

Learning Unit 3

Formulate and use learning strategies

After completing this Learning Unit, you will be able to formulate and use learning strategies, by successfully completing the following:

- Formulate learning strategies by selection of specific tried techniques.
- Summarise and use information in the learning process.
- Synthesise and contextualise answers pertaining to relevant questions.
- Read/view texts for detail, interpret, analyse and synthesise it for a given context.
- Interpret, analyse and synthesise verbal interaction for a given context.
- Ensure that learning takes place through communicating with others in groups or as individuals.

Formulate and use learning strategies

There are various strategies you can use to enhance (improve or add to) your learning.

Some examples are:

- brainstorming
- group analysis
- peer and self-assessment
- probing
- mind mapping
- note taking
- memorising
- word association
- underlining
- skimming
- scanning

In this module we will look at each of these strategies that can help us to learn more effectively.

3. 1 Formulate learning strategies

Let's look at each of the learning strategies that you can use to become an effective learner:

Brainstorming

Brainstorming is an organised approach that is used to produce creative ideas by letting the mind think without interruption. You first define a problem or idea and then let your brain come up with anything related to the topic – no matter how unlikely or "way out" a suggestion may sound.

You can brainstorm either individually or in a group. In group brainstorming sessions, the participants generally share their ideas with one another as soon as they "bubble up". Someone then records all these ideas.

The key to brainstorming is that you don't interrupt the thought process. As ideas come to the mind, they are noted. This again stimulates the development of further ideas.

When brainstorming, it is essential that all participants do not criticise any ideas that are mentioned. Instead of immediately thinking of what might be wrong with an idea, the participants should rather focus on extending or adding to it, while reserving criticism for a later stage of the process.

- Brainstorming procedure

Here is a summary of the procedure for brainstorming. It is important to make sure that all participants are aware of the procedure - especially the "no criticism" rule.

- In a small or large group select a leader and a recorder (they may be the same person).
- Define the problem or idea you want to brainstorm. Make sure everyone is clear about the topic that is being explored.

- Set up the rules about the session. They should include:
 - letting the leader have control
 - allowing everyone to contribute
 - ensuring that no one will insult, demean or evaluate another participant or his or her response
 - emphasising that no answer is wrong
 - recording each answer unless it is a repeat of a previous idea
 - setting a time limit and stopping when that time is up
- Start the brainstorming. Have the leader select members of the group to share their answers. The recorder should write down all responses, if possible where everyone can see them. Make sure no one tries to evaluate or criticise any answers until the brainstorming time is completed.
- Once you have finished brainstorming, go through the results and begin to evaluate the responses.

Some guidelines to follow when you examine the responses include:

- looking for any answers that are repeated or similar
- grouping similar concepts together
- eliminating responses that are definitely not appropriate

Now that you have narrowed your list down, discuss the remaining responses as a group.

Group analysis

An analysis is a detailed evaluation of something, literally it means "taking apart". Analysing usually involves breaking the subject down into its various parts and then describing the parts and their relationship to the whole.

So group analysis of a subject means that a group of people take that subject and explore the different parts of it. For example, if the subject is learning, they will explore adult learning, child learning, the process of learning, learning styles and so on.

The benefit of the group in the analysis process is that members of the group bring different insights and points of view, thus stimulating one another and sparking off differing ideas and thoughts.

Self-assessment

Self-assessment is a process in which a learner is responsible for assessing his or her own skills and understanding.

Educators recommend self-assessment:

- to help learners to examine their own work critically, taking an outsider's point of view and applying assessment criteria
- to help learners to improve their work by looking at it quite objectively (not too strongly influenced by their own feelings) once they think they have completed it

Peer assessment

Two or more people are peers if they are in the same social situation or have the same abilities. For example, we can think of the learners in the same class or studying the same subject as peers. Therefore *peer assessment* in a subject is the assessment of a student's work by another student studying the same subject.

Peer assessment is useful:

- to help each learner to get some feedback on their work from someone else
- to give the learner some insight into the criteria that are assessing
- to allow learners to see the work that other learners are doing on the same topics (this applies when everyone in a class are involved in assessing each other's work)

Types of assessment

There are two types of assessment, and they serve different purposes. These types are:

- summative assessment
- formative assessment

Summative assessment is used to grade learners and is generally done towards the end of a course.

Formative assessment is used to help learning; it is *not* used for grading, and is normally done in the early stages of learning. It gives the teacher and the learner an indication of the learner's strengths and indicates areas that need extra attention during the course.

How to do self- or peer assessment

To begin, we need to explain some terms we used to describe methods or principles of assessing, namely:

- criterion-referenced assessment
- norm-referenced assessment

With criterion-referenced assessment, you assess the learner's achievements by comparing them to the given assessment criteria and seeing whether each criterion has been met!

By contrast, with norm-referenced assessment, you assess the learner by comparing their achievements to those of other learners. In other words, the point of reference in this case is what the average learner in that group is able to achieve. (A *norm* is a generally accepted standard or average.)

For self-assessment and peer assessment, you have to base your assessment on given assessment criteria. It is not appropriate for learners to assess each other in ways that compare one learner's skills to those of other learners. One cannot assume that the learner who is assessing is familiar with the standards that have been achieved by other learners.

In order to apply criterion-referenced assessment, you should understand the criteria and be able to apply them to the work you are assessing.

Assessing involves three essential skills:

- giving effective feedback
- applying a standards to the work assessed, according to some criterion
- deriving a grade from assessments on various criteria (to derive means to get something from something else)

Let's look more closely at that first point. **Effective feedback** ideally fulfils three objectives:

- It tells the recipient (the learner who is receiving the feedback) what is "right or good" about their work.
- It tells the recipient what is "wrong' or "bad" about their work.
- It tells the recipient how they might start correcting the defects (gaps or mistakes) in their work, or simply improving it, without reducing its strengths.

