

Module 1

Language and Communication

Unit 1.2

Processing Information

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Revised September 2000

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Introduction

About this unit

Welcome to the unit on *processing information*.

We hope you find the study of this topic informative and interesting.

This unit begins with a discussion of the *Communication Process*. Techniques for analysing written information are then considered in some detail as well as techniques for critically assessing this information. We then examine methods for improving the storage and retrieval of information in the human memory. This unit also contains activities and exercises that will give you practice at developing skills and then applying these skills to your area of teaching.

How to use this manual

This unit is designed to build on the *skills* acquired in each section.

You should work through the unit at your own pace in the order that the material is presented.

As well as discussing the skills of *processing information*, this unit contains *practical activities* for you to complete. All activities are clearly identified and give you an opportunity to identify issues for consideration or to practise new skills.

These activities do not play a part in your assessment for this unit. They are there to help you check your learning progress.

Solutions are provided at the back of the manual so you can check your work as soon as you complete the activities.

Assessment tasks will be provided by your tutor to determine if you've achieved the learning outcomes of this unit.

It's these tasks that determine if you have met the learning outcomes for this unit.

How you'll be assessed

The assessment for this unit is an assignment.

Get in touch with your tutor when you are ready to complete this assessment.

Finding your way

As you work through the text you'll see symbols in the left margin of some pages. These 'icons' guide you through the content.



Read



Important—take note!



Check your progress



Activity



Competency

The resources of the TVET curriculum are competency based. The competency for each unit is expressed as a number of **learning outcomes** and **assessment criteria**.

The assessment criteria specify what you must be able to do to show you have gained the knowledge and skills needed to achieve each learning outcome.

Each unit has its own assessment criteria specified. Recognition of prior learning is encouraged. If you feel confident you have the necessary level of competence to successfully complete the elements shown below, you may be able to take the assessment without studying the unit.

Learning outcomes

When you have completed this unit you should be able to:

- illustrate, in different ways, how information is communicated;
- identify strategies for extracting salient points from information given;
- analyse information;
- identify different perspectives in selected pieces of writing
- critically assess information sources and content;
- summarize information to facilitate decision making;
- elaborate an abstruse statement for better understanding;
- identify strategies for storing and accessing information in a human memory.

Assessment criteria

- Illustrate, in accordance with information given, different ways in which information is communicated.
- Identify accurately, three strategies that assist in extracting salient points from information given.
- From a given statement of not less than three hundred words, which contains at least four concepts, extract and briefly explain without error, each concept.
- Explain the perspective taken by the author in each of three newspaper/journal articles on a current topic (eg. politics, sport, and education).
- Assess and validate the credibility of the source and the accuracy of the content of a journal article in the area of expertise of the teacher trainee.
- Summarize correctly the information in a number of given student assessment instruments.
- Decide, from the summarized information, the potential of each student to continue the course and recommend appropriate future action, for example, remedial, accelerated.
- Elaborate, to full comprehension by a student, a given cryptic statement.
- Describe accurately, three strategies for storing information in, and three strategies for retrieving information from, the human brain.

Other resources you may find useful

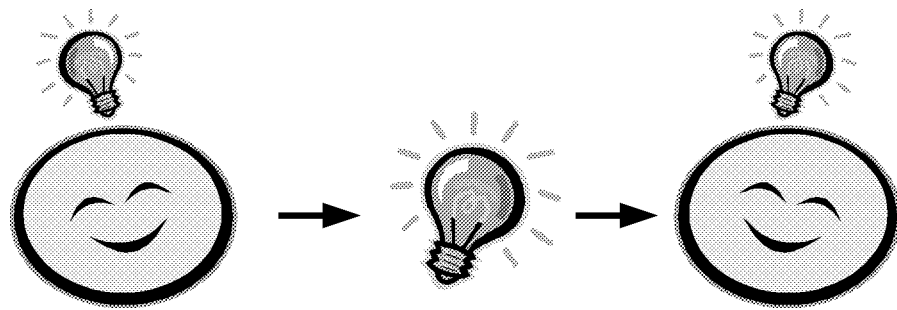
- Gage N, Berliner D, *Educational Psychology*, 1975, Rand McNally College Publishing Co., Chicago.
- Hilgard E, Atkinson R, Atkinson R, *Introduction to Psychology*, 1971, Harcourt, Brace Jovanovich Inc., USA.
- Nutting J, Cielens M, Strachan J, *The Business of Communicating*, 1996, McGraw Hill Book Co., Australia.
- Smith B, Delahaye B, *How to be an Effective Trainer*, 2nd Edition, 1983, John Wiley and Sons Inc., New York.

Section 1 The communication process



In Unit 1 of this module, *Listening and Writing*, we looked briefly at the communication process. Let's now look at this process in more detail.

Communication is the process of transmitting your thoughts and ideas to another person or other people and receiving feedback response.



There are many different ways of communicating your ideas. The method you choose will depend on your audience and the type of message you have to send.

- Do you know your audience?
- How many are there?
- How far away are they?
- How complex is your message?
- Do you need a direct response?

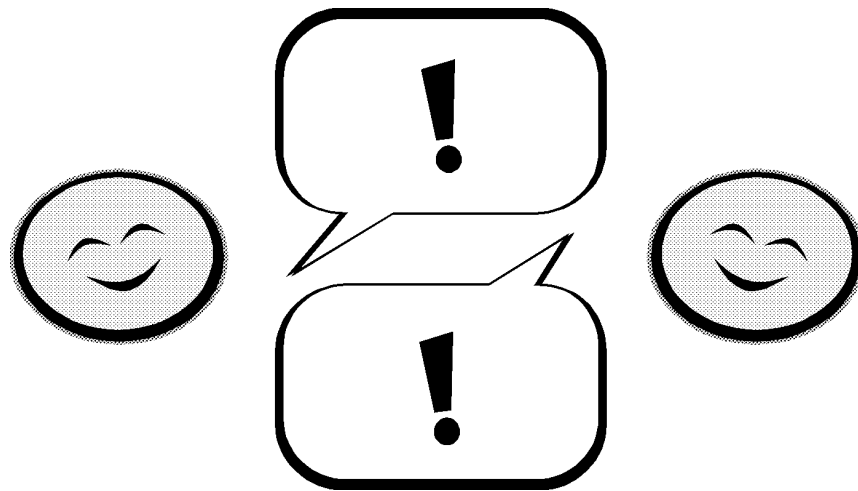
The **sender** of the message begins the communication process. It is the sender's role to choose how to send the message given the information above. The sender must:

- be **clear** what message he/she wants to send
- choose an appropriate method of sending the message, called a **channel**
- indicate to the receiver of the message the kind of response that is needed to the message. This is known as **feedback**.

The **receiver** of the message takes in the message and interprets the words or symbols. Feedback is the receiver's reaction to the message. There are many different types of feedback such as:

- a wave of the hand
- doing a specific task
- answering a question

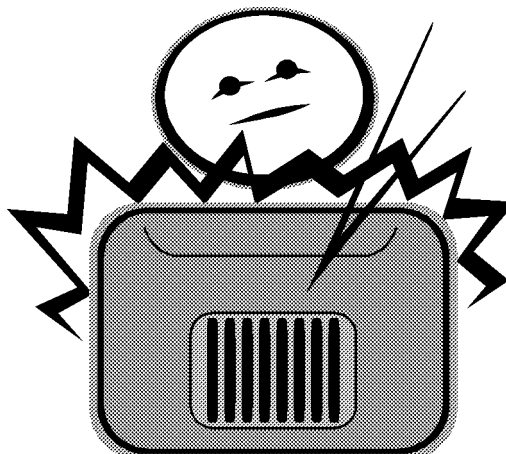
Feedback lets the sender of the message know that the message has been received and understood. When the receiver provides feedback he or she now assumes the role of the sender.



When feedback is part of the communication process, this is an example of **two-way communication**.

Some communication doesn't require direct feedback. This is called **one-way communication**, for example:

- television and radio
- books, magazines



Before we look in more detail at the methods or channels for sending the message, complete the following activity.



Activity 1

The communication process

1. What kind of response would you expect from one-way communication such as a radio broadcast?

Turn to page 95 for suggested solutions to this activity.



1.1 Sending the message - the channel

Let's spend some time looking in more detail at the different methods that communicators can use to send their messages.



There are three types of communication:

- oral
- written
- non-verbal

Choosing the right method to send your message is important. Consider this example, which is more effective:

- reading a list of statistics to a class of students?
- or
- writing the statistics on an overhead transparency and showing the class?

Writing the statistics on an overhead transparency would be more effective. Most people need to be able to see numbers to be able to understand them.

Choosing the right method means thinking about your audience and considering how best to get the message to them. Choosing the wrong channel means that your audience may not get the message you intend.

Let's look at each of these channels in detail beginning with the verbal channel.



Verbal Channel

The verbal channel is used in conversation, public speaking, debating, on television and radio, in theatre, songs and poetry. It is the most commonly used method for conveying messages.

The advantage of this method is that it is ***immediate***. It is useful to:

- explain a new idea when immediate feedback is required
- convey emotions and influence your audience.
- modify a message instantly if there are misunderstandings
- assist audiences who have poor reading skills
- convey messages quickly across a large area or to a mass audience using radio or television

Written channel

The written channel, the second channel you can use to send a message, is used in books, newspapers, magazines and computers to name a few. The fax machine, electronic mail and the Internet are becoming more common sources of written communication. The type of written communication varies from the hastily written note left on the desk to large volumes that take many years to research and write.

It takes longer to communicate in writing. Writing a message takes longer than speaking the same message, but the writer generally has time to think about what is being written. Written information is useful to:

- deliver complex messages
- deliver large amounts of information
- keep lasting records that can be referred to again
- ensure that a large audience receives the same message
- send information over large distances

Non-verbal channel

This is the third channel that can be used to send messages. Non-verbal communication covers both **body language** and **graphical symbols**.

Body language includes gestures, movement, posture, touch, facial expressions and tone of voice. Body language can be a channel on its own. A kiss, a wave of the hand, a punch are powerful messages! However body language is constantly in use with the verbal communication even when you are not aware of it, or do not intend to use it deliberately.

We may choose to send a message using body language because:

- you want to send a strong personal message
- there are physical barriers to overcome such as the receiver has hearing problems or it's too noisy (eg. building sites)
- the full meaning of the message cannot be conveyed by words alone

Remember our body language is often unconscious communication - that is, it betrays what we are really feeling about a person or situation; and can contradict verbal communication

Consider the body language being used in the examples in the next activity.



Activity 2

Body language

You are delivering a lecture to a class of students. Are you sure they are listening to you? From the examples below, place *yes* against those examples where you think the student is listening and *no* against those who are not.

Student A is filing her fingernails. 1. _____

Student B is watching you and nodding her head. 2. _____

Student C is staring fixedly at a point just over your shoulder. 3. _____

Student D is writing busily in a notebook. 4. _____

Student E is leaning back with his eyes closed. 5. _____

Student F is looking at you and smiling. 6. _____

Turn to page 95 for suggested solutions to this activity.



Most of the time we are unaware of our body language, and we may not pay particular attention to other people's body language. However, since body language is an important part of oral communication, if we are to be good communicators we must be conscious of the impact it can have on the communication process.

Some of these issues were identified in Activity 2.

Take some time to observe body language. Watch a video and watch with the sound turned down. Try to follow the story using the actor's body language only. Replay the video with the sound to see if you were drawing the correct conclusions.

Body language can be a very powerful communication channel.

The other aspect of non-verbal communication is ***graphical representation***.

Here are some other graphical representations:

Signs, pictures, paintings, graffiti and cartoons are **graphical representations** of a message or thought. There are graphical messages around us every day.

Are you familiar with this sign?



The graphical representation makes it very plain that this is a non-smoking area.

Graphical symbols are useful because they can:

- communicate across languages
- be read quickly
- save space
- be excellent advertising features

Let's observe some of these graphical symbols in your own environment.



Activity 3

Non-verbal communication - graphical representations

1. Look around your environment and see how many messages using the graphical channel you can find. Try and find at least three examples.

(1) _____

(2) _____

(3) _____

Turn to page 96 for suggested solutions to this activity.



So, when you are the sender of a message, you must choose which channel is the most appropriate for your message.

Let's apply what we have discussed so far about communication channels in the next activity.



Activity 4

Selecting the communication channel

Select an appropriate channel for each of the following messages and situations.

