the language skills that you will study and practice in this textbook. Remember reading is one of the most important activities any successful student does in any course of study. It is important to note that reading is an *active* process; you need to apply strategies that will enable you make sense of what you read.

The chapter aims at making you a good reader; somebody who will be able to monitor your rate of progress as you read and improve your understanding. To do this you will be introduced to a number of strategies or approaches at both surface and deeper levels. There will also be opportunities for you to practice. Specifically, you will be introduced to strategies of reading namely: skimming, scanning, SQ3R, active reading, reading for comprehension. You will also be introduced to resources within a text such as graphics conventions, symbols, layout, punctuation, figures, diagrams, tables, pictures and word roots in sciences. Then the chapter will also discuss some barriers or obstacles to effective reading.

## Outcomes

By the end of this chapter you should be able to:

- Describe a variety of reading strategies effective readers use as they read a text for comprehension.
- Apply a chosen strategy to read an identified passage
- Discuss common barriers to effective reading
- Suggest ways of solving problems readers experience during their reading activities.
- Read any resource efficiently using any of the reading strategies discussed
- Read texts critically to help you evaluate the given information.

A good way of getting started on developing your reading skills is to think about how you read a text or passage. There are three main reading techniques that you can use: scanning, skimming, and focused reading. Let's discuss each in turn.

## Scanning<sup>1</sup>

The technique of scanning is a useful one to use if you want to get an overview of the text you are reading as a whole – its shape, the focus of each section, the topics or key issues that are dealt with, and so on. In order to

<sup>1</sup> Adapted from OpenLearn, Available at <http://openlearn.open.ac.uk/mod/resource/view.php?id=200709&direct=1> (CC: BY NC SA)

scan a piece of text you might look for sub-headings or identify key words and phrases which give you clues about its focus. Another useful method is to read the first sentence or two of each paragraph in order to get the general gist of the discussion and the way that it progresses.

Scanning is used to find a particular piece of information. Run your eyes over the text looking for the specific piece of information you need. Use scanning on schedules, meeting plans, etc. in order to find the specific details you require. If you see words or phrases that you don't understand, don't worry when scanning.

Scanning is what you do to find an answer to a specific question. You may run your eyes quickly down the page in a zigzag or winding S pattern. If you are looking for a name, you note capital letters. For a date, you look for numbers. Vocabulary words may be boldfaced or italicized. When you scan for information, you read only what is needed.

### ***Examples of Scanning***

- The "What's on TV" section of your newspaper.
- A telephone number in the directory
- A horoscope guide

## **Skimming**

Skimming is used to quickly gather the most important information, or 'gist'. Run your eyes over the text, noting important information. Use skimming to quickly get up to speed on a current business situation. It's not essential to understand each word when skimming.

Skimming is covering the chapter to get some of the main ideas and a general overview of the material. It is what you do first when reading a chapter assignment. You don't read for details at this point.

Here is how you skim a chapter:

- Read the first paragraph of the chapter line by line.
- Next, read all the bold print headings starting at the beginning.
- Read the first sentence of every paragraph.
- Study any pictures, graphs, charts, and maps.
- Finally, read the last paragraph of the chapter.

As you skim, you could write down the main ideas and develop a chapter outline.

### ***Examples of Skimming:***

- The Newspaper (quickly to get the general news of the day)
- Magazines (quickly to discover which articles you would like to read in more detail)
- Business and Travel Brochures (quickly to get informed)

## Focused Reading

Focused reading employs two sub skills namely extensive and intensive reading. However, the idea is to have an area of emphasis or focus. In other words, it is a purposeful kind of reading, during which you target a specific area of study. Let us examine how the two skills relate to and differ from each other.

### Extensive reading

Extensive reading is used to obtain a general understanding of a subject and includes reading longer texts for pleasure, as well as business books. Use extensive reading skills to improve your general knowledge of business procedures. Do not worry if you do not understand each word.