Valid and reliable assessment

Assessment should be valid and reliable. What do we mean by these terms?

- A *valid* assessment is one that measures what it is intended to measure. For example, it would not be valid to assess deriving skills through a written test (alone); the most valid way to assess deriving skills would be through a combination of practical assessment and a written test.
- *Reliability* relates to the consistency of an assessment. (If something is consistent, you can depend on it to always behave in the same way.) So a reliable assessment is one that consistently achieves the same results with the same or similar learners. Various factors affect reliability. These include ambiguous (vague) questions, too many options within a question paper, unclear marking instructions and poorly trained markers.

Although validity and reliability are the most important measures of an assessment, there are other considerations, such as:

- practicality (which relates to the feasibility of the assessment in other words whether it can actually be done without major difficulties)
- fairness (which relates to its application across various groups, such as males and females)
- authenticity (which relates to its realism)

Probing/Questioning

To probe something is to question or examine it thoroughly and closely. Probing, therefore is the process of questioning or examining.

Probing involves questioning. There are two types of questions to use in probing, namely open-ended and closed questions.

Open-ended questions are used when we want more detailed information. They lead to an "open" answer – a lot of information about and around the subject. Open-ended questions often begin with *how, what or in what way*. Let's look at some examples of each of these in turn.

- How questions

- How did you decide which resources to use?
- How did you decide that?
- How do you think this will turn out?
- How does this affect you?
- How do you conclude that?
- How were you involved?
- How did you go about researching your topic?
- How does this work?

- What questions
 - What made you choose X technique as topic as opposed to Y technique?
 - What would you like to do?
 - What is still outstanding?
 - What is the problem?
 - What do you plan to do?
 - What information do you have?
 - What would you like me to do?
 - What has been done?

- In what way questions
 - In what way did it help you knowing?
 - In what way do you think we can best?
 - In what way do you believe?
 - In what way could we improve?

Closed questions

Closed questions start with a verb. They ask for a "yes" or "no" answer and are useful to check details and to confirm facts.

Here are some examples:

- Have you tried asking her for information?
- May we meet tomorrow at 10:00 for a brainstorming session?
- Have you tried to?
- Would you like me to show how I did it?

Mind maps

Mind maps work the way the brain works, which is not in nice neat lines! Memory is naturally connective, not linear (organised in lines, straightforward). Any idea probably has thousands of links in your mind. Mind maps let you record and reinforce those associations and links.

(If you don't know what mind maps are, take a quick look at the example on the next pages before you read on, just to get a general impression.)

The mind remembers key words and images, not sentences – try to recall just one sentence from memory! Mind maps use just key words and key images, which mean that you can fit a lot more information on to a page.

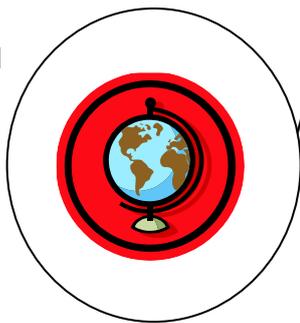
Because mind maps are more visual and show associations between key words, they are much easier to remember than linear notes. This makes them a very good tool for revision.

When you draw a mind map, start from the middle of the page rather than the top left-hand corner. This way you can work outwards in all directions. The organisation of a mind map is meant to reflect the way your own brain organises ideas. Mind maps are easy to review. Regular review reinforces your memory of the topic. It is best to review the mind map in your imagination first (or draw it out on paper from memory), then go back and check on those areas that were hazy.

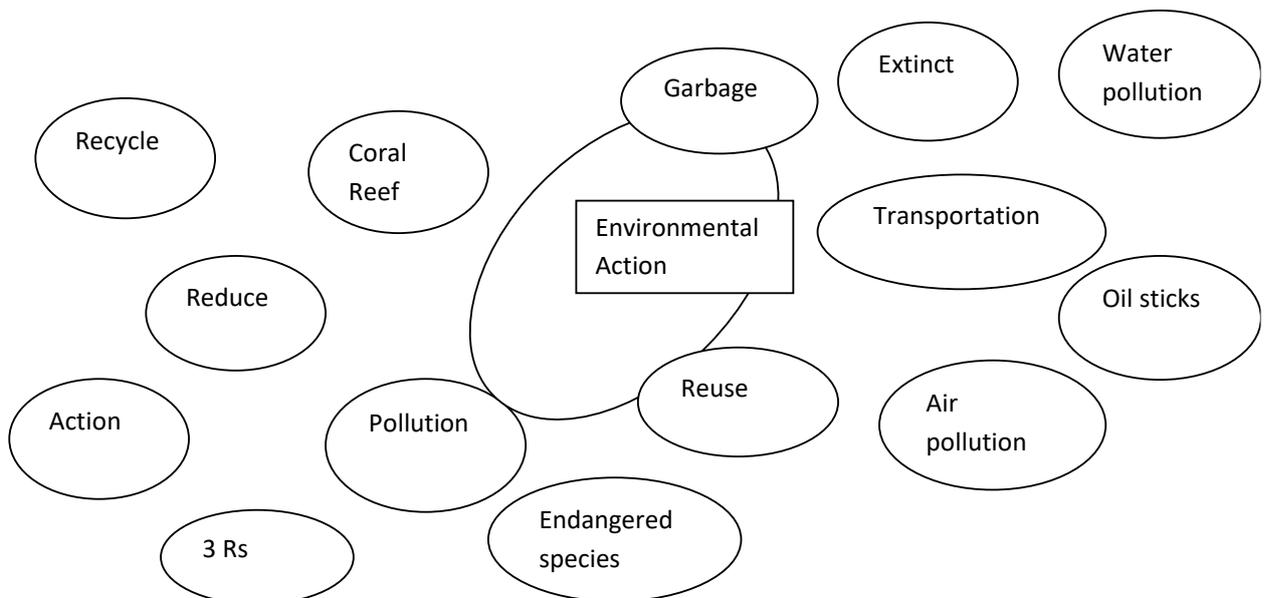
Our minds remember best what stands out easily.