1. To warn motorists of a traffic hazard ahead.

2. To let traffic on a busy highway know that there is a restaurant ahead.

3. To convey the details of a sporting match.

4. To draw a student's attention to poor work performance and attendance.

5. To convey to a friend that your feelings have been hurt.

Turn to page 96 for suggested solutions to this activity.



1.2 Barriers to communication

As we have seen from our discussions so far, communication is a process of selecting a message, an audience and the right channel and sending our message.

The receiver takes in the message, interprets it, understands it and then gives us the appropriate feedback.

If only it really was that simple!

Unfortunately, there are lots of things that can get in the way of effective communication.

Barriers to communication are usually grouped under three main headings:

- physical barriers
- psychological barriers (such as emotions and other states of mind)
- cultural barriers

In the next activity, we'll take some time to think about different types of barriers to communication.



Activity 5

Barriers to communication

Using the three types of barriers to communication - physical, psychological and cultural - try and think of at least two examples for each of these categories.

1. Physical barriers:

- _____
- _____
- _____
- _____

2. Psychological barriers:

- _____
- _____
- _____
- _____

3. Cultural barriers:

- _____
- _____
- _____
- _____

Turn to page 97 for suggested solutions to this activity.



As you have discovered, there are many reasons why the communication process may not be successful. Most of these reasons have to do with being human and we are capable of making mistakes or sometimes trying, for our own reasons, to deliberately distort or manipulate the communication process.

Politicians seem to be the group of people who are most often accused of manipulating the communication process to their own ends - not answering questions, turning defence into attack, deliberately 'fogging' to avoid issues.

In your role as trainee teachers, it is important to recognise the potential barriers to communication that you may encounter and develop skills to overcome them.

In the rest of this unit, we will examine strategies and develop skills that will help you to:

- critically analyse and assess information sources and content
- extract the important points and summarize the information
- understand cryptic statements
- identify strategies for storing and accessing information in a human memory

Summary

In this section we examined the communication process:

- **communication** is the process of transmitting your thoughts and ideas to another person or people
- how you choose to send your message will depend on your audience, the complexity of the message and whether a response is required or not
- there are two participants in the communication **process** - the sender and the receiver
- **One-way** communication does not require a response from the reader (eg. radio, television, books)
- **Two-way** communication requires the receiver to make some response to the message (eg. giving instructions, sending a letter of invitation)

The three channels of communication are:

- verbal
- written
- non-verbal, which includes both body language and graphical representations.

**Check your progress**

1. List three factors that will influence the way you would choose to send a message.

(1) _____

(2) _____

(3) _____

2. What is one-way communication?

3. Give two examples of one-way communication.

(1) _____

(2) _____

4. What is two-way communication?

5. Give two examples of two-way communication.

(1) _____

(2) _____

6. Name three channels for sending a message.

(1) _____

(2) _____

(3) _____

7. Give two examples of each channel selected in Question 6.

(1) _____

(2) _____

(3) _____

8. Give two reasons why you would choose the channel selected in Question 6.

(1) _____

(2) _____

(3) _____

Remember that there are no answers given, so check your responses against the information in Section 1.

Section 2 Assessing information sources and content



When you are reading any kind of document, there are three levels on which you are trying to understand the written word - the content, the intent and the response.

Content - *what is actually written on the page?*

- What is the specific information?
- Am I interested in this information?

The skills of pre-reading, skimming and scanning are designed to give you this information quickly.

Intent - *what is the writer's purpose in writing?*

- What do I know about the writer and his/her qualifications and expertise in this area?
- Is the writer trying to influence me in some way?
- What perspective or bias does the writer have?
- Fact versus opinion?
- Emotive arguments versus factual arguments?
- Are the arguments put forward and the conclusions logical?

Response - *what am I going to do with this information?*

- Do I agree or disagree with the information?
- What use can I make of this information?

We shall look at each of these aspects of understanding and analysing the written word. Let's begin by looking at the skills needed to quickly assess the **content**. There are three skills for assessing content:

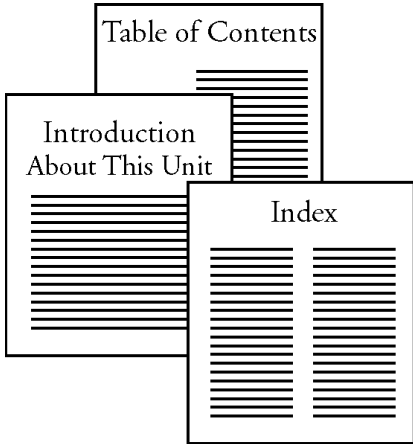
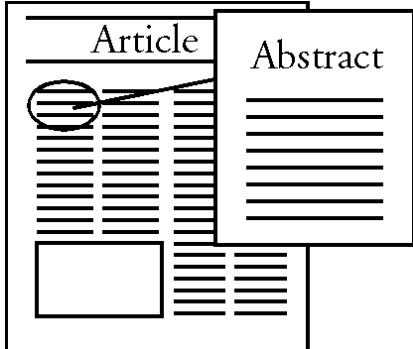
- pre-reading
- skimming
- scanning

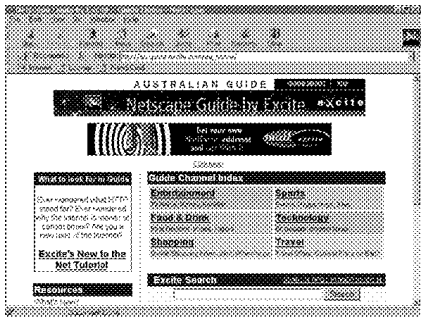
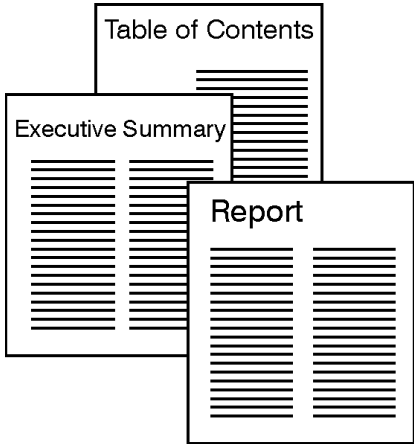
Let's look at each of these in more detail starting with pre-reading.



2.1 Pre-reading

This skill is particularly useful for longer pieces of writing and gives you a chance to quickly assess whether the overall content is going to be relevant to you.

<p>Reference books:</p> 	<ul style="list-style-type: none"> • Begin by looking at the <i>Table of Contents</i> for chapter headings so that at a brief glance you can tell what each chapter covers. • Look also at the <i>Index</i> at the back of the book, particularly if you are looking for specific information. • If there is an <i>Introduction</i>, read this briefly as it will give you an overview of the book's content.
<p>Articles in periodicals, journals and magazines:</p> 	<ul style="list-style-type: none"> • These articles often have an '<i>abstract</i>' at the beginning of the article which is a brief summary of its contents and conclusions. It is possible to assess the value of the information to you. • If there is no abstract, read the introductory paragraphs and the conclusion. • Read some of the first lines in paragraphs in the main body of the information. This will also tell you about the content of the article. • Some pieces of information may also be highlighted to make the text more appealing to the eye. Reading these highlighted portions will also give you information about the content.

<p>Web sites on the Internet:</p> 	<ul style="list-style-type: none"> • Look for any Tables of Content, highlighted text, and first lines from paragraphs to gain an overview of the content.
<p>Reports:</p> 	<ul style="list-style-type: none"> • Start with the Table of Contents, which will give you an overview of the contents of the report. • Reports may have an 'Executive Summary' at the beginning, which is a single page summary of the contents of the report and of the conclusions or recommendations. • If there is no 'Executive Summary', quickly read the Introduction and the Conclusions or Summary.

It's tempting when we are faced with a long piece of writing to just start reading and skip all the preliminary stuff! Taking a little extra time to pre-read some of this information will give you a much better indication of the content of the text and maybe save you time later on.

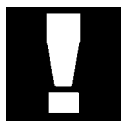
Let's try another activity. Now, be honest!



Activity 6

Pre-reading

Did you pre-read the 'About this unit' before you began work on this unit? If you have not done so, take a few minutes to read this information now.



Pre-reading is a valuable skill that you should develop. Reading the 'About this unit' section will give you useful information about what this unit covers and how you will be assessed at the end. This will help you to focus your attention while you are working through the material presented.



2.2 Skimming

This is the second skill for assessing content of written information. Having established that the content of an information source is likely to be relevant, it is time to skim parts of the work for information on the particular subject you are seeking. This means finding the page or pages that have the relevant information using either the Index or the Table of Contents.

Skimming means quickly passing your eyes over a page looking for particular ***word shapes***.

*If you were scanning the previous page of this unit, some of the different word shapes you could look for are **magazine**, **journal** or **Internet**. Each is different and easy to recognise. When you recognise a word shape, you can then stop and read the sentence or paragraph to get a quick overview of the content.*

We shall cover further techniques in the section on scanning.

The same technique can be used on reports, articles in journals or magazines and on Internet sites.

By skimming, you can establish whether a piece of writing has information about a particular topic.

Let's practise the technique of ***skimming*** in the next activity.



Activity 7

Skimming

Read these questions first and then 'skim' the article on the next page to find the answers. The questions use sections of the text, so look for those **word shapes** and practise your skimming technique.

1. What two 'weapons' should no teacher use?

(1) _____

(2) _____

2. Student contributions in class should be what?

3. Learning to accept criticism or correction without _____
_____ should be a major goal of teaching.

4. What is a mature student?

5. How should the teacher always deliver correction or criticism?

6. Comments or criticism should always be directed at _____
_____ and not at _____.

Turn to page 97 for suggested solutions to this activity.



This technique may take some practise before you feel you have mastered it. Whenever you are reading, even if it's reading the newspaper, use the skimming technique to quickly assess the content of articles.



Activity 7 (cont.)

Skimming

Before reading this article, make sure you have read the questions on the previous page. Then skim the article for the word shapes from each question to find your answers. Try to avoid reading each word. Make a conscious effort to skim the text.

A major pitfall to avoid when teaching is hurting students' feelings. Sarcasm and ridicule are weapons that no teacher should use. Unless the teacher has exceptional reasons to believe they can use hostility harmlessly - even humorous hostility - avoid it.

Student contributions in class should be welcomed and received with respect.

But respect may be difficult to maintain if the student's contributions are incorrect, irrelevant or illogical. Can the student who made such statements be corrected without the student feeling that he/she is under personal attack?

Learning to accept criticism or correction without taking it personally should be one of the major goals of teaching. Students must learn that their first concern should be the solution of the problem or task, not the protection of their self-esteem. The mature student is one who has learned to accept valid criticism of his/her ideas without becoming defensive about them.

The teacher can do much to help the student learn to accept criticism. The teacher can model the behaviour that is appropriate when students question their statements, acknowledging the criticism and considering whether it is valid or not. The teacher should always deliver correction or criticism without emotion. Teachers should not display anger, frustration or amusement at a student contribution. Comments or criticism should be directed at the content of the statement and not at the individual who offered the comments. Hostile personal attacks should be avoided at all costs.



2.3 Scanning

This is the final skill for assessing the content of an information source.

Having skimmed an information source to locate certain word shapes, you need to scan the text to gain an overall sense of the meaning. Scanning means training your eye to look for the main words and ignoring the little words that connect the text together - such as: a, an, the, and, of etc. (This technique was discussed under note-taking in Section 1.2 of Unit 1, ***Listening and Writing***.)

By scanning, you can quickly assess whether the information about a particular subject is useful to you without wasting a lot of time.

Let's practise this technique in the next activity.



Activity 8

Scanning

Read the questions below and then read the following paragraph. The paragraph has had all the small words removed. Reading the questions FIRST will help you to focus on the particular information to be scanned.

1. What is the basic structure of any written format?

2. What does the introduction do?

3. What is in the body?

4. What does the conclusion do?

Basic format written information is introduction, body and conclusion.

Introduction alert readers main topic. show how plan to approach topic important to gain interest.

Body is made up one or more paragraphs expand main topic. Each paragraph deals separate aspect support ideas detailed information references.

Conclusion summarize topic draw together main points

Turn to page 98 for suggested solutions to this activity.



Even with the small words taken from the text, it is possible to understand the meaning of the information. You don't have to read every word to make sense of the writing. Using scanning helps you to gather information quickly.

For your information, here is the passage written out in full.