#### ***Examples of Extensive Reading***

- The latest marketing strategy book
- A novel you read before going to bed
- Magazine articles that interest you

### Intensive reading

Intensive reading is used on shorter texts in order to extract specific information. It includes very close accurate reading for detail. Use intensive reading skills to grasp the details of a specific situation. In this case, it is important that you understand each word, number or fact.

#### ***Examples of Intensive Reading***

- A laboratory report
- A journal or newspaper article
- A business letter



### **Seminar Activity: Skimming**

As a group think of various situations where you would use the three skills above and answer these questions:

- Explain when and why you would use the skimming technique in the context of your studies here at Bunda.
- Who in your seminar group is an effective reader? Discuss and justify your choice.
- To what extent is reading an *active* process?

Once you get the skimming, scanning and focussed reading down pat, you are ready to move on to the SQ3R reading method which employs each of these three techniques.

## **What is the SQ3R?**

SQ3R was first developed by researchers at Ohio State University. SQ3R is a useful technique for understanding written information. It helps you to create a good mental framework of a subject, into which you can fit the right facts. It helps you to set study goals and prompts you to use review techniques that will help you to remember.

The acronym SQ3R stands for the five sequential techniques you should use to read a book: Survey, Question, Read, Recite and Review.

### **Survey (S)**

Scan the entire assignment to get an overview of the material. Read the headings to see the major points. Read the introductory paragraphs and the summary at the end of the chapter. Do not forget to look at the tables, pictures, etc. Remember, you are scanning the material and not actually reading every sentence.

### **Question (Q)**

Make questions that can be answered during the reading of the material. This will give a purpose to your reading. Take a heading and turn it into a question. For example, if a heading in a chapter about Cell Division is in your biology text, make a question by turning the title around: "How does cell division occur?" or "How many steps are involved in cell division?"

### **Read (R)**

Now you read the material trying to find answers to your questions. This is a careful reading, line by line. You may want to take notes or make flashcards.

### **Recite (R)**

As you read, look away from your book and notes and try to answer your questions. This checks your learning and helps put that information in your memory.

### **Review (R)**

To check your memory, scan portions of the material or your notes to verify your answers. Review the material and note the main points under each heading. This review step helps you retain the material.

The SQ3R method is just one technique that can be used to retain information you collect while reading. Students learn in different ways. Therefore they

should be aware of their learning styles. Knowing whether you are an Auditory (learn by hearing), Visual (learn by seeing) or Kinaesthetic (hands-on) learner helps you to understand your best learning environment. The SQ3R technique of reading can help to enhance your reading skills no matter what your style is.



## **Self Study Activity: Scan, Skim and Focus**

1. Scan *Action Aids* article below for the following key words and phrases. In which paragraphs do they appear:
  - Environmental management policies
  - Flood induced migration
  - Climate related activities
  - Disaster preparedness
2. Now *skim* the article and see if this time you can also work out the meanings of the terms above using the context in which they are used. Also develop a set of questions for further investigation.
3. Though you are familiar with content of the article, read it again, this time in a more *focused* way. Think about each section of the text, breaking off at regular intervals and ...
  - Extract the main points or examples about climate change in Malawi.
  - Jot down some notes and questions that come to mind as you read.
  - Use other reading resources that discuss issues of climate change in Malawi answer the questions you developed in '2' above.

# Climate Change and Smallholder Farmers in Malawi: Understanding poor people's experiences in climate change adaptation by Action Aid International<sup>2</sup>



Source: Marion Khamis, ActionAid International

**Key message 4:** Climate change exposes the underlying causes of food insecurity.

*Droughts and floods are exposing the crisis in livelihoods of smallholder farmers in Malawi. In the past, nearby small-scale sugar and tea plantations were sources of employment for most people in Nsanje. However, farmers say that flood-induced migration means that there are now many more people seeking work on the plantations than there are jobs available. They also believe that the limited income opportunities in the face of increased floods and droughts have forced women to engage in unsafe sex practices, exposing them to greater risk of HIV. They say that girls as young as 13 are being forced into early marriage due to hunger, thus aggravating the impact of HIV and AIDS. In addition, the destruction of property and infrastructure places a huge burden on already strained health care systems. "I am very worried about the future of the AIDS orphans that I am looking after and my family which depends on me. I am asking if ActionAid could help me purchase a garden of my own so that I can maintain and provide a better future for my family," said Selimani Zaina, 79 year old victim of the 2005 drought.*

**Key message 5:** Existing local government capacity cannot support the challenges smallholder farmers face in adapting to climate change.