EXAMPLES

Step 1



Write down the most important word or short phrase or symbol in the centre of your page. This is your central concept. Think about it, circle it.

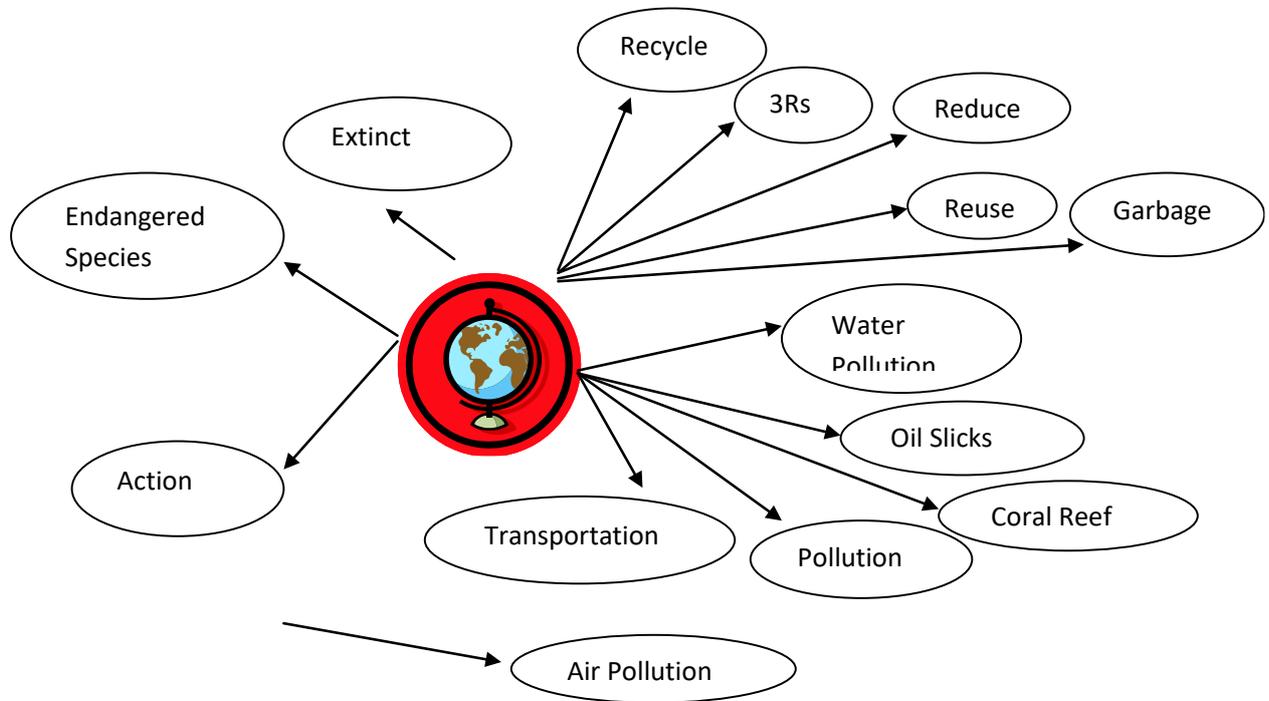


Step 2

Write down any thoughts that you have about the central concept. Note these other important concepts and their words outside the circle.

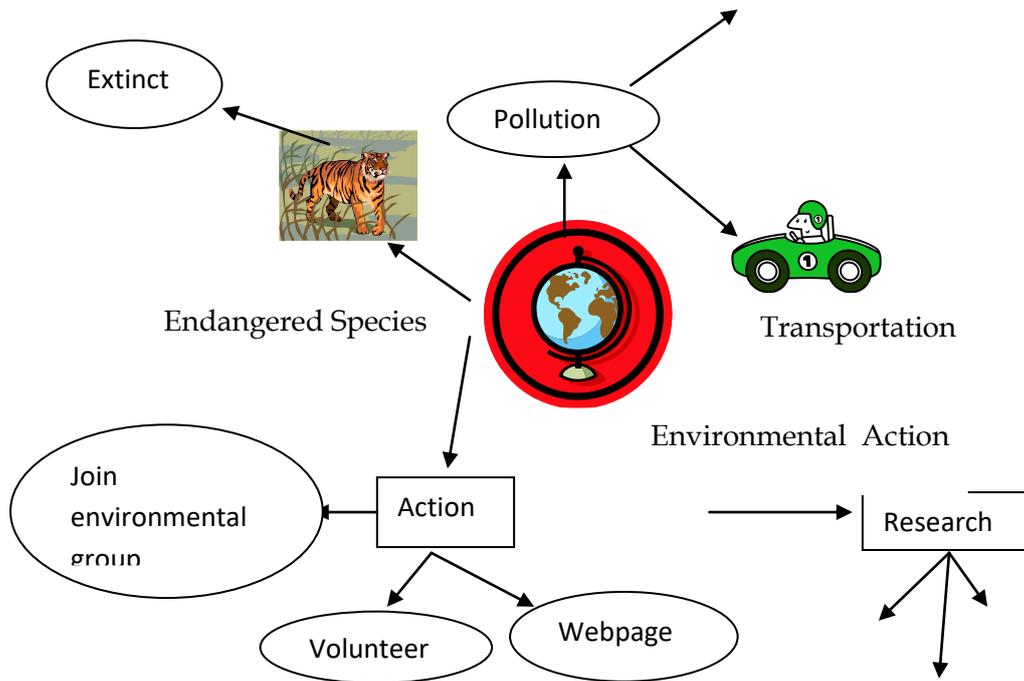
Edit this first phase:

- Think about how the outside words relate to the word in the centre.
- Erase, edit, and shorten words to key ideas.
- Shift important items closer to each other for better organisation.
- If possible, use colour to organise information.
- Use words to link different concepts to clarify their relationships.