The basic format for any written information is introduction, body and conclusion. The introduction should alert the readers to the main topic for discussion and show them how you plan to approach the discussion of the topic. It is also important to gain your readers' interest. The body is made up of one or more paragraphs that expand the main topic. Each paragraph should deal with a separate aspect of the main topic and support your ideas with detailed information and references. The conclusion should summarize the topic and draw together the main points of your discussion.

So far in this section we have looked at how to critically assess the sources of written information and have examined some strategies for assessing the relevance of content and extracting the main points.

In the next section we will look at some of the skills needed to critically **analyse information**.

Summary

Three skills to try and assess the content of written information are:

- pre-reading
- skimming
- scanning

Pre-reading is the skill of quickly assessing the overall content of large pieces of work using:

Tables of Content, chapter headings, indexes, introductions to texts, abstracts of Journals, introductory and concluding paragraphs in shorter articles and reports, any highlighted text.

Skimming is passing the eye quickly down a page looking for word shapes to locate information on specific topics.

Scanning is reading the main words in written text to quickly assess whether the information is going to be useful to you.



Check your progress

1. List three skills for assessing the content of written information.

(1) _____

(2) _____

(3) _____

2. Briefly describe each skill above.

(1) _____

(2) _____

(3) _____

3. What is the purpose of each of these skills?

(1) _____

(2) _____

(3) _____

Remember that there are no answers given, so check your responses against the information in Section 2.

Let's now move on to the skills of analysing information.

Section 3 Analysing information



We have established by pre-reading, skimming and scanning that the written text contains information that is relevant to you. Let's now look at critically analysing the information to determine the writer's purpose in writing and to help us decide whether the information will be useful to us.

The aspects that we will consider are:

- credibility of the source
- the writer's perspective, bias
- use of language
- emotive or factual arguments
- presentation
- logic and conclusions

Let's look at each of these in turn.



3.1 Credibility of the source

The cliché that 'if it is in the library, it must be ok' doesn't always apply. Nor is the fact that something has made it into print a reliable guide to the accuracy and integrity of the information. It is up to the person using library resources, searching the Internet or reading the report to assess whether the information is relevant, useful or credible.

Let's look at some guidelines for assessing the credibility of written information.



Books

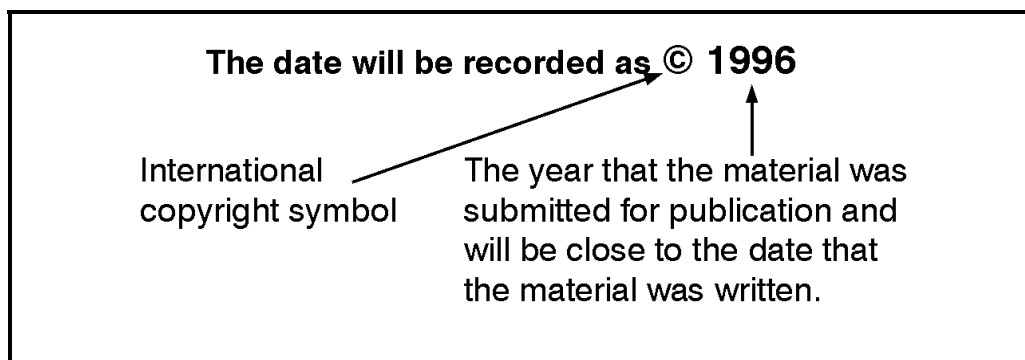
- ***Look to see what information has been included about the author.*** Check on the title page, in the preface or introduction or on the book jacket. Does it give any indication of the author's experience and qualifications? Does this experience seem relevant? Consider this example:

Does a politician who is writing an article on an economics subject have any qualifications in economics?

Does he/she have any experience in an economics portfolio?

Is this person recognised as a spokesperson on economic issues?

- ***Check the name of the publisher.*** Are you familiar with the publishing house? Some publishers have a reputation for producing works of academic excellence. If you aren't familiar with the publishing house, ask the librarian who should know or who can check the information for you.
- ***Look also at the year of publication.*** This will tell you how recent the information is.



Periodicals

This is the general term given to the magazines and journals held in a library collection. Periodicals provide up-to-date information on research that is currently in progress or on recent research findings. Researchers all over the world publish their findings in journals as a means of communicating to their colleagues the advances they have made in their field.

Periodicals generally *specialise* in a subject area. There will be journals and magazines that are devoted to medicine, teaching, psychology etc. There are journals that are recognised as leading publications in a particular subject area. Again, check with the librarian for further information.

Journals contain articles that are written by the people who are actually doing the *research* in a particular subject. Journal articles usually have a short biography of the person or people writing the article and will also refer to other relevant research in a bibliography at the end of the article. Reading this will give you some information on which you can judge the credibility of the author.

Magazines contain information *about* recent research but are more likely to be written by professional journalists rather than the person doing the research. These publications are often meant to give general information on a subject rather than the specifics contained in a journal article on the same subject. Because they are not written by the person who is doing the research, it may be useful to check a couple of articles on the same topic to make sure that the information is consistent.

When assessing the credibility of the author of these articles ask yourself:

- Does the author of the article tell you the source of the information they have used?
- Does that source have any credibility in that particular subject?

The Internet

The Internet offers up to 50 million pages of information. Anyone can put a page onto the web - corporations, universities, colleges, community organisations, political organisations, special interest groups and individuals. There is no quality control over the information that is on the web. Searching the web for information can be time-consuming as there may be a lot of information on a subject that you have to sift through before you find a relevant and useful site.

Most universities and colleges are attached to the web and it is possible to access some libraries through the Internet.

If you decide to do a general Internet search, here are guidelines you can use to test the credibility of a site:

- who wrote the information contained on the site? Is there any detail about their qualifications and experience?
- is the site sponsored by a particular organisation? What do I know about that organisation? Is it likely to be biased in a particular way?
- is the information documented? Does it provide references to the sources used to write the article?
- does the information compare favourably with other sources of similar information - books, journals etc.?
- look at the date the site was last updated. This information is usually at the bottom of the page. It will tell you how recent the information is.

Reports

The first step in assessing the credibility of the source is to find out about the author or authors of the report - what are their skills and qualifications in the specific subject area?

- *How old is the report? Would it now be superseded by more up-to-date information?*
- *Is the information in the report supported by specific information and references?*
- *Are there other reports on the same subject that you can use to compare the information?*

Let's relate this to your specific teaching area.



Activity 9

Assessing the credibility of the source

Choose a subject relevant to your teaching area. From your local information source, find three different articles in different journals or reference sources. Select them at random. Using the techniques outlined in this section, assess the credibility of the source. Give a short written justification for your decision.

Article 1:

Article 2:

Article 3:

Keep copies of these articles you have referred to in this activity OR retain a record of their location as we will use them again in a later activity.

Turn to page 98 for suggested solutions to this activity.



Perspective and bias

This is the second aspect of analysing information.

As we have already discussed in Unit 1 of this Module, ***Listening and Writing***, people have many different purposes in mind when writing. They may want to:

- inform
- persuade
- express an opinion
- entertain
- describe
- arouse emotions

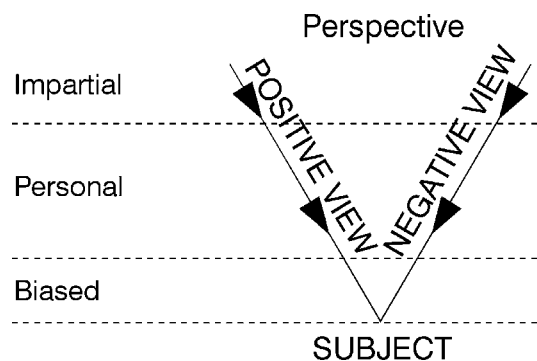
Implied within this purpose is the writer's ***attitude*** towards the subject matter.



What is perspective?

Perspective is about the writer's point of view - that is, their ***attitude*** towards their content. It is about how far the writer chooses to distance him/herself from their subject. It ranges from complete impartiality through positive and negative personal perspectives and to bias.

Let's try and represent the attitude visually.





What is the difference between perspective and bias?

Bias is a particular attitude that prevents a writer from taking an impartial view of a subject. Bias can be conscious or unconscious. A writer may recognise and acknowledge bias on a particular subject. Another writer may attempt to be impartial but have this attempt undermined by his/her own attitudes to a subject.

Perspective is about making a decision about your purpose when writing and carefully considering your attitude to the subject matter as shown in these examples:

Example 1

The following has been adapted from The Sunday Gleaner, October 29, 2000.

I AM CONCERNED OVER THE decline in the interest paid to our war veterans. When I was a child I looked forward to "Poppy Day", because it was the means of assisting those who fought in World Wars I & II and returned home blind or minus an arm or a leg, and also to assist the families of those who failed to return.

At school we were taught the meaning of "Poppy Day", Remembrance Day or Armistice Day. We knew that it was commemorated on the 11th hour of the 11th day of the 11th month of the year

1918 to mark the end of World War I. We also knew why it was important to support the Poppy Day Fund and who benefited from it.

Poppies were sent to schools, churches, business establishments, Government offices and leading individuals etc. We all bought poppies and wore them on Poppy Day.

Having been alive in World War II, and witnessed the return of our soldiers, I can sympathise with the veterans and also with the families of those who failed to return.

Please buy a poppy and wear a poppy on Poppy Day.

Answer the following questions and then we'll compare notes.

- What do you think is the writer's purpose?

- What is the writer's perspective? How much distance does he have from his subject matter?

Here's what I think. Let's see how this compares with your opinion.

*The writer's **purpose** appears to be both to inform and to arouse emotions - to make us aware of the meaning and significance of Poppy Day and to arouse sympathy for the war veterans.*

*The writer's **perspective** is very **personal** and **positive** towards the subject matter. The writer has made it clear that he feels very close to his subject matter.*

Here is another report:

Example 2 From **The Sunday Observer**, October 29, 2000.



Answer the following questions. We'll compare our responses again.

- What do you think is the writer's purpose?

- What is the writer's perspective? How much distance does he have from his subject matter?

This is my view. How does it compare with yours?

The writer's purpose is to inform.

The writer's perspective is impartial. This is an example of factual reporting of events without emotion.

Example 3

This is a Letter to the Editor on a different subject. The actual names used in the original letter have been removed.

■ THE barrage of bull being showered on the electorate by the ill-named . . . (yes, we know who they really are) should make international conman . . . envious that he never had come up with a similar scheme to help feather-bed his former champagne lifestyle.—

(Name and address supplied)

Reproduced with permission by The Courier-Mail.

Answer the following questions and we'll compare our points of view.

- What do you think is the writer's purpose?

- What is the writer's perspective? How much distance does he have from his subject matter?

Let's compare our opinions.

The writer is expressing a personal point of view.

The author is very close to the subject matter. This could be labelled as an example of negative bias given the level of vitriol expressed in the letter.



How do you decide that a perspective is biased?

This is not an easy question to answer. Often it is a matter of personal interpretation. We expect to see bias in some instances, for example; from political parties and their spokespersons and from special interest groups when reporting about their particular causes. We can recognise these statements by the language they use and the types of arguments they use:

- presenting only one side of an argument
- strong statements of support for a person or point of view
- negative references to other points of view and people who hold them
- emotional rather than logical arguments and conclusions
- arguments that are not supported by evidence

Bias may be subtle and may occur in seemingly factual accounts and reports. Omitting or distorting information or facts to suit a particular point of view are ways in which this can be done. Unless you are very knowledgeable in a particular subject area, you may not be aware of the hidden bias as shown in this example:

If someone is writing a report to try and persuade you to buy a particular brand of photocopier, he/she may be more inclined to promote its good features and not mention its bad features.

OR

If something negative is mentioned about the machine, then the rival brands will be made to look even worse.

How can you decide what an author's perspective is?

It is an established writing custom, particularly in academic writing, that if a writer is going to present a particular point of view on a topic that point of view should be made clear to the audience as part of the introduction.



If the writer's perspective is not stated clearly, you can detect it through:

- words used
- writing style
- tone



Look at the different ways in which the **writers use words**:

- **Example 1** - descriptive, trying to help you picture the actual events, and uses emotive words such as sympathize
- **Example 2** - reporting of events and uses facts and names of people and organisations to report the events
- **Example 3** - uses colourful words and negative terms to carry its message

The **writing style** is about the use of grammar to reflect how personal or how impartial the writer wants to be. If you are writing from first-hand experience and expressing a personal opinion, you will use personal pronouns such as *I, me, my, we, us*.

Writing from the third person perspective, *he, she, they*, puts the writer at a distance from the reader and makes the writer appear more impartial.