*Lack of knowledge of disaster and environmental management policies, limitations on funding and damaged equipment within the district is weakening support towards community adaptation. For example, the District Disaster Preparedness committee has not been*

<sup>2</sup> Except from ActionAid International, (2006), Climate Change and Smallholder Farmers in Malawi, Available at [www.actionaid.org.uk/doc\\_lib/malawi\\_climate\\_change\\_report.pdf](http://www.actionaid.org.uk/doc_lib/malawi_climate_change_report.pdf)

functioning efficiently due to lack of resources.” These were sentiments expressed by a member of the District Assembly in Salima. The current limitations to adaptation are poor formulation of policies, lack of knowledge of policies, and their lack of implementation at the district level.

The National Adaptation Programme of Action (NAPA) for Malawi, drafted by the Environmental Affairs Department, is the key guide to adaptation priorities. As it stands, there are concerns that NAPA exists in isolation of other key sectors, for example, the document currently addresses issues of agriculture and environment, but health and gender are ignored. District staff in both Nsanje and Salima were ignorant of its existence, a situation that confirms that not all sectors were involved in drafting the document. This has far reaching consequences for its implementation.

An element of concern in Malawi is the lack of intersectoral coordination that currently affects implementation of climate-related activities. The planning and management of climate change and disaster management is currently carried out on a sectoral basis and the involvement of local communities is limited. The absence of an overall planning and management strategy, developed with the participation of community users, hampers successful adaptation. There are also currently limited skills and resources at the local level to implement new policies.



## Assessment Task: SQ3R

Reflect on the meaning of the SQ3R method of reading and:  
Explain how you would survey the above Action Aids article?

- List down any three questions you would ask as you plan to read it comprehensively.
- Give the main points you would recall.

## Active Reading<sup>3</sup>

Whatever the specific objective of reading, as a student you will always need to read in an active way. Active reading involves reading with a purpose; that is reading in order to grasp definitions and meanings, understand debates, and identify and interpret evidence. It requires you to engage in reading and thinking at one and the same time in order to:

- Identify key ideas.
- Extract the information you want from the text.
- Process that information so that it makes sense to you.
- Re-present that information in assessments, using your own words.

It may involve you pausing at intervals to think about what you have just read, checking that you have grasped the main point and perhaps even noting down

<sup>3</sup> Adapted from Learn NC. <http://www.learnnc.org/reference/active+reading> (CC: BY NC SA)

questions that come to mind or highlighting key words that you might want to return to at a later date. A crucial part of active reading is matching the way you read to the purpose you have in mind – that is reading for a purpose.

Active reading includes:

- Applying what you know (prior knowledge)
- Interacting with the author (responding critically to the text)
- Predicting (trying to determine the importance of the selected text)
- Solving problems (striving to understand confusing passages)
- Summarizing (at the end of each page or where convenient)

## Resources Within a Text

### Word relationships

One of the graphic organizers is the use of synonyms, antonyms and homonyms which readers use when learning vocabulary in the course of reading any resource. This is done with the understanding that in some ways words are similar in one way or another. To begin with, synonyms are words that mean the same despite having some morphological differences. For example, words like cute/beautiful; huge/gigantic are synonyms. An antonym, on the other hand, is a word that has an opposite meaning of another word. Words such as pretty/ugly; strong/weak; tall/short exposes different meaning and should be used differently. Further, homonyms are words that have similar sounds if pronounced and somebody might hardly recognize their difference if carelessly done so. Think about words like their/there; reach/rich; fit/feet. Reading in this case which has to do with pronunciation has to take care of the possible differences that ought to be there.