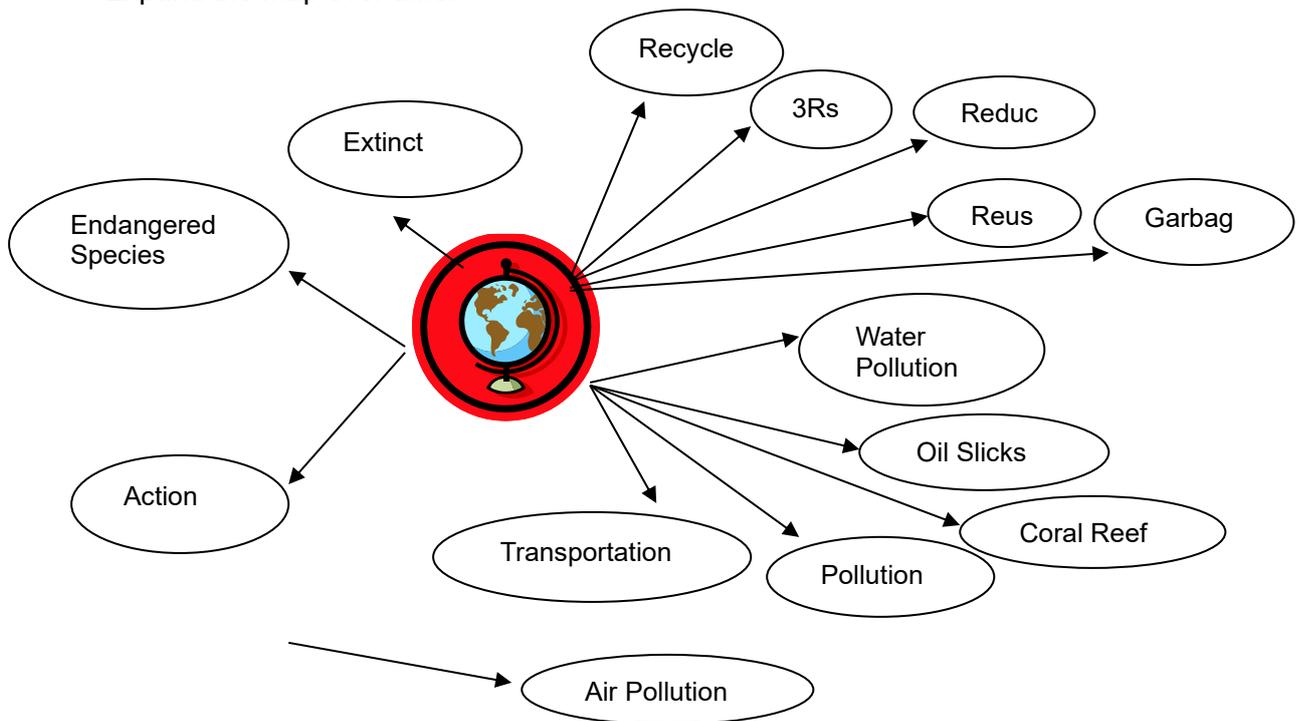
Step 3

- Freely and quickly add other key words and ideas (you can always rub out later).
- Combine concepts to expand your map or break boundaries. Develop in directions the topic takes you – don't be limited by how you feel you "should" do the map.
- As you expand your map, become more specific or detailed.



Step 4

- Set the map aside for a while.
- Later, continue to develop and revise it.
- Stop and think about relationships you are developing.
- Expand the map over time.



This map is your personal learning document. It combines what you knew already with what you are learning and what you may need to complete your "picture".

How to draw mind maps

Here are some pointers to help you draw creative and effective mind maps.

- Use just key words, or wherever possible images (pictures and icons).
- Start from the centre of the page and work out.
- Make the centre a clear and strong visual image that depicts the general theme of the map.
- Create sub-centres for sub-themes.
- Put your key words on lines. This reinforces the structure of your notes.
- Print rather than write in script. It makes your words more readable and memorable, lower case is clearer to read (and better remembered) than upper case.
- Use colour to depict themes and associations and to make things stand out.
- What stands out on the page will stand out in your mind.
- Use arrows, icons or other aids to show links between different elements.
- Don't get stuck in one area. If you dry up in one area, go to another branch.
- Put ideas down as they come up in your mind, wherever they fit. Don't judge or hold back.
- Break boundaries. If you run out of space, don't start a new sheet; paste more paper onto the map.

Uses of mind maps

We have already mentioned that mind maps are useful revision tools, and you have seen how you can use them to explore a topic. Here are some other uses of mind maps to explore:

- **Notes** - Whenever you are taking in information, mind maps help to organise it into a form that is easy for your brain to absorb and remember. Use them to make notes of anything - books, lectures, meetings, interviews, phone conversations and so on.
- **Recall (remember)** - Whenever you are retrieving information from memory, mind maps allow you to note ideas quickly as they occur, in an organised manner. There's no need to form sentences and write them out in full. The mind map serves as a quick and efficient way of reviewing, and so keeps recall at a high level.
- **Creativity** - Whenever you want to encourage creativity, mind maps free the mind from linear thinking, allowing new ideas to flow more rapidly. Think of every item in a mind map as the centre of another mind map.
- **Problem solving** - Whenever you are confronted by a problem, professional, or personal, mind maps help you to see all the issues and how they relate to each other. They also help others to get a quick overview of how you see different aspects of the situation, and their relative importance.
- **Planning** - Whenever you are planning something, mind maps help you get all the relevant information down in one place and organise it easily. They can be used for planning any piece of writing, from a letter to a film script to a book, or for planning a meeting, a day or a holiday.