Example 1, written in the first person, has a personal tone because of the language it uses. **Example 2** has no personal pronouns at all. This style puts the writer at the greatest distance from the events, merely reporting facts and figures.

Example 3 is written in the first person (indicated by the use of the pronoun *we*) to show that this is a personal opinion.

Tone is about the kind of mood or feeling the writer wants to make the reader feel. The tone can be friendly or formal, angry or sad.

Tone is a combination of both the language used and the writing style. How would you describe the tones of Examples 1, 2 and 3?

The tone of **Example 1** is very emotional. The writing evokes emotions in the reader. The tone of **Example 2** is formal with no emotional content at all. The tone of **Example 3** is sarcastic and angry.

As a critical reader you need to be aware of the perspective the writer has on the subject matter. To obtain a truly balanced view of an issue, you may need to seek the views of more than one writer on the same subject or reject that author and find an impartial observer.

Let's look at a few newspaper articles and practise this skill.



Activity 10

Perspective and bias

Read the Newspaper article 1 on the following page. Then answer the questions.

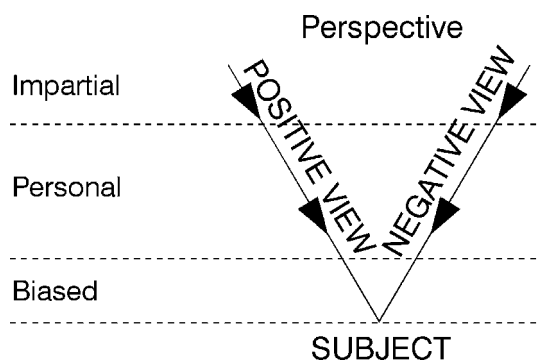
Article 1

1. Locate the topic of the article.

2. Decide on the writer's purpose.

3. Decide on the writer's perspective.

4. Use the graphic reproduced below to decide where the writer's perspective lies.
For example: Impartial perspective or Negative personal perspective.



5. Write a short justification for your decision.

Turn to page 98 for suggested solutions to this activity.

Floating fungus could slash sugar crop



CAIRNS canefarmer Sucha Chohan ... 'What can you do?'

By DEBRA ALDRED, GORDON COLLIE and BRENDAN O'MALLEY

QUEENSLAND'S \$2.1 billion sugar industry is being threatened by an airborne fungus which has West Australian farmers considering destroying their infected crops.

Canegrowers say it is just "wishful thinking" that Queensland has not been infected with the sugarcane smut fungus, which may have travelled from Indonesia.

The fears have been exacerbated by the use of Queensland machinery in Western Australia's affected Ord region, in the far north.

Canegrowers yesterday called for the Queensland and Federal governments to fund programmes to identify the fungus.

The fungus, which can slash cane yields by more than 50 percent, is a scourge of world sugar producers.

It was not believed to exist in Australia, Papua New Guinea or Fiji until several days ago, when strains of the fungus were discovered in the fledgling Ord River industry.

Scientists from the Bureau of Sugar Experiment Stations in Brisbane said Queensland, which produced 95 percent of the nation's sugar, would sustain "significant losses" if the smut was found in crops.

They said Queensland's high-yield cane, representing 40 percent of the state's total crop, had only moderate resistance to disease.

BSES director Colin Ryan said all 6500 Queensland canegrowers must be shown what to look out for so a thorough investigation could begin.

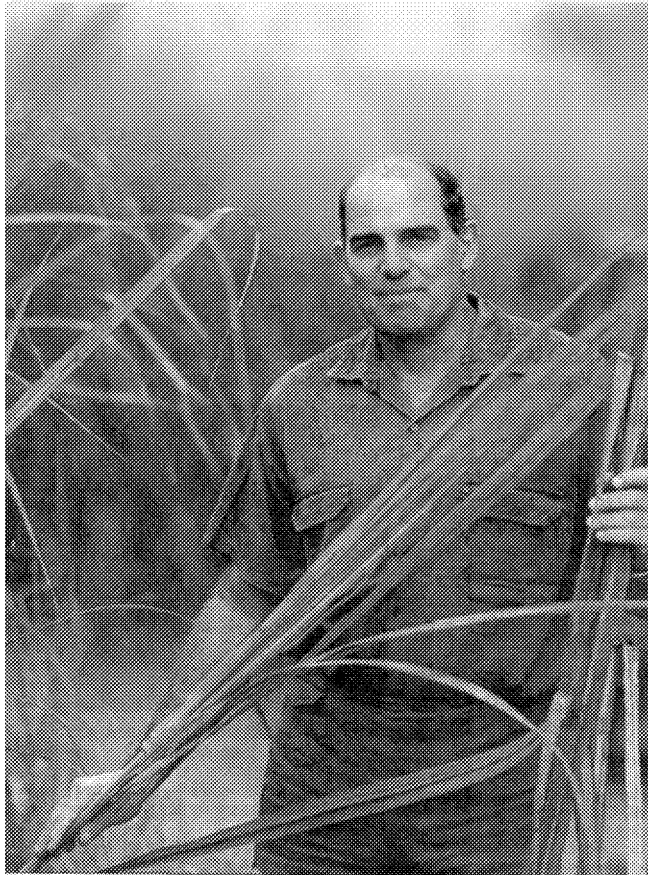
Mr Ryan said fungus spores travelled by wind from one susceptible plant to another and could be carried via machinery such as cane harvesters and cane planters.

Nambour canegrower Kevin Bailey said the fungus smut was the disease farmers dreaded the most.

"It looks like it has arrived in Australia although we had hoped it never would," Mr Bailey said.

Harvesting contractor Eric Waugh, of Mossman, who has the contract to cut the 3000ha of cane in the Ord River area, said he had not moved any of his machinery from the affected area to Queensland because of fears of spreading the fungus.

Movement of machinery between Western Australia and Queensland and New South Wales will be



NAMBOUR canefarmer Kevin Bailey inspects his crop for smut.

restricted by law as soon as possible, the BSES has announced.

Sucha Chohan, who grows 35ha of cane at Smithfield, north of Cairns, said strict hygiene had kept his crops relatively clean for many years.

"We tell the harvesting contractors to clean all their equipment when they move from field to field," Mr Chohan said. "But what can you do with this smut if the wind is spreading it?"

Australian Canefarmers chairman Warren Martin said farmers would need help if the fungus spread.

"It will be outside the capacity of this industry if we find the disease on the east coast," Mr Martin said.

"We are going to be looking at the three state governments affected and the Federal Government and insist on heavy financial support."

Canegrowers director Ian Ballantyne said the industry would wait on advice from scientists on the best course of action to protect the

Queensland industry rather than make a knee-jerk reaction.

He said the total destruction of Queensland's crop was not part of the current strategy at this stage.

"We know that certain varieties are quite susceptible and it might be practical and sensible to destroy those, but we haven't reached that stage by a long shot," he said.

Ord River Canegrowers Association spokesman Robert Boshammer said: "If the Australian sugar industry could convince us that there was definite scientific merit in destroying our entire crop, then it would have to be considered. But I don't think anyone would suggest there was a significant benefit to the Australian sugar industry in doing that."

Scientists will test Queensland crops over the next few weeks to determine the extent of the disease, and samples of the West Australian fungus have been sent to the US for analysis.

ARTICLE 1

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**Activity 10 (cont.)****Perspective and bias**

Read the Newspaper Article 2 on the following page. Then answer the questions.

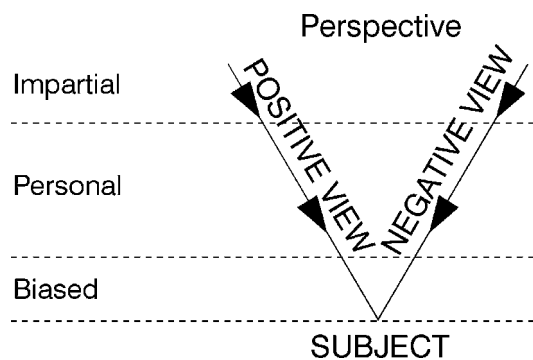
Article 2

1. Locate the topic of the article.

2. Decide on the writer's purpose.

3. Decide on the writer's perspective.

4. Use the graphic reproduced below to decide where the writer's perspective lies. For example: Impartial perspective or Negative personal perspective.



5. Write a short justification for your decision.

Turn to page 99 for suggested solutions to this activity.

GATHERED in grief . . . Stuart Appleby is comforted by friends and family at the funeral service yesterday of his wife Renay who died in a freak accident last week.

THOSE were the words shattered golf pro Stuart Appleby e-mailed home to friends in Australia, as news spread of his wife's death in a freak car accident in London last Thursday.

Yesterday, Appleby read his heart-wrenching e-mail once again to hundreds of family, friends and fans who had gathered not to mourn Renay's death but to "celebrate her life".

His black suit offset by a vivid blue shirt, Appleby broke down briefly after asking the crowd to "bear with me" as he read the letter, which captured the champion golfer in one of his darkest, loneliest hours.

In it, he revealed his desperate wish that, as in the hit Hollywood movie *Ghost*, "the power of pure belief would bring (Renay) back, that she would be here now".

"Only in TV," he wrote sadly.

Instead, Appleby said he would cherish the belief that one day, "when I'm ready", Renay herself would explain to him the meaning behind what seemed a pointless tragedy.

Wiping away tears, the 27-year-old golfer recalled the last dinner he shared with his wife, "in jeans and runners" at a fancy restaurant in their upmarket London hotel.

That was typical Renay, he said — always concerned about his comfort and utterly unfazed by what anyone else thought of the devoted pair known throughout the golfing world as Team Appleby.

Several leading Australian golfing identities, including Robert Allenby, Craig Parry, Ian Baker-Finch and Jack Newton, were among those who gathered at St Joseph's church at Tweed Heads yesterday.

Most knew that Renay Appleby had been an accomplished amateur golfer in her own right.

But she gave up a promising career in the sport to support Stuart, who she met on a 1992 tour of the United States.

"Love your partner unconditionally," was the lesson to be learned from Renay's short life, her sister Duean told the congregation.

"There could be no more supportive partner than Renay," she said of the petite brunette, who had attracted the attention of golfing greats as she lugged her husband's pro bag around some of the world's most gruelling golf courses.

Ironically, neither Appleby nor the then Renay White had wanted to be paired together on that first US tour, Reverend Michael Nylon later revealed in his eulogy.

Appleby thought the vivacious 19-year-old was a flirt. She thought the quiet country boy from Cohuna, Victoria, was a snob.

But within months of the pairing, Appleby rang his parents to tell them he had found the woman with whom he wanted to spend the rest of his life.

Sadly, it was not to be.

Instead, as vocalist Gabriel Parson sang *Say A Little Prayer* and a chill winter seabreeze brushed over the crowd, Stuart Appleby yesterday gathered the coffin of his wife, sometime caddy, and soulmate on his shoulder, and began Team Appleby's final, slow journey home.

— CHRISTINE JACKMAN

ARTICLE 2

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AND ANOTHER THING: A quarter of our top 20 companies have appointed — gasp — a second woman to the board, a trend search firm Korn/Ferry calls "a huge increase". That leaves just two problems as women storm the boardrooms of corporate Australia — there still aren't enough of them there, and change is coming with all the speed of the average glacier. Some companies say there are not enough women to satisfy demand. They can't be looking very hard.

ARTICLE 3

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**Activity 10 (cont.)****Perspective and bias**

Read the newspaper article (Article 3) on the previous page. Then answer the questions.

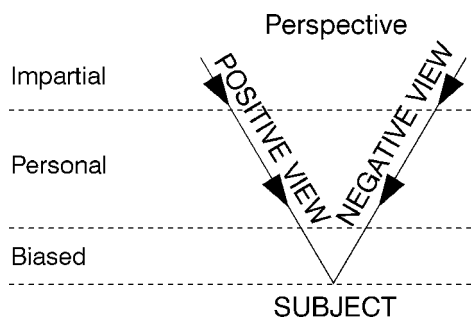
Article 3

1. Locate the topic of the article.

2. Decide on the writer's purpose.

3. Decide on the writer's perspective.

4. Use the graphic reproduced below to decide where the writer's perspective lies. For example: Impartial perspective or Negative personal perspective.



5. Write a short justification for your decision.

Turn to page 99 for suggested solutions to this activity.



3.2 Use of language

This is the third aspect we will examine when considering how to critically analyse information.