Note: **Synonym** is for *sameness* in meaning

**Antonym** is for *an opposite* meaning

**Homonym** is a word which can be *heard like* another word

So, from the foregoing, it is observed that words are related in many other ways such that they are alike, different and related to each other. This means that understanding how words relate to each other helps readers to increase their vocabulary, enables them to analyze and synthesize any information they read from any reading resource at any level of study which leads to one's building of a useful vocabulary.



### Seminar Activity: Synonyms

Read the following sentences and identify words or phrases that have similar meanings within the sentences.



1. Scientists believe that these days people are using up resources at an increasing rate. The acceleration in consumption is partially a function of the steady improvement in the standard of living
2. When phosphate, a pollutant, is emptied into a pond, algae grow very fast. Then when algae flourish, the water supply may be affected.
3. The recent data on students' performance at Malawi School Certificate of Examination indicate that quality of education in Malawi is going down. The information also indicates that students' interest in schooling is low.
4. Should politicians regulate the amount of tuition in tertiary institutions? Some academicians do not believe that politicians' control is the solution to the rising cost of feeding students in colleges.
5. Industrious students usually succeed in their studies. It is evident that all students who worked hard in the previous years are in high positions.

## Graphic and Semantic Organizers

Graphic organizers illustrate concepts and relationships between concepts in a text or using diagrams. Graphic organizers are known by different names, such as story maps, chain of events/webs, graphs, charts, cause and effect, etc. Graphic organizers do help readers focus on concepts and how they are related to other concepts. They also help students read and understand textbooks. Therefore, graphic organizers can:

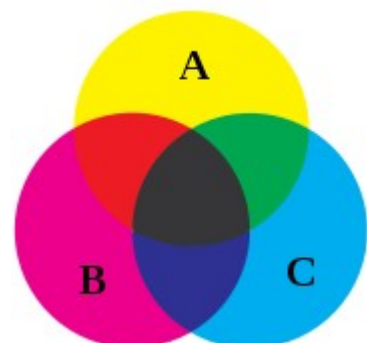
- Help students focus on text structure 'differences between fiction and nonfiction' as they read.
- Provide students with tools they can use to examine and show relationships in a text.
- Help students write well-organized summaries of a text.

Here are some examples of graphic organizers:

### **Venn-Diagrams**

Venn diagrams or *set diagrams* are [diagrams](#) that show all hypothetically possible [logical](#) relations between a finite collection of [sets](#) (groups of things). Venn diagrams were conceived around 1880 by [John Venn](#). They are used in many fields, including [set theory](#), [probability](#), [logic](#), [statistics](#), and [computer science](#).

A Venn diagram is constructed with a collection of simple closed curves drawn in the plane. Venn diagrams normally consist of overlapping circles. For instance, in a two-set Venn diagram, one circle may represent the group of all wooden objects, while another circle may represent the set of all tables. The overlapping area (*intersection*) would then



represent the set of all wooden tables. Shapes other than circles can be employed, and this is necessary for more than three sets.<sup>4</sup>

### ***Storyboard/Chain of Events***

Used to order or sequence events within a text. For example, listing the steps for carrying out an experiment.

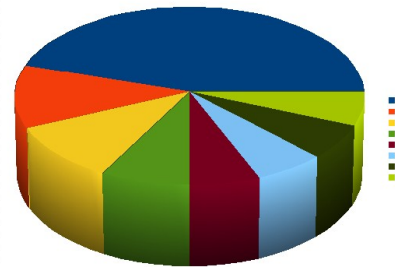
### ***Story Map***

Used to chart the story structure. These can be organized into fiction and nonfiction text structures. For example, defining characters, setting, events, problem, and resolution in a fiction story; however in a nonfiction story, main idea and details would be identified.