- **Presentations** - Use mind maps when you are preparing a speech. It helps you to organise the ideas coherently. The visual nature of the map means that you can "read" the whole thing in your head as you talk without ever having to look at a sheet of paper.
- **Learning** - You can see mind mapping to put things into perspective, to analyse relationships and to prioritise. Try using it for the following learning activities:
 - organising a subject
 - bringing about deeper learning
 - integrating old and new knowledge
 - revising and preparing for tests

Note-taking

You have probably done a lot of note-taking throughout your education, but perhaps there's room for improvement in this skill. The steps and tips below will help you to take notes more effectively.

- Read a section of your book
 - Read just enough to keep an understanding of the material.
 - Do not take notes yet, but rather focus on understanding the material.
 - It is tempting to take a shortcut. You will probably write down too much information and simply copy from the text without understanding.
- Review the material
 - Identify the main ideas as well as important sub-points.
 - Set the book aside.
 - Paraphrase the information (put it into your own words). Putting the information into your own words forces you to become actively involved with the material.
- Write the paraphrased ideas as your notes
 - Do not copy information directly from the textbook.
 - Add only enough detail to understand.
 - Review, and compare your notes with the text.
 - Ask yourself whether you truly understand the information.

Memorising

When you are memorising information, it is important that you don't remember words but that you also:

- understand the ideas
- deal with the information
- grasp the subject

To memorise facts, use the best methods:

- wall charts and maps
- portable index cards
- audio tapes

- one-page summaries - including mind maps

Learn the basics of your subject. Learn names, dates, formulas and equations.

After that, you should concentrate on general themes and topics.

Some mnemonic techniques

A mnemonic is something (like a word, rhyme or visualisation technique) that is designed to help you memorise information. For example, if you did chemistry at school, you may have learnt the sentence **Little Beer Bottle Can Not Overflow Naturally** to remind you of the elements in the top row of the periodic Table.

There are many mnemonic techniques that would be very useful and powerful in your studies, and in everyday life. The most appropriate technique often depends on the material you are trying to memorise.

Find opportunities to practise each of the following:

- For information involving key words – acronyms
- For ordered numbers of lists – rhyme-keys
- For approximately 20 items – the method of loci
- For remembering names – the image-name technique
- For ordered or unordered lists – chaining

Let's look at each of these in turn. Remember, it doesn't help just to know about them – you have to *apply* (practise) them to get the benefit!

For information involving key words – acronyms

An acronym is an invented combination of letters. Each letter is a link to an idea you need to remember. For example, BRASS is an acronym for how to shoot a rifle: breath, relax, aim, sight, squeeze.

For ordered numbers of list – rhyme-keys

First, memorise key words that you can associate easily with numbers. For instance, bun with one; shoe with two, tree with three, door with four, hive with five, and so on.

Next, for each item you need to remember, create an image to link it to one of the key words. Make each image quite ridiculous or unusual, so it sticks in your mind. Suppose you want to remember the four basic food groups: dairy products; meat, fish, and poultry; grains; and fruit and vegetables. You could imagine:

- cheese on bun (1)
- livestock wearing shoes (2)
- a sack of grain suspended in a tree (3)
- opening a door to a room piled high with fruits and vegetables (4)

For approximately 20 items – the methods of loci

(*Loci* is the plural of locus, which simply means place, position or location.)

Select any location where you have spent a lot of time and that you know well.

Imagine yourself walking through the scene, selecting clearly define fixed items or places – the door, couch, fridge, shelf and so on.

Imagine yourself walking through this location in a direct path and putting the objects that you need to remember into each of these places. Again you need a standard direct path and clearly defined locations for objects, so that your mind can retrieve this object easily.

For example, if you had to remember Nelson Mandela, FW de Klerk and Eugene Terre Blanche, you could imagine walking up to the door of your location and seeing a colour poster of Nelson Mandela stuck on the door when you open the door. FW de Klerk is sitting on the couch and Eugene Terre Blanche is sitting on the fridge, holding the reins of his horse.

For remembering names – the image – name technique

This is a technique for remembering the names of people you meet. You invent any relationship between the name and the physical characteristics of the person. (Again, it helps if there's something odd or ridiculous about the images to make it memorable – as long as you don't burst out laughing when next you see the person!) For example, if you had to remember Shirley Temple's name, you might carve the name into your memory by noting that she has curly (rhymes with Shirley) hair around her temples (forehead).

For ordered or unordered lists - chaining

This means that you create a story where each word or idea you have to remember cues (links your memory) to the next idea you need to recall.

If you had to remember the words Desmond Tutu, ear, door, Germany, you could invent a story of Desmond Tutu with his ear to the door listening to people speak in German.

Word association

The word association method, also known as "key words" has become very popular as an effective strategy for learning foreign words. It is just as valuable for extending your language vocabulary and learning technical jargon. It has also been used successfully to teach social studies facts (for example the products of a country; capital cities), scientific facts (for example chemical reactions or parts of the skeletal and nervous systems) and for remembering people's names and faces.

Basically, you associate the sound of a word in the foreign language with an image. Here's an example we found in an advertisement for the Linkword© memory method:

The Russian for **COW** is **KAROVA**
To remember this: Imagine driving your **CAR OVER** a **COW**
Source: <http://www.unforgettablelanguages.com>

Word association is:

- very effective for learning the meanings of words
- most effective when you are supplied with the word, but create your own image
- particularly well suited to learning:
 - vocabulary
 - face-name associations
 - core facts
- When not to use the word association method

If you want to understand what a word means when you come across it, word association is probably the best memory strategy. However, if your goal is to be able to remember the word itself, note repetition may work better.

Here's an example of what we mean. If you learn that Canberra is the capital of Australia by visualising a can top of a map of Australia, you should find it easy to answer. Canberra the capital of? But you may struggle to answer the question: what is the capital of Australia?

Does faster mean better?