We have already discussed how you can analyse the type of words used in a piece of writing to detect the writer's perspective. We will now look at language in more detail.



Some of the aspects to consider are:

- simple versus complex language
- use of jargon and technical terms

The basic question to ask is - *Does the language make it easy to find and understand the information that you are looking for?*



In a well-written document, you should not be aware of the language. You should be able to concentrate on the content without the language intruding.

In Unit 1 of this module, ***Listening and Writing***, we discussed the importance of correct use of grammar and the use of simple language to convey a message clearly. This principle applies to all forms of writing. Just because something is written in obscure language doesn't make it more important or more credible. Language is not there to obscure the message but rather to make the message easily understood.

Lots of time can be wasted trying to read difficult text that may not have information that is useful to you. Or, you may miss valuable information because the meaning is so well hidden by the language. As the reader, it is your decision whether to shut the book or spend the time.

There are some techniques that you can use to try and make sense of text so that you can decide on your course of action.

Consider the following passage.

What is the difference between information and data?

The definition of data is rudimentary. Data is fact that can be substantiated by corroborative evidence.

The definition of information is more problematical as whether material constitutes information or not is dependent on the perspective of the recipient. Information connotes a net gain in understanding by the recipient but the degree to which transmission of information occurs depends on the nature of the conundrum to be deciphered, the degree to which the individual is capable of comprehending sophisticated concepts and the nature of the incentive the individual experiences to probe for elucidation.

Did you understand this passage at first reading?

If not, why not?

Consider the language used.

The writer uses unnecessarily complex words in this context. For example, ***substantiated, corroborative, connotes, recipient, transmission, elucidation.***

The writer uses overly long sentences. There are only four sentences in this passage, one of which is very long.

This passage can be described as verbose and difficult.

Some techniques to help you read and analyse difficult passages:

- use ***scanning*** techniques to eliminate the unnecessary words. Highlight the main ideas with a pen if you can or write down the main ideas.
- if you encounter unknown words try and guess at their ***meaning*** within the text. Look at the words and sentences around them. Can you assume their meaning? Have a dictionary with you just in case!
- once you have chosen the main ideas and found the meaning of unfamiliar words, rethink or ***rewrite*** the passage in your ***own words***.

Let's see if we can make some sense of this passage by applying these techniques.

Use a dictionary to look up the meaning of any unfamiliar words.

Main ideas:

Data is easy to define.

Information is more difficult to define.

Supporting information:

Data is a fact that can be confirmed by supporting information.

Up to person receiving to decide what is information.

Information implies a net gain in understanding by the recipient.

Whether person receives information or not is influenced by:

- the nature of the problem to be solved
- what the recipient can understand
- how motivated the person is to seek a solution

Take these main ideas and link them together into a coherent passage.

What is the difference between information and data?

Data is easy to define. Data is fact that can be confirmed by supporting evidence.

Defining information is not as easy. It's up to the person receiving the information to decide what is and what is not information.

Information implies a gain in understanding by the recipient.

Whether the person perceives the material as information depends on the nature of the problem to be solved, what the person can understand and how motivated the person is to seek a solution.

This version of the passage is slightly shorter. The original had 100 words and this version has ninety. This version uses language that is in more common use and attempts to explain some of the ideas more simply. The word 'recipient' has been used in this passage but only after the term *'person who is receiving the information'* has been used. In this way, someone who is unfamiliar with the term 'recipient' can perceive the meaning.

Try the following activity and see if you can simplify the passage.



Deciphering cryptic information

Ordinarily, we consider language as only the device for communicating our notions and dispositions. Language is crucial to the communication process but is also essential to the process of mentation. In fact, language is integral to the process of thinking. It is incomprehensible that the use of language could be divorced from the process of thinking.

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and extend across the width of the page. There are no margins, text, or other markings on the paper.

Turn to page 99 for suggested solutions to this activity.



Hopefully, you now have some techniques to help you to assess information written in a complex style.

The other aspect of the use of language is the use of jargon and technical terms.

In some works, it is inevitable that you will encounter **jargon** or **technical terms** relevant to that particular subject or occupation. Some technical reference books will have a 'Glossary' at the back of the book before the index. A glossary is like a mini-dictionary that lists the technical words and gives a brief definition. If you are reading a technical work, place a bookmark at the glossary page so that you can refer to it easily.

Sometimes, technical terms are explained in footnotes at the bottom of the page or the end of the chapter. A number placed beside the word or phrase in the text usually indicates footnotes.

This is what a footnote looks like ⁽¹⁾.

⁽¹⁾ The footnote number refers you to the bottom of the page.

If the work has no glossary or footnotes, and you have decided this is a work that does have useful information for you, write down the terms so that you can:

- check their meaning with a colleague
- or
- check their meaning in another reference text

Again, it is your decision as the reader of the work to decide whether the technical terms are there because they are necessary or whether the author hasn't considered the audience.



3.3 Emotive and factual arguments

If an author is trying to influence your opinion on a subject, or wants you to accept a particular opinion, there are two types of argument he or she can use:

- emotive arguments
- factual arguments

This is the fourth aspect we are going to consider when critically analysing information.



Emotive arguments

An ***emotive argument*** is one that attempts to influence you by appealing to your emotions rather than trying to convince you by the value of the evidence.

There are three methods that an author may use to appeal to your emotions:

1. Appeals that make you want to be identified with a certain group or that try to say that people who belong to a certain group all feel or think this way. For example:

The average person in the suburbs...

All thinking people...

Common sense should tell you...

You would have to be stupid not to think...

These arguments work if the appeal to belong to a particular group is strong enough. Do you want to belong to the group of people who are stupid or accept the argument and be amongst those who are ***not*** stupid? Politicians frequently use the appeal to the 'average person in the street'. Is that you?

2. Appeals that target certain emotions:

Vanity, patriotism, anger etc....

Advertisements frequently appeal to emotions - vanity in particular. To persuade you by emotion requires the author to find a way of creating some common ground or a sense of identification with you, the audience. You must feel that what the author is presenting somehow identifies or meets a need or wish that you have. Advertisers attempt to classify their audience by age, education level, salary level and marital and family status and then vary the type of appeal in the advertisements to satisfy the needs of that audience.

3. Rationalisation. This is an attempt to use an argument that seems logical to justify a conclusion that the persuader wants you to adopt. For example:

We all know that natural products are better for you. Sugar and butter are natural therefore they must be better for you than artificial sweeteners and margarine.

Not everyone who smokes gets lung cancer and some people who don't smoke get lung cancer. Therefore, smoking doesn't cause lung cancer.

These arguments are obviously flawed. One method of testing whether an argument is a rationalisation is to consider the purpose of the writer. If the writer is using an argument to justify a position he/she already holds, then be wary!

Look at the types of arguments used in the examples in the next activity and decide what types of appeals the authors have used.



Activity 12

Emotive arguments

Read the following statements and decide what type of appeal the author is making.

1. A speech made in a court of law:

The quality of mercy is not strain'd;

It droppeth as the gentle rain from heaven

Upon the place beneath: it is twice bless'd;

It blesseth him that gives and him that takes:

'Tis mightiest in the mightiest;

(William Shakespeare, 'The Merchant of Venice' Act 4, Scene 1)

2. Who is here so vile that will not love his country?

(William Shakespeare, 'Julius Caesar', Act 3, Scene 2)

3. Outside Russia, no one has ever died in a nuclear accident. Compare this to the high rate of death among coal miners. Nuclear power stations in the West are perfectly safe.

Turn to page 100 for suggested answers to this activity.



The other method used to try and persuade an audience is the use of **facts**. These are called ***rational arguments*** and their purpose is to try and prove their arguments using factual statements.

A **fact** is a statement that can be proved or reliably tested.

The Earth is round.

This is clearly provable and is therefore a fact.

As a critical reader, you need to be able to distinguish between **fact** and **opinion**. Opinion is a personal perspective on an issue and may or may not be supported by reliable evidence.

Fact: The rock weighs 2 kilograms.

Opinion: The rock is heavy.

The first statement is easily tested and can be proved.

The second statement is a subjective opinion - that is, the person making the statement thinks the rock is heavy. The next person you ask may have an entirely different opinion.

Statement: All politicians are honest.

Is this fact or opinion?

Opinion: There is reliable evidence that some politicians are not honest.

Be aware that authors will sometimes try and use opinion as the basis of a rational argument. Be wary and always look for the evidence that supports or contradicts these opinions.

Test out your ability to differentiate between fact and opinion in the next activity.



Activity 13

Distinguishing between fact and opinion

Read the following statements and decide which are fact and which are opinions. Circle your answer after each example.

1. *Smoking doesn't cause lung cancer because even people who don't smoke get it.*

Fact / Opinion

2. *The computer has not needed any repairs in the last two years.*

Fact / Opinion

3. *This computer is very reliable.*

Fact / Opinion

4. *All members of staff support this proposal.*

Fact / Opinion

5. *All members of staff voted on this proposal.*

Fact / Opinion

6. *All students are lazy.*

Fact / Opinion

7. *The maximum temperature today was 28 degrees (C).*

Fact / Opinion

8. *It was hot today.*

Fact / Opinion

Turn to page 100 for suggested solutions to this activity.



Be aware of the use of 'false' factual arguments when you are reading critically. These may mislead you into thinking that the information is factual and has supporting evidence. Common techniques used are generalisations, appeals to authority and using personal experience as a basis of fact.

1. ***Generalisations:***

These are broad statements that we may at first glance be prepared to accept as accurate.

'Crime is on the increase.'

'More couples are getting divorced today.'

Look for the evidence that supports statements like these, especially if the author is using these statements as a basis for the argument.

2. ***Appeals to authority:***

This refers to the use of authorities where those authorities are not specified.

'Scientists warn us...'

'One out of every two dentists...'

When someone appeals to an authority like this, look for the supporting evidence. Ask yourself:

Which scientists?

What survey did they base their information about dentists on?

3. ***Using personal experience as a basis for fact:***

'Speaking from my many years experience in this field, I know that...'

We may accept that the person has many years of experience but be wary of accepting assertions like this as fact unless there is other supporting evidence.



3.4 Presentation

So far in this section on analysing information we have examined:

- credibility of the source
- the writer's perspective or bias
- use of language
- emotive or factual arguments

Let's move on now to consider the fifth aspect of critically analysing information - ***presentation***.

This is about whether the information is laid out in a way that makes it easy to find. In a long piece of writing in particular, readers need all the help they can get to find the main points, comprehend the supporting information and follow the arguments being presented. This can be achieved if presentation is properly considered.

We have already discussed in Section 2 of this unit on ***Pre-reading*** how to find information in books using the Table of Contents, chapter headings and subheadings, the index and introductions or abstracts. These will lead you to the places in the text that have the information you may need.

But having found the relevant pages, are you faced with pages of text that are not broken up with headings?

Have you tried to understand data that is presented as text rather than as a table or a graph?

Consider the presentation of this document. Hopefully, the information is easy to find and to follow!

- Information has been structured to build on skills in a step-by-step way.
- The text uses icons at the side of the page to show text for reading, activities, important points to note and activity tasks.
- Headings are indicated in bold or slightly larger print size.
- Numbering and dot points are used to break up the text and to show the main points to remember.
- Summaries appear at the end of each section.
- Each section has a self-check to reinforce the main points discussed.

All these devices are used to make reading and finding information as easy as possible.

When critically assessing information sources, consider how easy the information is to access. Can you quickly find the relevant parts and then extract the main points? Try this in the next activity.



Activity 14

Presentation

In Activity 9 on page 33, you were asked to select three articles at random on a subject relevant to your teaching area. Return to these three articles now and assess them in terms of their presentation.

1. How readable are they?

Article 1:

Article 2:

Article 3:

2. Does the presentation make the information easy to find?

Article 1:

Article 2:

Article 3:

3. Would you recommend any changes to the presentation?

Article 1:

Article 2:

Article 3:

Turn to page 100 for suggested solutions to this activity.



3.5 Logic and conclusions

This is the last aspect we shall consider in this section on analysing information.

Logical reasoning uses structured, step-by-step thinking to assess objective data from reliable information sources. These steps must lead logically to the conclusion with each step supporting this conclusion.



As a critical reader, there are two aspects to consider when you are analysing information in support of an argument and the conclusions drawn:

- Are the statements in support of the conclusions correct?
- Is the conclusion drawn from that evidence valid?

Problems arise in an argument when the evidence is incorrect or unsupported and the evidence does not support the conclusion reached.