### ***A Chart***

A chart is a visual representation of [data](#), in which the data are represented by [symbols](#) such as bars in a [bar chart](#) or lines in a [line chart](#). A chart can represent [tabular numeric](#) data, [functions](#) or some kinds of qualitative structures.

The term "chart" as a visual representation of [data](#) has multiple meanings. A data chart is a type of [diagram](#) or [graph](#) that organizes and represents a set of numerical or qualitative data. The four common charts are histogram, line, bar and pie chart. The following is an example of a pie chart.



A [histogram](#) typically shows the quantity of points that fall within various numeric ranges (or bins).

A [bar chart](#) uses bars to show frequencies or values for different categories.

A [pie chart](#) shows percentage values as a slice of a pie.

A [line chart](#) is a two-dimensional scatter plot of ordered observations where the observations are connected following their order.

### ***Cause/Effect***

Cause and effect essays are concerned with why things happen (causes) and what happens as a result (effects). Cause and effect is a common method of organizing and discussing ideas.

It is worth noting that writers of a cause and effect essay do distinguish between cause and effect. To determine causes, they ask, "Why did this happen?" And to identify effects, they ask, "What happened because to cause this?" The following is an example of one cause producing one effect:

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<sup>4</sup> Adapted from Wikipedia, Available at [http://en.wikipedia.org/wiki/Venn\\_diagram](http://en.wikipedia.org/wiki/Venn_diagram) (CC: BY-SA)

**Cause:** You are out of fuel.

**Effect:** Your car won't start.

Sometimes, many causes contribute to a single effect or many effects may result from a single cause<sup>5</sup>.

## **Language Comprehension**

The comprehension of language includes linguistic knowledge, background knowledge, making inferences, and the self-regulation of comprehension (or meta cognition).

### **Linguistic Knowledge**

Comprehension of a text is reliant on an individual's knowledge of the language system. We build up this knowledge with repeated exposure to how language is used. As we interact with the language so we begin to understand certain nuances. A language system is made up of phonology, semantics (this includes word meanings and also morphology), and its grammatical structure.

For example phonology is about how a language sounds and how sounds are used to communicate differences in meaning. Semantic knowledge looks at the various meanings of words, phrases or sentences that allow us to comprehend knowledge. In order to improve your linguistic knowledge you need to read widely and be exposed to words and meanings in varying contexts. In addition, word study and instruction that includes orthography, morphology and spelling can strengthen your vocabulary learning.

### **Background Knowledge**

We are constantly building our background knowledge. By the end of your secondary school education you have already amassed background knowledge of the world and its social and cultural contexts. Continued reading and reading broadly will grow this knowledge further.

### **Inferences**

Comprehension beyond the word level requires the reader not only to activate background knowledge but also integrate meaning across sentences. As the message becomes less familiar, the reader needs to make inferences.

Readers need to actively construct a mental model of the text that draws upon the text and their own background knowledge. This is sometimes called active construction of meaning from text whereby we need to infer the meaning.

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<sup>5</sup> Adapted from Wikipedia, Available at: [http://en.wikipedia.org/wiki/Graphic\\_organizer](http://en.wikipedia.org/wiki/Graphic_organizer) (CC: BY-SA)

## Self-Regulated Comprehension

To be a good reader one needs to reflect and evaluate your understanding of what you have read. Self-regulated comprehension involves activating knowledge, making predictions about meaning, reflecting on what has been understood, and if necessary drawing new conclusions about your understanding. Readers need sufficient background knowledge to be able to understand what they read.

## Interacting with the Text

An effective reader engages actively with the text. There should be a swapping of ideas between the reader and the text, or the speaker and the listener. This is called a transaction. The transaction enables readers to negotiate the meanings of the texts they read. Transactions increase motivation and can further develop comprehension.