The main advantage of the keyword mnemonic over other strategies for remembering is that you acquire the information faster. But this doesn't mean it's necessarily a better method than others. Learning new words in a meaningful context is an equally effective strategy for long-term recall.

Underlining

Underlining has the following advantages:

- It forces you to decide what's important in what you are reading, and how ideas are related.
- It tests your understanding as you rephrase the text.
- It improves your concentration levels, because you read actively rather than passively.

Here are some basic guidelines for effective underlining:

- Read the entire paragraph or section (depending on the subject matter of the book) before underlining. Pick out the main idea and the supporting details.
- Select key words and short phrases to make smooth and complete sentences, always try to make your own sentences. Generally, it is best to leave out minor words like "the" or "a".
- Underline the right amount. Make sure your underlining covers all the necessary material for recall, but don't underline too much. Different kinds of material require different proportions of underlining. A very tough guideline might be to underline about 20% of the material.
- Develop a variety of marks to help you recognise and distinguish between different features when you review the next. You could for example, circle words that are defined; underline the definition; or draw a line down the side of the page to indicate examples. Then, when you review the material look first at the circled words. You may not need to revise the definition itself.
- Underline and use the above markings consistently. Every once in a while look back at the type and amount of marking in earlier chapters to make sure you are being consistent.
- Use the margins for writing down key words, your own thoughts or reactions and so on.
- Always remember that the main purpose underlining is to reduce the amount of material you have to remember specifically and thus the amount you have to review.

Effective habits for effective study

You can prepare yourself to succeed in your studies by developing and appreciating the following habits:

- Take responsibility for yourself. Responsibility is recognition that in order to succeed you can make decision about your priorities, your time, and your resources.

- Focus yourself around your values and principles. Don't let friends and acquaintances dictate what you consider important.
- Put first things first. Follow up on the priorities you have set for yourself, and don't let others, or other interests distract you from your goals.
- Discover your key productivity periods and places. Morning, afternoon or evening; study spaces where you can be the most focused and productive. Make use of these for your most difficult study challenges.
- Consider yourself in a win-win situation. You win by doing your best and contributing your best to learning, whether for yourself, your fellow students, and even for your teachers and instructors. If you are content with your performance, a qualification becomes an external check on your performance, which may not coincide with what you really think is beneficial.
- First understand others, and then attempt to be understood. When you have an issue with an instructor, for example a questionable grade, an assignment deadline extension, put yourself in the instructor's place. Now ask yourself how best can make your argument given his or her situation.
- Look for better solutions to problems. For example, if you don't understand the course material, don't just re-read material. Try something else! Consult with the lecturer; a tutor, an academic advisor, a classmate, a study group, or a study skills centre.

Skimming

When we skim a text we search for the main ideas by reading mainly the first and last paragraphs and by noting other organisational cues, such as summaries, that the author used.

Skimming is used to quickly identify the main ideas of a text. When you read the newspaper you're probably not reading it word by word; instead, you're skimming the text.

Skimming is done at a speed that is three to four times faster than normal reading. People often skim when they have lots of material to read in a limited amount of time. Use skimming when you want to see whether an article may be interest in your research.

There are many strategies you can use when skimming. Some people read the first and last paragraphs, along with headings, summarises and other organisers as they move down the page or screen. You might read the title, subtitles, subheading, and illustrations. Consider reading the first sentence of each paragraph. This technique is useful when you're seeking specific information rather than reading for comprehension. Skimming works well to find dates, names, and places. You can also use it to review graphs, tables, and charts.

Scanning, on the other hand, means that you search for specific information. For example, you might *scan* for a particular word or concept.

Skimming and scanning are particularly valuable techniques for studying scientific textbooks. Science writers pack many facts and details closely together, and learners usually react by shifting their reading speeds to the lowest gear and crawling through the material.

Although science textbooks are usually well-organised, with main points and sub topics clearly set out, the typical learner ignores these clues and plods through the chapter word to word, trying to cram it all in. It is precisely these characteristics organisation and density of facts per page – that makes it so vital that you learn and use skimming techniques.

To succeed in science studies, you need a thorough understanding of the major ideas and concepts presented. Without such a conceptual framework, you will find yourself faced with

the impossible task of trying to cram hundreds of apparently disconnected facts into your memory. Rather skim the text for the main ideas first, using the author's organisation signs (topic headings, italics, summaries and so on). Then you are ready to do the more intensive reading with the aim to remember as much as possible. The skimming step will provide a logical framework into which you can then fit the details.

3.2 Summarise and use information in the learning process

A summary can be regarded as a shortened version of a longer text that provides a reader with the general theme, but does not expand on details. It describes a larger work (such as an entire book, speech, or research project), and has far less content than the actual original text.

Summarising

For effective summarising, we need to:

- pull out key details – answer the questions who, what, when, why and how
- use key words and phrases
- break down the larger ideas
- write only enough to convey the gist (essence)
- take brief but complete notes

Summarising is one of the most difficult learning strategies to master. You have to practise it repeatedly, but it is such a valuable strategy and competency that it's worth learning to do well.

3.3 Synthesise and contextualise answers pertaining to relevant questions

Synthesis and contextualisation are tools that allow you to delve deeper into the meaning of text and ensuring that there is a greater understanding of what is being read. You can use the following techniques in order to gain this insight.

Checking understanding and clarifying meaning

Paraphrasing and questioning are two effective techniques to use when checking your understanding and clarifying meaning.

Paraphrasing

To paraphrase is to repeat someone else's message in your own words. What you paraphrase in a conversation, you use statements like "let me make sure I'm with you so far", or "what I hear you saying is ...", then you rephrase the communicator's ideas in your own words. With this type of feedback, you voice your understanding, which creates an opportunity for the speaker to check that you have understood correctly and clarify the point if necessary.