The traditional example of a valid argument is:

- All men are mortal.
- Socrates is a man.
- Therefore, Socrates is mortal.

We can look at this and see that this is a logical conclusion. The argument makes sense. Both sets of statements are true and support the conclusion.

- All humans are mortal.
- My dog, Spot, is mortal.
- Therefore Spot is a human.

We can look at this and know this is **not** a logical conclusion. Both statements are true but give us a false conclusion. Spot can't be human so it means that one of the statements is insufficient to support this argument. That Spot is a dog is a fact but the category of mortals is clearly much larger than just humans.

Let's try it again:

- All mammals are mortal.
- My dog, Spot, is mortal.
- Therefore Spot is a mammal.

That works!

Some more examples:

- All men are mortal.
- All fish are mortal.
- Therefore, all men are fish.

We can look at this and see that this is not a valid conclusion. Both statements are true but do not support the conclusion. The conclusion is the wrong one to draw from these statements.

- All men are white.
- All sheep are white.
- Therefore all men are sheep.

We can look at this and see that this isn't a valid argument either. Clearly, the first two statements are incorrect. They are not supported by available evidence. Also, again we have two entirely unconnected statements. Therefore, the conclusion is not valid because it is based on incorrect evidence and is not a logical conclusion to draw.

The same holds true for any argument that you are assessing. For an argument to be logical and have valid conclusions, it must be based on accurate information and lead step-by-step to a conclusion that is supported by the preceding information.

Test the arguments in the next activity to see whether they are logical or not.



Activity 15

Logic and conclusions

Read the following arguments and decide whether they are logical or not. Give reasons.

1. Interest rates are up and my mortgage is going through the roof! I deserve a pay increase.

Logical / Not logical

2. High school examinations should be abolished. No one does exams when he/she enter the workforce so they are useless in preparing us for our careers.

Logical / Not logical

3. Bill has been in parliament for 20 years and no one has ever accused him of being corrupt. He must be an honest politician.

Logical / Not logical

4. The child cannot have whooping cough. The whooping cough vaccine is known to be 100 per cent effective and the child was recently vaccinated.

Logical / Not logical

5. All the soldiers who were shot during the war were wearing trousers. Trousers are really dangerous and should be banned.

Logical / Not logical

Turn to page 101 for suggested solutions to this activity.



Summary

In this section we have discussed several ways of critically analysing written information. We have considered:

- credibility of the source
- perspective and bias
- use of language
- emotive and factual arguments
- presentation
- logic and conclusions drawn.

Credibility is about checking the authority and reliability of the writer and the publisher, how recent the information is as well as checking to see whether information given is backed up with specific data.

Perspective is about an author's attitude to the subject matter - the amount of distance a writer chooses to have from the subject. It ranges from impartial where the author places him/herself at the greatest distance to very close and personal, either positive or negative.

Bias is when a particular attitude prevents an author from taking an impartial view of the subject. This bias can be either planned or unintended.

You can test an author's perspective by examining:

- words used
- writing style
- tone

In a well-written document you should **not** be aware of the **language** used. The language is there to make it easy to find the information that you want.

To understand **cryptic passages**, use the following techniques:

- Use scanning techniques to find the main ideas and the supporting information.
- Use a dictionary to check on unfamiliar words.
- Re-write the passage in your own words.

Some reference texts will have a Glossary or use footnotes to explain **jargon** or **technical terms**. If the text does not explain them, ask a colleague or use another reference text.

An **emotive argument** is one that tries to influence your opinion by appealing to your emotions rather than convincing you by the value of the argument itself. There are three types of emotive arguments:

1. Appeals that make you want to be identified with a certain group
2. Appeals that target the emotions
3. Rationalization.

A rational argument is one that is based on **facts**. A fact is a statement that can be proved or reliably tested.

Opinion is a personal perspective on an issue. Authors sometimes try to use opinion as the basis of a rational argument. Always look to see if there is supporting evidence for these opinions.

The **presentation** of any piece of writing should make it easy for the reader to find and understand the information being presented. There are many ways an author can make reading the text easier:

Structuring information in a logical format, use of graphs and tables, numbering, dot points or highlighted text for main points, summaries, and clear headings.

Logical arguments are those that develop an argument step-by-step, using objective data and reliable information and support the conclusion drawn from this analysis. Arguments that use false or misleading data to reach their conclusions are called **invalid arguments**. Sometimes incorrect conclusions are drawn from the information given. These arguments are invalid also.

In the next section we will examine how to summarise and write a precis. In the meantime check your progress on Section 3.



Check your progress

1. What three things would you check to assess the credibility of a new reference text?
 - (1) _____
 - (2) _____
 - (3) _____

2. What is perspective?

3. List three ways that you can use to analyse a writer's perspective.
 - (1) _____
 - (2) _____
 - (3) _____

4. What do you call a passage that has hidden meaning?

5. List three strategies you can use to understand these passages.
 - (1) _____
 - (2) _____
 - (3) _____

6. List three types of emotive arguments and give an example of each.

(1) _____

(2) _____

(3) _____

7. Explain the difference between a fact and an opinion.

8. How can proper presentation assist you to analyse information?

9. List three ways in which this document attempts to assist you.

(1) _____

(2) _____

(3) _____

10. What is logic?

11. Why is it important to consider logic when assessing an argument?

Remember that there are no answers given, so check your responses against the information in Section 3.

Section 4 Summarising information



In Section 2 of this Unit we looked at the three different levels you are using when analysing information. These were:

Content - what is actually written on the page

Intent - what is the writer's purpose in writing

Response - what am I going to do with this information

In the previous two sections we have examined how to critically analyse content and intent. We will now move on to discuss ***response***. The skills that we will examine are summarising and precis writing.



What is the difference between a summary and a precis?

A ***summary*** is a shortening of written information using only main points and supporting information, leaving out unimportant words and unnecessary detail, in a numbered format, or using dot points.

A ***precis*** is a concise restatement of a longer piece of text using your own words while remaining faithful or true to the essential points in the original.

Let's examine the techniques for writing each of them.



4.1 Summarising

Summarising is taking the key points from a longer written work and reproducing them in compact and easy-to-read form.

Summaries can be useful in the following ways:

- as a study and research technique it reduces information to manageable amounts.
- as a teacher you have information that you need to absorb and understand, such as student assessments or reports on student progress. Accurate summarising of information can help in the decision-making process by providing relevant information that can be more easily compared.
- as the first part of any reports or submissions you may be writing. They give your audience a chance to review the main points of the report before reading your supporting information or arguments.

In Unit 1, ***Listening and Reading***, we discussed the skill of note taking as a means of improving your listening skills. Summarising uses the same techniques but applies them to the written word. The process for both involves finding the main ideas and the supporting evidence.

How to Summarise

1. Scan the relevant material so that you have an understanding of the author's general idea or ideas.
2. Re-read the material in more detail paying more attention to the main points and the supporting information.
3. Write this summarised information down using a simple letter and numbering system or dot points to distinguish between the main ideas and the supporting data.

For example:

1. Main idea
 - (a) Supporting idea
 - (b) Supporting idea
 - (c) Supporting idea.

OR

2. Main idea
 - (1) Supporting idea
 - (2) Supporting idea.

The summary doesn't have to follow the same order as the original information but it **MUST** be a true and faithful record of the author's content.

A danger when summarising is that you might make the summary so brief that when you go back to read it again later, you can't make sense of it. On the other hand, if you don't take out unnecessary information, you are in danger of re-writing rather than summarising. There is a fine balance between being too brief and not brief enough.

Let's try an example in the following activity.



Activity 16

Summarising

1. Read the following passage on the use of the lecture method of teaching. Make a summary of the passage.

There are four parts to planning a lecture: preparation for lecturing, the introduction, the body of the lecture, and the conclusion.

When preparing for a lecture, you will have to decide what audiovisual equipment you will need. Spend some time thinking about the lecture and motivating yourself to lecture well. Focus on the lecture and think about how you will feel. Try and picture yourself being animated and confident. This may involve using some sort of stress reduction strategy such as deep breathing.

Your introduction to the lecture can serve such functions as establishing relationships with the students and gaining their attention. The introduction should also outline the main points to be covered during the lecture and remind students of how this relates to information they already know.

In the body of the lecture, you should cover the content using logical organisation of the material to be covered. Alert the students to the main points by using verbal markers such as 'The three main points...' or by using a summary on the whiteboard or overhead projector. Change communication channels during the lecture to maintain student interest. Your own enthusiasm will help the students learn more. If you look interested they are more likely to be interested. Ask questions during the lecture or invite the students to ask you questions if they want to.

Finally, the conclusion of your lecture should summarise what your students should now know and be able to do. Express your thanks to the students for their attention. Ending on a positive note helps students retain happy memories of the experience. Asking for questions from the students will give you a final opportunity to clarify any points. End by reviewing how this lecture is related to the next lecture the students will have.

Turn to page 101 for suggested solutions to this activity.



4.2 Writing a precis

There may be times when a summary format is not acceptable and the formal style of the precis is more appropriate, (eg. at the beginning of formal reports or at the beginning of scientific reports where the precis is called an 'abstract').

Precis are also useful when you are trying to understand text that is written in complicated language or in a formal or academic style. (See *'Understanding cryptic statements'* in Section 3 of this unit.)

The aims of a precis are to:

- reproduce all the important points;
- express this summary in connected English;
- produce a properly balanced summary.

How to write a precis

- Read the passage to ensure you understand its content clearly.
- List the main points that should be included in your precis.
- Do not include any text that does not contain factual information such as description or text that only explains the main points without adding new information.
- Try and retain the same order as in the original. Sometimes it may be necessary to rearrange the material slightly to make sense of the text.
- Retain the balance of the original text. For example, if half the original text is devoted to discussing one idea, then make sure about half your precis is about that idea. Don't be tempted to give emphasis to ideas that you think are important. The precis is NOT an analysis of the original - it is a summary of it.
- Simplify or condense any complex words or expressions.
- Connect these pieces of information together using linking words such as and, but, for, however, yet.
- Re-write the precis in your own words.

There are no rules that dictate how long a precis should be compared to the original. The most important aspects are that the **original content and intent of the original piece of writing should be retained**.

Here is an example of a longer passage and its precis.

Thousands of people lined the street and windows of Melbourne today and gave the English cricket team a really royal farewell.

Streamers, confetti, rice, balloons and torn paper fluttered down from the office buildings as the team rode around the city in a procession of ten open cars. After a 20-minute drive through cheering crowds to the Town Hall, some of the players were so moved that they wept. At the Town Hall, they were given a civic farewell by the Lord Mayor, after which the English cricket team was joined by the Australian Test team on the balcony of the Town Hall where they were given a tumultuous reception.

The precis would look like this:

After a 20-minute drive through crowd-packed Melbourne streets, the English cricket team was officially farewelled at the Town Hall by the Lord Mayor, who later appeared with the English and Australian team members on the balcony. Most of the visiting cricketers were visibly affected by their reception.

This precis retains all the essential facts about the event but removes all the description and emotion of the original passage. There are only two sentences in this precis compared to four in the original. Most of the detail concerning the parade and farewell has been combined into one long sentence. The last sentence deals specifically with the players' feelings. It has been moved to the end of the precis where in the original it was in the middle of the information. This helps the continuity of the precis and does not affect its accuracy.

Let's practise **precis writing** in Activity 17.



Activity 17

Precis writing

1. Read this text and then make your own precis using the process outlined in this section.

Age and learning

Young adults of about 15 to 18 years present a range of complex problems. They are passing through a rather difficult stage of development. Particularly, these young adults are concerned with the development of identity, the movement from school to work, the development of independence and coping with physical changes.

Many young adults do not adjust well to changes in their environment. As a result, their confusion may show in instability of temper and intolerance.

The life of the adult is significantly richer than that of youth. Not only has he/she had more experiences, he/she has had different kinds of experiences and the range of these is varied – occupational, social, political and so on. The adult is a rich resource for learning.

As the adult develops greater maturity, a desire for self-education emerges. The adult must acquire certain skills to be ready for self-education such as communication skills, social skills and the ability to accept responsibility.

Turn to page 102 for suggested solutions to this activity.



Precis writing is more difficult than summarising as it requires you to not only look for the main points in the information but to then re-write the information in easily understood language whilst remaining true to the original content and intent of the information.

It is important to remember that both the **summary** and the **precis** **should reflect the content and the intent of the original text**. They are reductions of the original, NOT interpretations.