## Word Roots

One of the ways of understanding the content of a subject through reading is to know the appropriate meaning of words used in a text. Words are used to communicate ideas. There are two types of words: *content* and *functional* words. Content words usually contain ideas, concepts and the latter, links words for clarity following grammar of a particular medium of instruction. Words also have denotative and connotative meanings: a *literal* or intended meaning like in the example, 'She is a star', meaning she is one of the heavenly bodies and an *evaluative* or deeper meaning she performs well.

## Specific Ways to Determine Meaning<sup>6</sup>

**Incidental learning** of vocabulary occurs through one's own reading of a variety of resources either for leisure or focused. As the reader does this some new words are mastered on how to pronounce and use them. Readers may also get to know a number of new vocabulary words by participating in a conversation with other speakers of the language. The conversation can be in form of a debate, an ordinary chat or a discussion of a topic at hand. It is imperative therefore that any reader interested in increasing his/ her vocabulary should engage in some conversation.

Through **direct instruction**. This is enhanced through teacher's well thought lessons meant to teach learners some lesson based words, activities on new words and giving learners possible meanings of words.

**Self instruction** is done as students consciously try to learn new words on their own. In this case the teacher's role is to provide strategies for learning new words.

Using **context** to predict meaning, for example:

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<sup>6</sup> Sitima, J.(2009). *Communication Skills Lecture Notes*, Bunda College of Education (CC: BY-SA)

- Definition / description : words are directly defined by a sentence e.g. a king cup is a yellow flower
- Appositive phrase meaning of a word is in phrase set by commas e.g.
  - Damiano and Gorla, Bunda students, are hard working.
  - Chambo, a type of fish, is very delicious

**Authentic settings:** natural environment in which words are used. For example in a laboratory there are: spatula, crucible, etc which can best be understood in that environment. Think about your examples.

**Extensive reading:** wide reading of self-selected material provides rich source of new words.

**Intensive reading:** in depth reading in a particular area/ subject. Check on examples above.

**Capsule vocabulary:** readers listen, speak, read and write words related to a particular topic to this environment as possible. For example, you take a laboratory situation and write as many words as possible.

Use a **dictionary** especially a subject dictionary to learn how particular words are pronounced, used and what they mean.

**Word detectives** (e.g. math morpheme)

| <u>morpheme</u> | <u>math usage</u> | <u>general usage</u> |
|-----------------|-------------------|----------------------|
| bi (two)        | bisect, bimodal   | bicycle, bilingual   |
| poly (many)     | polygon           | polygamy             |
| equi (equal)    | equilateral       | equator, equinox     |

Or we may use the following sequence to easily understand how we can use word roots to master some vocabulary:

| ROOT     | MEANING | EXAMPLE       | DEFINITION                    |
|----------|---------|---------------|-------------------------------|
| Agri     | field   | agronomy      | field crop production         |
| Anthropo | man     | anthropology  | study of man                  |
| Demos    | people  | democracy     | government by the people      |
| Thermo   | heat    | thermometer   | instrument for measuring heat |
| Zoo      | animal  | zoology       | study of animals              |
| Psycho   | mind    | psychology    | study of the mind             |
| Circum   | around  | circumference | distance around something     |
| Auto     | self    | automatic     | self regulating machines      |

# Additional Strategies for Reading Science

## Advanced Organizers:

Students pre-read the science text to understand its structure and the scope of its content. By consciously analyzing and recording the author's outline and advance organizers, students are better prepared to understand the text when they read it.

## Mind Map

A mind map is a [diagram](#) used to represent [words](#), [ideas](#), tasks, or other items linked to and arranged around a central key word or idea. Mind maps are used to [generate](#), [visualize](#), [structure](#), and [classify](#) ideas, and as an aid in [study](#), [organization](#), [problem solving](#), [decision making](#), and writing. The elements of a given mind map are arranged intuitively according to the importance of the concepts, and are classified into groupings, branches, or areas, with the goal of representing [semantic](#) or other connections between portions of information. Mind maps may also aid recall of existing [memories](#) of what is read<sup>7</sup>.