Questioning

Questioning is useful in conversation when you need additional information to clarify the communicator's message. For instance, you might ask: "What do you mean?" Asking this type of question lets the person add to the information they have already given.

Closed questions require only a "yes" or "no" response. If you use this type of question, you can expect to get a very short answer. It will not encourage the other person to go into detail although sometimes they may do so anyway. Once you have used this kind of question, you may want to follow it up with an open-ended question. Yes or no questions are useful for checking facts.

Open-ended questions do not seek "yes" or "no" response. Instead, they draw out more information from the speaker. Open-ended questions are useful for gathering information.

Gathering information

As you have already seen, there are various resources that you can use to gather information. These include:

- resource centre
- libraries
- the internet
- videos
- documentary television programmes
- brochures, magazines, books, encyclopaedias and other reading matters
- other people – friends, colleagues and family

When you gather information, it is important to ensure that the information is:

- accurate
- appropriate (relevant to the topic)

Let's look at what each term means and how you can check for accuracy and appropriateness.

Accuracy

Is the information in the resource accurate? You may wish to check this against other resources (cross-check), or by checking some aspects in which you have some expertise.

Is the information biased in any way? Some resources are produced as marketing and advertising tools, so it is a good idea to ask: What motivation does the organisation, person or author have for giving me this information? Sometimes the answer is that the information is placed to support a particular point of view, in other words, it is biased.

How can you tell whether a piece of text is biased? Look for evidence like misleading statements or outrageous, unsupported claims made by the organisation, person or author; sponsorship by individuals or groups with a vested interest in the topic, or one-sided arguments about controversial issues.

Inconsistent quality (making an article look as though it was patched together from several sources) and signs of hasty preparation (typing, spelling and grammatical errors) also indicate that the article is likely to be inaccurate.

Questions to ask to check accuracy:

- Are there any obvious or misleading omissions?
- Can I cross-check this information with another source?
- If the issue is controversial:
 - Does the text present all sides, or do I have to look for alternative views elsewhere?
 - Is the bias of the source of information clearly identified (if any)?

- Is the publication of the information sponsored or co-sponsored by an individual or group that holds a known position on the issues discussed?
- Does the resource have a vested or commercial interest in the topic?
- Are there indications of careless or hasty preparation, such as spelling or grammatical errors?
- Is the information of a consistent quality?

Appropriateness

Whether information is appropriate or not depends on the needs as the user. Appropriateness deals with whether the information meets your needs in terms of type and depth of the material provided, whether it complements (adds to completes) other information available or leaves gaps, and whether it fits into the broader field of knowledge.

Questions to ask to check appropriateness:

- Is the content related to my needs?
- Is the information sufficiently current (up to date) to meet my needs?
- Is the coverage of the topic sufficiently broad to meet my needs?
- Does the document provide any new information on the topic?
- Are there any obvious gaps or omissions in the coverage of the topic?

Asking questions is, unfortunately, the skill we use least often when we communicate with others. We often avoid asking questions because we don't want to appear uninformed, too inquisitive or too challenging.

Sometimes questions are not well received because people feel that they have either defended or justify their perspective. Like listening, asking questions is a skill that requires practice. When questions are focused on learning, they can be used to help us learn.

Typically, in learning situations we would ask questions of:

- facilitators
- other learners
- colleagues

Tips for asking questions

Effective questioning is a skill you can learn and improve. Here are some tips to help you:

- Pair your questioning with effective listening skills. Asking the other person questions is only one part of communicating effectively. The other key part is listening effectively for a complete understanding.
- Ask questions to understand. Asking the wrong questions, or asking in a way that might seem intimidating or challenging, shuts down effective communication. Avoid asking questions to prove your point. Instead, ask questions to gain an understanding. (For example "Can you help me understand why that is the best methods to use?")
- Asking questions prevents you from jumping to conclusions by allowing you to clarify your understanding. We often jump to the wrong conclusions because we don't ask questions to clarify what we are hearing. Without clarifying our understanding. We end up reinterpreting other people's reality and often shut down conversation. Questions

can help clear up any misunderstandings early in the conversation. (Example: "When you said ..., I understood it mean ... Am I understanding you correctly?")

- Allow the person an opportunity to think about the question. This applies particularly in a learning environment with a facilitator. Give the other person a chance to consider the question and formulate an answer. Waiting patiently for the answer will give you more benefits than rushing the person into answering too quickly. If your question does not get you the information you need, try phrasing it another way.
- Ask open-ended questions. Open-ended questions are ideal for gaining information from others, because they require more than a yes or no answer. The most effective open-ended questions are simplest. (Examples: "What is an alternative?" "What do you mean when you say ...?")
- Ask "what" and "how" questions. These kinds of questions are less threatening and allow people to describe and explain. These kinds of questions help prevent people from becoming defensive and allow for an exchange of perspectives (Examples: "How would you describe it?" "What is the benefit?")
- Remember that people aren't always receptive to answering questions. Be sure that you are not being intrusive when you ask questions. Be aware of the non-verbal and verbal messages you may be giving when you ask questions. Make sure that your facial expression and tone of voice are friendly and convey respect of the person.
- Be sensitive to the other person's non-verbal and verbal reactions to your questions. Be aware that you may be interrupting their train of thought. Ask your questions when the person has finished their points or when you are trying to clarify your understanding.
- If asking questions is not working, try making a request instead. (Example: "I'm having a little difficulty understanding. Please help me to understand what you are trying to tell me. ")

3.4 Learn from texts

You can learn from texts, by reading texts for detail, interpreting texts, analysing texts and the synthesising the texts.

3.4.1 Read/view texts for detail

To identify details in text, ask the questions:

Who? What? Where? When? Why? How?

Asking and answering these six questions will help you to learn more from your reading.

Some paragraphs in your reading will answer all your questions and be loaded with details. Other paragraphs will make you work and really investigate just like the reporters do. As a reader, it's your job to notice the small pieces of information that support the main idea of paragraph or passage.