Summary

A **summary** is the condensing of written information using only main points and supporting information in a standardised format - dot points or numbers or letters.

Summaries are useful as:

- a research and study tool
- a technique for understanding large amounts of information
- a part of reports and submissions you may have to write
- a means of producing easily understood handouts or reference tools for students from longer and more complex texts

A **precis** is a concise restatement of a longer piece of text using your own words while remaining faithful to the essential points of the original.

Precis are used as the beginning of more formal written reports (sometimes called an abstract). They are also useful for interpreting complicated text.

It is important to remember that both the summary and the precis should reflect the content and the intent of the original text. They are reductions of the original, NOT interpretations.

**Check your progress**

1. Complete these sentences.

A summary is _____

A precis is _____

2. List two uses for each.

(1) _____

(2) _____

3. List three steps in writing a summary.

(1) _____

(2) _____

(3) _____

4. What are the three aims of a precis?

(1) _____

(2) _____

(3) _____

5. What is the important point to remember about both the summary and the precis?

Remember that there are no answers given, so check your responses against the information in Section 4.

Section 5 The human memory



Memory is essential to learning. If nothing were remembered from previous experience, nothing would be learned. We learn as children not to touch the flame because it is hot. If we didn't store this in our memory, we would burn ourselves over and over again.

The same thing happens with skills we learn. For example:

Once you learn to ride a bike you never forget OR you can relearn more rapidly next time you need to ride a bike.

But do we remember everything?

Obviously not. We cannot recall our experiences as babies nor do we remember the phone number we just used.

Memory is selective. We remember clearly things that we need to remember or that we use a lot. Vivid experiences may be remembered very clearly.

But sometimes memory fails us. A face looks familiar but we cannot recall the name. A student complains that he/she studied the subject thoroughly but couldn't recall essential information during an exam.

In this section, we are going to examine some ways of improving your memory - improving how memories are stored and using some ways to improve retrieving memories.

But first, let's look briefly at how 'memory' works.



5.1 How memory works

There are two parts to human memory, **short-term memory** and **long-term memory**.

Short-term memory is, as the name implies, short-term storage of information. All new information input first goes to short-term memory. If you have no further use for this information, it is removed and you forget the information - like the telephone number you forget right after you have used it. There is limited space in short-term memory. You can only hold so much and if new information keeps coming in, then something has to go to make way for the new input.



Activity 18

Short-term memory

Read the following list of items then turn the page over and attempt to remember as many as you can.

flower	pencil	planet	banana	dog	brain
house	tree	horse	butterfly	paper	glass

Turn to page 103 for suggested solutions to this activity.



If you tried this activity again in half an hour without looking at the words again, how many do you think you would remember?

You would be lucky to remember even one or two and those would be the words that had strong associations for you or left vivid mental pictures when you read them.



How long does information stay in the short-term memory?

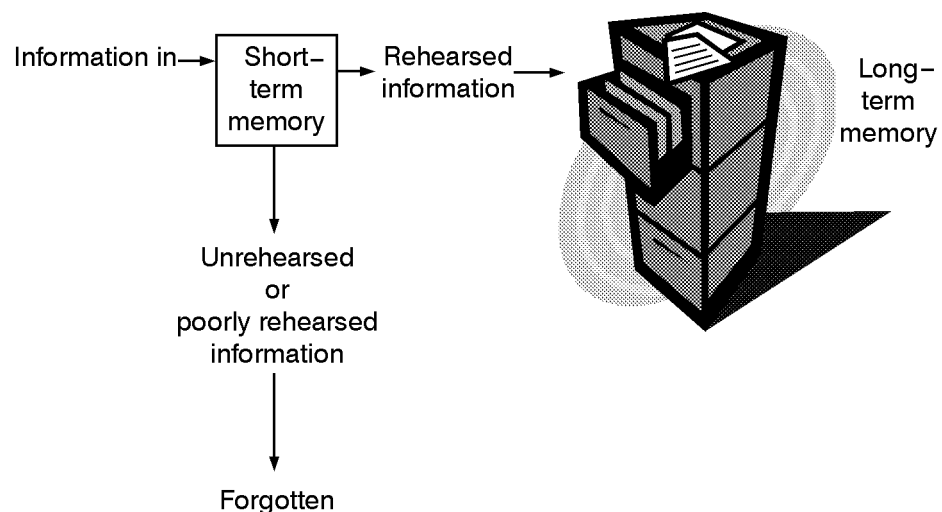
This is not an easy question to answer. Sometimes information is stored for only a few seconds, while other information stays longer but this would be information that you have decided is important and that you want to be able to retrieve again. But even this doesn't guarantee that you will still be able to find this information in a few days time.

So there must be some process that you use to move information from the short-term memory to the long-term memory.

This is information that you **rehearse** or use over and over so that the memory trace does not decay. Eventually, this information is transferred to long-term memory for permanent storage.

While short-term memory has limited space and can only keep items for a short time, the capacity of long-term memory to store information is thought to be unlimited. Long-term memories are also permanent.

This diagram outlines the basic process that happens when information is received.



If long-term memory is permanent, why do we forget information or can only retrieve part of it?

Think of long-term memory as a giant filing cabinet. Unless items are filed in the correct place they are very difficult to find again. Long-term memory relies on 'cues' to retrieve information. They are like the **key words** we have talked about in previous sections. You must find the right key word to unlock the filing cabinet and find the information. You may have used the wrong key word when you were storing the information, so retrieving it will now be more difficult.



Sometimes you forget information because it was never properly transferred from short-term to long-term memory. For example:

Have you studied for an exam and then days later not been able to recall pieces of that information? This means that the memory traces in short-term memory were not properly transferred to long-term memory

Let's test your long-term memory in Activity 19.



Activity 19

Long-term memory

Allow yourself five minutes. Think about your first year of school. Write down as many memories as you can. Your teacher? Fellow students? Significant events?



How easy or difficult was that activity? It should be easy given that the first year of school is a significant event in your life. Recalling details may be a problem because for some of us, First Year may be a long time ago!

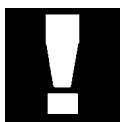
Think about **HOW** you went about retrieving that information from your long-term memory.

- Did you find some details sprang to your mind fairly easily? Did the mention of Year One instantly call to mind names and faces and events?
- Did some information require you to think a little? Could you remember the names of your friends easily but not the names of some of the other class members? Once you remember one classmate's name, other names seemed to follow?
- Did you find yourself 'looking' at pictures from that time in your mind like class photographs, for example?
- Could you 'see' the school grounds and then start to recall events from that time?
- Were there any events from that year that were very vivid for you? Happy? Embarrassing? Painful?

All of these are **cues** or **key words** that you used to find the information in your long-term memory. In five minutes, you may not have a complete picture from that time because you didn't find all the cues you needed.

Cues can take different forms. Cues can be words like a name or a date that starts the recall process. Some cues are visual - you create a mental picture and then start to 'see' details. Smells can bring back very vivid memories. Vivid events are easy to recall, despite our efforts to forget them sometimes!

Often we don't have exactly the cue we need to find the right piece of information. But we have cues to help us narrow down the search. So, finding the names of our friends in Year One might then lead us to think about the other members of the class. Once we have one name, we find that others start to come more easily.



So let's now look at some ways of improving your memory. There are two aspects we will consider:

- improving the transfer of information from short-term to long-term memory;
- improving methods for retrieval of information from long-term storage.



5.2 Improving the transfer of information from short-term to long-term memory

We have already said that to transfer information to long-term memory requires a process called *rehearsal*, which is using the information again and again. This is not *just* repeating the information. There are some techniques that you can apply to make this rehearsal more effective.

Multi-sense rehearsal

To make sure the information goes to your long-term memory, you will need to rehearse it more than once. When you are rehearsing the material, use as many different techniques as you can, such as:

- read the text
- underline or highlight important parts of the information as you read
- make a summary or precis of the information
- repeat the information out loud in your own words
- make a tape-recording of the main points and replay this
- discuss the information with a colleague

Involve as many senses as you can. Using more than one sense means that you are thinking about the information in a slightly different way each time. This strengthens the memory trace and helps to move the information from short- to long-term memory.

Spaced rehearsal

Have you ever crammed for an exam and then not been able to recall information you need?

Cramming doesn't work because the memory cannot process that much information at once and retain it. Transfer to long-term memory is much more effective if rehearsal of information that you want to retain takes place over time.

Unless information is rehearsed regularly, it will be forgotten. After three days you may recall only 20 per cent of the original material. Rehearsal of the material within the first 24 hours is essential and then again within 2-3 days.

Use some of the techniques discussed above in multi-sense rehearsal to return to the information at regular intervals.

First and last rehearsal

Turn back to Activity 18 (page 80) and the list of random items that I asked you to recall. Did you find in this activity that you remembered the first and last items on the list more easily than the ones in the middle?

This is quite common, the theory being that information you receive early doesn't have to compete with other material and material heard late has nothing after it to compete with it. Material in the middle has to compete for memory space with the material that comes both before and after it.

This means that when you are rehearsing your material, make sure you cover the most important points first and then do a summary of the main points again as the last part of your rehearsal.

Having used these three methods - multi-sense rehearsal, spaced rehearsal and first and last rehearsal - to firmly fix this information in your long-term memory, let's now look at some ways of improving the *retrieval* of this information.

5.3 Improving methods for retrieval of information from long-term storage

When we recognise information that is familiar to us, our brain begins the search for the cues that will access our memory. Improving retrieval of a memory means strengthening the cues that lead to that memory. There are three techniques you can use to make the cues stronger:

- association
- organisation
- ‘gimmicks’

We’ll look at each of these in turn.

Association

Association means linking the information that you want to remember to information that you already know. Think about the information and consider:

- how this information is similar to information you already know, or
- this information follows on from.....

This helps to give more meaning to the information that you are storing and improves the cues that you can use to retrieve the information later.

Using the analogy of a filing cabinet to explain the operation of long-term memory combined with the cartoon may help you to remember that information has to be ‘filed’ correctly in the memory so that you can use the right cues to find it again.

Organisation

Organise the material you want to remember to make it more meaningful.

As we demonstrated in Activity 18 it is difficult to recall random information. **Grouping** that information into some order may have made it easier to recall. This places the information in 'chunks' that are easier for you to remember.

Let's try it.

The words that were used in that activity were:

Flower pencil planet banana dog brain

House tree horse butterfly paper glass

Let's try to organise them using the 'traditional' categories of animal, vegetable and mineral.

Animal	Vegetable	Mineral
Dog Butterfly Brain Horse	Flower Tree Banana	Pencil Planet Book House Paper Glass

Another possible category is Natural or Made. Make a list here of items under each of those categories.

Natural	Made

Using 'gimmicks'

The third technique is the use of 'gimmicks' to strengthen the cues.

Are you familiar with the rhyme *'30 days has September,
April, June and November'...*?

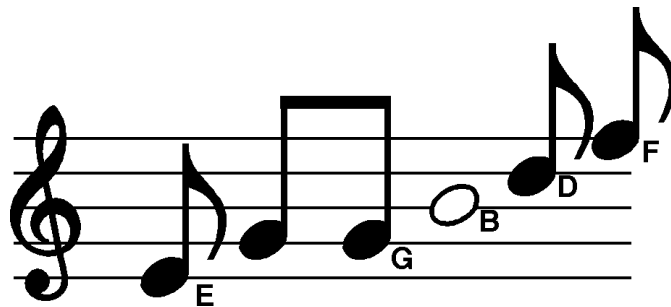
This is an example of the kind of gimmick that you can employ to help the retrieval process. This rhyme would help you if you were trying to remember how many days were in the month of November. You may not instantly recall the number of days in that month but it will bring to mind the rhyme that you can use to find the information you need.

Most adults when they hear the name 'Christopher Columbus' automatically think of the rhyme:

'In 14 hundred and ninety-two Columbus sailed the ocean blue.'

Another technique is to make crazy sentences or words out of information that you want to remember. For example:

The sentence *'Every good boy deserves fruit'* gives the letters E G B D F, which are the names of the notes on the lines of a written piece of music. A music student having to read an unfamiliar piece of music would find this useful.



If someone were to ask you the names of the Great Lakes that form part of the border between the USA and Canada, the word HOMES would help you. The lakes are: Huron, Ontario, Michigan, Erie and Superior.

Do you use any such device to help you to recall information? If you can think of an example, write it here:

If you use these techniques, then you will make the memory paths stronger and you will use the cues that will help you to retrieve the information you want. Let's apply this information to your future roles as teachers in the next activity.