## Concept Map

A concept map is a way of representing relations between [ideas](#), [images](#) or [words](#), in the same way that a [sentence diagram](#) represents the grammar of a sentence, a [road map](#) represents the locations of highways and towns. They are graphical tools for organizing and representing [knowledge](#). Concepts, usually represented as boxes or circles, are connected with labelled arrows in a downward-branching hierarchical structure. The relationship between concepts can be articulated in linking phrases such as "gives rise to", "results in", "is required by," or "contributes to". The technique for [visualizing](#) these relationships among different [concepts](#) is called "Concept mapping"<sup>8</sup>.

## KWL Tables and Charts

A KWL table, or KWL chart, is a [graphical organizer](#) designed to help in [learning](#). The letters KWL are an [acronym](#) for "what we know", what we want to know, and "what we learned". A KWL table is typically divided into three columns titled [Know](#), Want and Learned. The table comes in various forms as some have modified it to include or exclude information. It may be useful in research projects and to organize information to help study for tests.

The chart is a comprehension strategy used to activate background knowledge prior to reading and is completely student centred. The teacher divides a piece of chart paper into three columns. The first column, 'K', is for

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<sup>7</sup> Adapted from Wikipedia: [http://en.wikipedia.org/wiki/Mind\\_mapping](http://en.wikipedia.org/wiki/Mind_mapping) (CC: BY-SA)

<sup>8</sup> Adapted from Wikipedia: [http://en.wikipedia.org/wiki/Concept\\_mapping](http://en.wikipedia.org/wiki/Concept_mapping) (CC: BY-SA)

what the students already know about a topic. This step is to be completed before the reading. The next column, 'W', is for students to list what they want to learn about the topic during the reading. This step is also to be completed before the reading. The third column, 'L', is for what the students learned from the reading. This step, of course, is done after finishing the reading. The KWL chart can also be used in reading instruction at the beginning of a new unit. Here is what the KWL chart can look like:

| <b>K</b><br>What I <i>know</i>                                    | <b>W</b><br>What I <i>want</i> to know                                    | <b>L</b><br>What I <i>learned</i>  |
|---|---|--|
| Write the information about what the students know in this space. | Write the information about what the students want to know in this space. | After the completion of the lesson or unit, write the information that the students learned in this space. |

A KWL chart can be used to drive instruction in the classroom. The teacher can create lesson plans based upon. KWL chart activates students' prior knowledge of the text or topic to be studied. By asking students what they already know, students are thinking about prior experiences or knowledge about the topic. Next, KWL charts set a purpose for the unit. Students are able to add their input to the topic by asking them what they want to know. Students then have a purpose for participating and engaging in the topic. Also, using a KWL chart allows students to expand their ideas beyond the text used in the classroom<sup>9</sup>.

## Root Words

Students learn how to construct and decipher scientific words by understanding the meanings of roots, prefixes and suffixes common to biology, chemistry, physics, and the earth and space sciences.

## Cloze

This is a reading activity in which a passage has some missing words for the reader to fill in either before or after reading. The activity is used to assess the readability of a passage. The higher the cloze scores for a given population, the more readable the passage. In this chapter we introduce cloze as a technique for developing and assessing reading comprehension.

## Jigsaw

Jigsaw is a technique whereby students develop reading skills by dialoguing with others, preparing notes, and teaching their peers. Initially, students are given some reading texts to master and in this case each student becomes an expert of his/her text. After mastery is when then they share with others either in pairs or groups. It is a best method because it promotes a 100% participation in the reading task.

<sup>9</sup> Adapted from Wikipedia: [http://en.wikipedia.org/wiki/KWL\\_table](http://en.wikipedia.org/wiki/KWL_table) (CC: BY-SA)



## Cognates

The word cognate derives from Latin [cognatus](#) "blood relative". In [linguistics](#), they are words that have a common [etymological](#) origin. An example of cognates within the same language would be English shirt and skirt, the former from [Old English](#) scyrte, the latter [loaned from Old Norse](#) skyrta, both from the same [Common Germanic](#) \*skurtjōn-. Words with this type of relationship within a single language are called [doublets](#). Further cognates of the same word in other [Germanic languages](#) would include German Schürze and Dutch schort "apron".