The main idea and the supporting details

The *main idea* tells you what a paragraph is about. It is usually stated in the *topic* sentence, the sentence can be located anywhere in a paragraph, but very often it will be placed first or last.

When you have identified the main idea, you are ready to look for the details that support the main idea. To explain a point clearly, a paragraph should contain supporting details, facts, and examples that back up the main idea.

When reading text for details, look for:

- **Examples** - Writers use examples to illustrate what they are saying. Examples help readers to understand a general statement by giving them specific information that represents one piece of the whole concept.
- **Facts** - A fact is a statement that can be proved. It can be verified, and there are no reasonable arguments against it.
- **Statistics** - Statistics are figures (numbers) that give additional information. Statistics can be presented in different ways, such as charts, graphs, tables and lists. The numbers themselves can also be expressed in different ways, for example as fractions, percentages and decimals.
- **Reasons** - Reasons are explanations. They tell you why something happened. Reasons may also explain the cause of someone's belief, attitude or behaviour.
- **Definitions** - Definitions are statements that explain what something means. Definitions often come from the dictionary.
- **Descriptions** - Descriptions are words or phrases that tell what something looks, smells, tastes, sounds, or feels like. Descriptions use sense-related words to help readers visualise or get a mental picture of what they are reading.

Examples:

Text	Example of ...
It soars so high above everyone else has a beautiful wingspan, eyes that can see its prey from miles away and uncanny accuracy in getting its food.	Description
When Les Wexner, Chairman of Limited, designed Victoria's Secret his mission was "to design a store where Cybil Shepherd would love to shop for lingerie".	Fact
Bill Gates' mission is to "put a computer on every desk".	Fact
Within three months their sales rocketed to the highest they had ever had.	Statistic
You see, geese fly in a V formation.	Fact

Here are some tips for finding and understanding details:

- Ask yourself who? what? when? why? and how? while you read.
- Picture the details in your mind.
- Think about how the details fit with the main idea of the passage.

3.5 Interpret, analyse and synthesise verbal interaction for a given context

In order to make sense of either written text or spoken conversation, we *interpret* and *analyse* text or the spoken words in order to understand them.

Once we have this understanding, we are then able to synthesise the text. In other words, we create a new version of the text, using our own words. This process is known as critical

thinking. During critical thinking we use information to solve problems or issues and make decisions.

The steps for critical thinking

We can identify five steps for critical thinking and decision-making. These steps apply to both written text and verbal text.

1. Identify and clarify the situation.
2. Gather information.
3. Evaluate the evidence.
4. Consider alternatives and implications.
5. Choose and implement the best alternative.
6. Characteristics of effective critical thinkers.

Notes:

- **Identify and clarify the situation** - The first step is to pinpoint specifically what the text is saying. It could be expressing a problem or asking for a decision to be made, or for information. With written text, you may need to gather various texts from different sources in order to gain different perspectives of the situation. With verbal text, speak to all parties concerned. Identify whether the content is explicitly (clearly) stated, or whether the text is implying things that it isn't stating clearly:
 - *Implicit meaning* – a meaning that is not directly expressed, but implied.
 - *Explicit meaning* – a meaning that is fully and clearly expressed, leaving nothing implied.
- **Gather information** - Learn more about the situation. Gather all sides of the story; look for possible courses and solutions. This step may mean speaking to others, reading up on information or brainstorming with colleagues.
- **Evaluate the evidence** - Where did the information come from? Does it represent various points of view? What biases could you expect from each source? How accurate is the information you have gathered? Is it fact or opinion?
- **Consider alternatives and implication** - Draw conclusions from the gathered evidence, be it written or verbal, and suggest solutions. Then weigh up the advantages and disadvantages of each alternative. What are the costs, benefits, and consequences? What are the obstacles, and how can you deal with them? Most importantly, what solution best serves the need?
- **Choose and implement the best alternative** - Select an alternative and put it into action. Then, follow through on your decision by monitoring the results of implementing your plan.

Characteristics of effective critical thinkers

- Raise vital questions and problems, formulating them clearly and precisely.
- Gather and assess relevant data and information (written and spoken).

- Come to well-reasoned conclusions and solutions, and test them against relevant criteria and standards.
- Keep an open mind, recognise the assumptions they are making and assess the implications and consequences of these assumptions.
- Communicate effectively with others in figuring out solutions to complex problems.

3.6 Ensure that learning takes place through communicating with others

You will find that you can learn through communicating with others in groups or individuals, such as:

- facilitators
- other learners
- colleagues

Critical thinking is one of the essential skills that you should master in order to formulate and use learning strategies effectively. Critical thinkers are able to solve problems or issues effectively and make effective decisions, individually or as part of a team.

We become critical thinkers by insuring that we are able to learn through communicating with others, interpreting, and summarising, synthesising and contextualising information.

When we allow ourselves to learn from our colleagues, facilitators and even other learners we benefit from their experience and our shared world therefore gaining new information.

This is not a passive process, and requires an open mind and commitment on our part. Read through the following ideas about how to learn best from others:

Exchange roles: Learning is a two-way street. Connecting and exchanging with key stakeholders around shared development challenges catalyses considerable results.

Collaborate: We do not need to always gain knowledge on our own. Collaboration and sharing make it twice as rich.

Find the expert in the room: Who's the local expert on what we need to know? Who's been in the department or organisation the longest and has a long-term perspective? Who has the most experience for us to draw on?

Mix it up: Engage in several levels of learning. Sharpen your expertise in one area by finding out about another.

Experiencing and learning with others makes our learning a richer experience and also could cement relationship within your organisation. Learning from others helps us grow emotionally, and can often help with our own decision making.



Class Activity 3: Formulate and use learning strategies

Please follow the instructions from the facilitator to complete the formative activity in your Learner Workbook.