Activity 20

Improving memory

The information outlined previously will help you to improve your memory, but can also be used when you are teaching to help your students retain information. Review the material now and think of three techniques use with your with your students.

(1) _____

(2) _____

(3) _____

Turn to page 103 for suggested solutions to this activity.



Summary

There are two parts to human memory:

- Short-term memory
- Long-term memory

Short-term memory is where all incoming information is stored.

- Some of this information is almost instantly forgotten, as we no longer need it.
- Other information is held in short-term memory until it is rehearsed enough and it can then be transferred to long-term memory.
- Short-term memory has only limited capacity to store information and so if you try to take too much in, some information will have to be forgotten to make way for the new information.

Long-term memory is permanent storage of information and it is thought that the capacity to store information is unlimited.

- We do not 'forget' information that is stored in this memory but if it is not stored correctly OR we do not use the correct cue we may not be able to retrieve the information.

There are **three techniques** that will help the **transfer of information** from short-term to long-term storage. These techniques make the rehearsal of information more effective:

- multi-sense rehearsal
- spaced rehearsal
- first and last rehearsal

There are **three techniques** you can use to **help retrieval from long-term storage**. These techniques strengthen the cues to help you to search your memory more effectively:

- association
- organisation
- gimmicks



Check your progress

1. Name the two different types of memory and write a brief description of each type.

(1) _____

(2) _____

2. How is information transferred from short-term to long-term memory?

3. Describe three techniques for improving the transfer of information to long-term memory.

(1) _____

(2) _____

(3) _____

4. How do you retrieve information from long-term memory?

5. Describe three techniques for improving the retrieval of information from long-term memory.

(1) _____

(2) _____

(3) _____

Remember that there are no answers given, so check your responses against the information in Section 5.

Suggested solutions to activities

Activity 1 - refer to page 7

The Communication Process

The response would depend on the nature and purpose of the message, as well as the target audience for example a hurricane warning for the general population will not elicit the same response as the outcome of a cricket match.

Activity 2 - refer to page 10

Body language

The evidence provided is far from conclusive but the chances are that:

1. no, they could be, but probably aren't.
2. yes
3. no, they could be, but probably aren't.
4. yes, probably
5. no
6. yes

To be sure who is and who isn't listening you would need to collect more evidence over a longer period of time, for example Student E might actually listen better with his eyes closed!

Activity 3 - refer to page 11**Non-verbal communication - graphical representations**

The number of graphic symbols you find will depend on where you live. Some possible examples are:

- road signs
- bus, train or airport symbols
- advertising signs - the steaming cup of coffee on the window of the restaurant
- male and female symbols on toilet doors
- computer icons and graphics symbols.
- symbols on equipment, clothing, etc.

Activity 4 - refer to page 11**Selecting the communication channel**

1. Graphical or written signs. Flashing police lights will usually slow traffic down. A prominently displayed Stop sign plus a sign in red reading Hazard Ahead.
2. Simple graphics to attract attention. A coffee cup or other food symbol with 'Ahead 1 mile' added.
3. A television or radio broadcast. A newspaper account following the game.
4. One-to-one verbal discussions would be most appropriate. This may be followed up with a written warning if necessary.
5. The Non-verbal channel would be the strongest here. Anger or sadness expressed through facial expression and tone of voice will convey your feelings most strongly.

Activity 5 - refer to page 14**Barriers to communication**

There are no correct answers to this activity. Compare your list of barriers to those listed below. This list is not exhaustive.

1. Physical barriers such as:
 - noise
 - physical discomfort
 - hearing disabilities
 - poor visibility
2. Psychological barriers such as:
 - strong emotions (anger, sadness, etc)
 - stress
 - prejudices
 - deliberately distorting the communication process
3. Cultural barriers such as:
 - language differences
 - not making eye contact
 - literacy problems

Activity 7 - refer to page 23**Skimming**

1. ...sarcasm...ridicule
2. Welcomed and received with respect.
3. ..taking it personally...
4. One who has learned to accept criticism of his/her ideas without becoming defensive about them.
5. Without emotion.
6. ...the content of the statement...the individual who offered the comments.

Activity 8 - refer to page 26**Scanning**

1. Introduction, body, conclusion.
2. Presents topic for discussion and introduces topic and author's point of view.
3. One or more paragraph's dealing with main topic. These paragraphs expand the main idea. Support these ideas with references.
4. Presents overview of discussion and summarizes main points.

Activity 9 - refer to page 33**Assessing the credibility of the source**

Possible Checklist

Did you check for:

- information on author
- reputation of publisher
- date of publication
- documented sources
- corroborating sources

Activity 10 - refer to page 41**Perspective and bias****Article 1**

1. Topic: sugarcane 'smut' disease
2. Purpose: to inform
3. Perspective: impartial

Whilst the article may raise people's fears about the possibility of a threat to the sugarcane industry, the article is a factual reporting of events. It quotes industry and scientific sources. It is written in

impartial style with no personal pronouns. It does use emotive words like 'threatened' and 'fears' which help convey the sense of urgency felt in the industry.

Article 2

1. Topic: funeral
2. Purpose: to describe and to arouse emotions.
3. Attitude: close personal, positive.

The article is designed to help us to feel the grief at this funeral and uses many emotive words and descriptions to do this. The tone of the last paragraph especially is meant to make us feel the sadness. The article is written in the third person (he/she/they).

Article 3

1. Topic: more women being appointed to the boards of companies
2. Purpose: could be any of or all of expressing an opinion, entertaining or persuading
3. Attitude: very close, personal, positive.

The tone of this article is quite sarcastic. The language is very emotive; 'gasp' and 'speed of the average glacier'. The article is written in the third person but manages to convey the writer's opinion clearly, especially the last sentence.

Activity 11 - refer to page 50

Deciphering cryptic information

Your passage may not look exactly like this but the meaning should be the same.

We usually think of language as a means of communicating our ideas and attitudes. Language is important in communication but it is also important in thinking. In fact, language is essential to the process of thinking. It is difficult to understand how the use of language could be separated from the process of thinking.

Activity 12 - refer to page 54**Emotive arguments**

1. This is an appeal to the emotions. The speaker is trying to persuade the audience that the quality of mercy is present in only the very best of people (the mightiest of the mighty).
2. This is an appeal to the need for identification. No one wants to be thought 'vile' for not loving his country.
3. This is an example of rationalisation.

Activity 13 - refer to page 56**Distinguishing between fact and opinion**

1. Opinion. It is not supported by current medical evidence.
2. Fact. This is provable.
3. Opinion. This statement would need to be supported by evidence.
4. Opinion. This statement would need to be supported by evidence.
5. Fact. This is provable.
6. Opinion. This is an extreme example as it is clear that this statement could never be proven.
7. Fact. This is provable.
8. Opinion. Another person may disagree.

Activity 14 - refer to page 60**Presentation**

If you have the opportunity, discuss your conclusions with your tutor or a colleague.

Activity 15 - refer to page 63**Logic and conclusions**

1. This is not a logical argument. Both statements may be factual but they do not support the conclusion. 'Deserve' is the problem. The statements don't mean he deserves.
2. Not logical.
3. Not logical.
4. Logical.
5. Not logical. The statements are true but clearly there is more to the category 'soldiers' than just the 'wearing of trousers'. The statement is incorrect or incomplete.

Activity 16 - refer to page 72**Summarising**

Your outline summary may not look exactly like this but check to make sure you have:

- all the relevant information
- a consistent letter or numbering system

There are four parts to planning a lecture.

1. Preparation
 - decide what audiovisual equipment you need
 - motivate yourself, including use of stress reduction strategy
2. Introduction
 - establish relationships
 - gain attention
 - outline main points
 - relate to information they already know
3. Body of lecture
 - cover content using logical organisation
 - alert students to main points using verbal cues or summaries on blackboard or overhead projector

- change communication channels during lecture
- look interested
- ask or invite questions

4. Conclusion

- summarise what the students should now know
- express your thanks
- ask for questions
- review how this lecture relates to the next lecture.

The original passage was 300 words in length. This summary is 114 words. How long was your summary?

Activity 17 - refer to page 75

Writing a Precis

Your precis may not look exactly like this but should contain these main points.

Age and learning

Young adults 15 to 18 years are concerned with the development of identity, the movement from school to work, independence and coping with physical changes. They may not adjust well to changes in their environment and this confusion may show in instability of temper and intolerance.

Adults have had more and varied experiences. As they mature and develop communication skills, social skills and the ability to accept responsibility a desire for self-education may emerge.

The original text contained ten sentences, five each on the problems of youth and five devoted to the mature student. These have been combined to four sentences, two on each topic. The descriptive sentences about the problems of youth and the benefits of maturity have been removed and the essential information about the two different ages combined.

Activity 18 - refer to page 80**Short-term memory**

Out of twelve, how many did you recall? Between five and seven is about average for remembering items from a random list.

Have a look and see which ones you did remember. It's possible you more easily remembered the first words and the last words and forgot more of the words in the middle. Were any of the words more meaningful for you than others? For example, when you read the word 'dog' did you think of a familiar pet, or did you see your own 'house' in your mind?

Can you see any patterns emerging here for the ways in which you remembered some objects and forget others?

Activity 20 - refer to page 90**Improving memory**

There is a variety of correct answers to this activity but consider the following:

1. *Multi-sense rehearsal*

Use this technique with your students by using as many of their senses when you are teaching. Tell them information, use an overhead projector or blackboard or chart to show the main points. Ask the students to use the information in exercises and activities.

2. *Spaced rehearsal*

Before beginning new material spend some time reviewing what you went over last time. Have regularly spaced review periods where you go back over all the material covered to date.

3. *First and last rehearsal*

Make sure that in your introduction and conclusions to lessons you cover the main points you want the students to remember.

4. Association

As part of reviewing what you covered last lesson, link this to the material that you are planning to cover in this lesson so students can connect the memories together.

5. Organisation

Pay attention to the structures of your lessons. Make sure that material follows a logical structure.

6. Gimmicks

Can you use them?

Assessment



You are now ready to complete your assessment for this unit.

Please contact your tutor to arrange a suitable time to complete your written assignment.

Assignment

Contact your tutor to organise a suitable time to complete the assignment.

1. Name the different communication channels and give at least two examples of each.

10 Marks

2. Explain three strategies for locating and extracting the main ideas from written information.

6 Marks

3. Read the following text. Identify each **main idea** and explain these using **supporting information**.

Questioning is one of the most important and useful skills a teacher can use in the classroom. Good questioning can make the difference between having a class full of passive receivers of information or active participants in the learning process. Appropriate questions can stimulate students to think and express their own opinions. Questions can also be used to stimulate and control discussions.

Questions should be planned as part of the lesson outline. This doesn't mean that you can't use spontaneous questions during the lessons. Major questions which test what students already know or understand about a topic, or which test how much the student has understood during a lesson, should be structured in advance.

Students should also be encouraged to ask questions. Questions from students are valuable feedback to a teacher on how much the student is understanding and give the teacher an opportunity to expand on information or to correct misunderstandings.

Don't use questions to intimidate or humiliate students, because students will cease to respond to any type of question. Use questions constructively as a valuable teaching technique and a skill to be learned by all teacher trainees.

There are two types of questions that a teacher can use, open and closed.

Open questions are those types of questions that require a student to use information they have been given to draw inferences or reach conclusions. A question like ‘Do you think the Commonwealth still has a valid role in the world political environment?’ encourages a carefully thought about response from students.

Closed questions are those types of questions which require a student to give a yes/no answer or to recall a specific fact such as ‘What year was the Commonwealth formed?’.

Both types of questions have a legitimate place in the classroom but there should be a balance between questions that rely on memory and those that stimulate thought.

12 Marks

4. Your tutor will give you a copy of a newspaper report. Identify the author’s perspective. Explain how you reached your decision.

4 Marks

5. Your tutor will give you a journal article. Assess and prove the:

- credibility of the author
- accuracy of the content.

4 Marks

6. Your tutor will give you several student assessment reports. From this summarized information, recommend **one** of three possible courses of action for each student listed below:

- (a) an accelerated program
- (b) continue with the current program
- (c) a remedial program.

Briefly explain your decisions.

4 Marks

7. Read the following cryptic statement provided by your tutor. Rewrite this statement to allow full understanding of its meaning.

4 Marks

8. Briefly explain three strategies for storing information in the human brain AND three strategies for improving the retrieval of information from the human brain.

6 Marks

Total 50 Marks