Cognates need not have the same meaning: [dish](#) ([English](#)) and [Tisch](#) ("table", [German](#)) and desco ("table", medieval [Italian](#)), or [starve](#) ([English](#)) and [sterben](#) ("die", [German](#)), or [head](#) ([English](#)) and [chef](#) ("chief, head", [French](#)), serve as examples as to how cognate terms may [diverge in meaning](#) as languages develop separately, eventually becoming [false friends](#). The understanding of this relationship helps readers of texts to know word meanings easily by referring to other words with similar structures<sup>10</sup>.



### Seminar Activity: Prefixes

Think about Physics as a course of study and:

- Identify 15 technical words from Physics and ensure they have prefixes
- Say what the prefixes mean, and;
- Construct a possible definition of each of the word based on your knowledge of the prefixes.



### Self Study Activity: Word Meanings

What do the following words mean?

- Epidermis
- Hydroponics
- Equilateral
- Magnify
- Macroscopic
- Precede
- Tripod

## Summary

In this chapter you have learnt that reading is an active process through which you understand the writer's meaning. Readers use a variety of reading skills to

<sup>10</sup> Adapted from Wikipedia, [http://en.wikipedia.org/wiki/Cognate\\_\(etymology\)](http://en.wikipedia.org/wiki/Cognate_(etymology)) (CC: BY-SA)



enhance their understanding of the reading resource. Careful readers apply a number of strategies to decipher the meaning of any new vocabulary whether functional or content word. However, as we read we may display or face a number of obstacles or barriers which affect our uptake of the text. However, care must be taken each time we read in order to understand the read materials.



## Chapter Assessment Task

This chapter has discussed several ways you could use to learn new words. Explain any five ways you could learn new vocabulary in your science courses. Give an example in each case.

(20 Marks)



## Additional Enrichment Resources

The following resources are highly recommended and will offer enrichment to your studies:

| Name   | Reference   |
|--|---|
| Books for Change,<br>Disaster Preparedness & Related Publications  | <a href="http://www.booksforchange.net">www.booksforchange.net</a>  |
| Adler, C.R. (Ed). (2001). <i>Put Reading First: The Research Building Blocks for Teaching Children to Read</i> , National Institute for Literacy, pp. 49-54, | <a href="http://www.nifl.gov/partnershipforreading/publications/reading_first1text.html">http://www.nifl.gov/partnershipforreading/publications/reading_first1text.html</a> . |
| Edwards, A.W.F. (2004). <i>Cogwheels of the Mind: the story of Venn diagrams</i> , Johns Hopkins University Press, Baltimore and London.                     |   |
| Ogle, D.M. (1986). <i>K-W-L: A teaching model that develops active reading of expository text</i> . Reading Teacher, 39, pp. 564-570                         |   |



## Glossary

These words and terms are used in this chapter.

| Term               | Definition  |
|--------------------|---|
| Intensive reading  | Intensive reading is used on shorter texts in order to extract specific information. It includes very close accurate reading for detail             |
| Extensive reading  | Extensive reading is used to obtain a general understanding of a subject and includes reading longer texts for pleasure, as well as business books. |
| Prefix             | Word element attached before a word root  |
| Word root          | Main part of a word which cannot be further segmented   |
| Barrier            | Any disturbance as we read a passage  |
| SQ3R               | Survey, question, read, recite, recall  |
| Graphic organizers | Word relationships which uses of synonyms, antonyms and homonyms which readers use when learning vocabulary in the course of reading any resource.  |
| Homonym            | Word which can be <i>heard like</i> another word  |
| Synonym            | Words with similar meaning  |
| Antonym            | Words with opposite meaning   |
| Skimming           | Reading focusing on general information   |
| Scanning           | Reading for specific information  |
| Meta cognitive     | Thinking about thinking   |