

3 : Reading and Comprehension

EN3106 – Communication Skills II

Level II - Semester 1

Overview

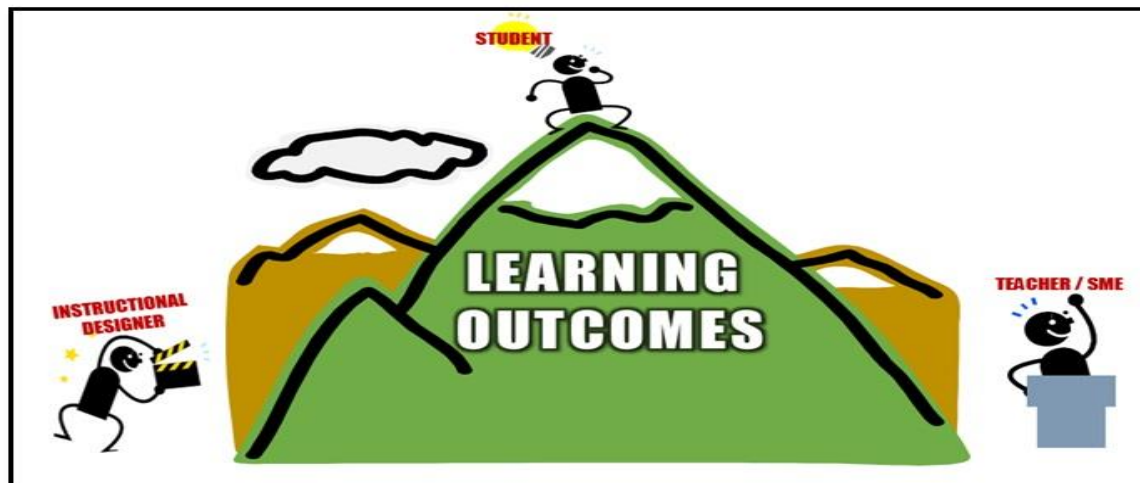
This is the third topic of the course module, Communication Skills (EN3106). This section will introduce the topic “Reading & Comprehension”.

The section will discuss how to process text, understand its meaning, and how to integrate with what the reader already knows.

Intended Learning Outcomes

At the end of this lesson, you will be able to;

- identify different sources of reading.
- analyze documents using different reading methods and techniques.
- Use mind maps to represent the contents of a document.



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List of Sub-Topics

3.1 Introduction to different sources of reading

3.1.1 Technical Reports

3.1.2 Business Communication

3.1.3 Scientific Writings

3.2 Reading methods and techniques

3.2.1 Reading methods

3.2.2 Reading techniques - skimming, scanning, intensive, extensive

3.2.3 Mind maps

Skills Required In Efficient Reading Comprehension



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Skills required in efficient reading comprehension

- There are nine (9) skills regarded as the basic skills of reading comprehension.
 1. Knowing meaning of words,
 2. Ability to understand meaning of a word from discourse context,
 3. Ability to follow organization of passage and to identify antecedents and references in it
 4. Ability to draw inferences from a passage about its contents
 5. Ability to identify the main thought of a passage
 6. Ability to answer questions answered in a passage

Skills required in efficient reading comprehension

7. Ability to recognize the literary devices or propositional structures used in a passage and determine its tone
8. To understand the situational mood (agents, objects, temporal and spatial reference points, casual and intentional inflections, etc.) conveyed for assertions, questioning, commanding, refraining etc.
9. Ability to determine writer's purpose, intent and point of view, and draw inferences about the writer (discourse-semantics).

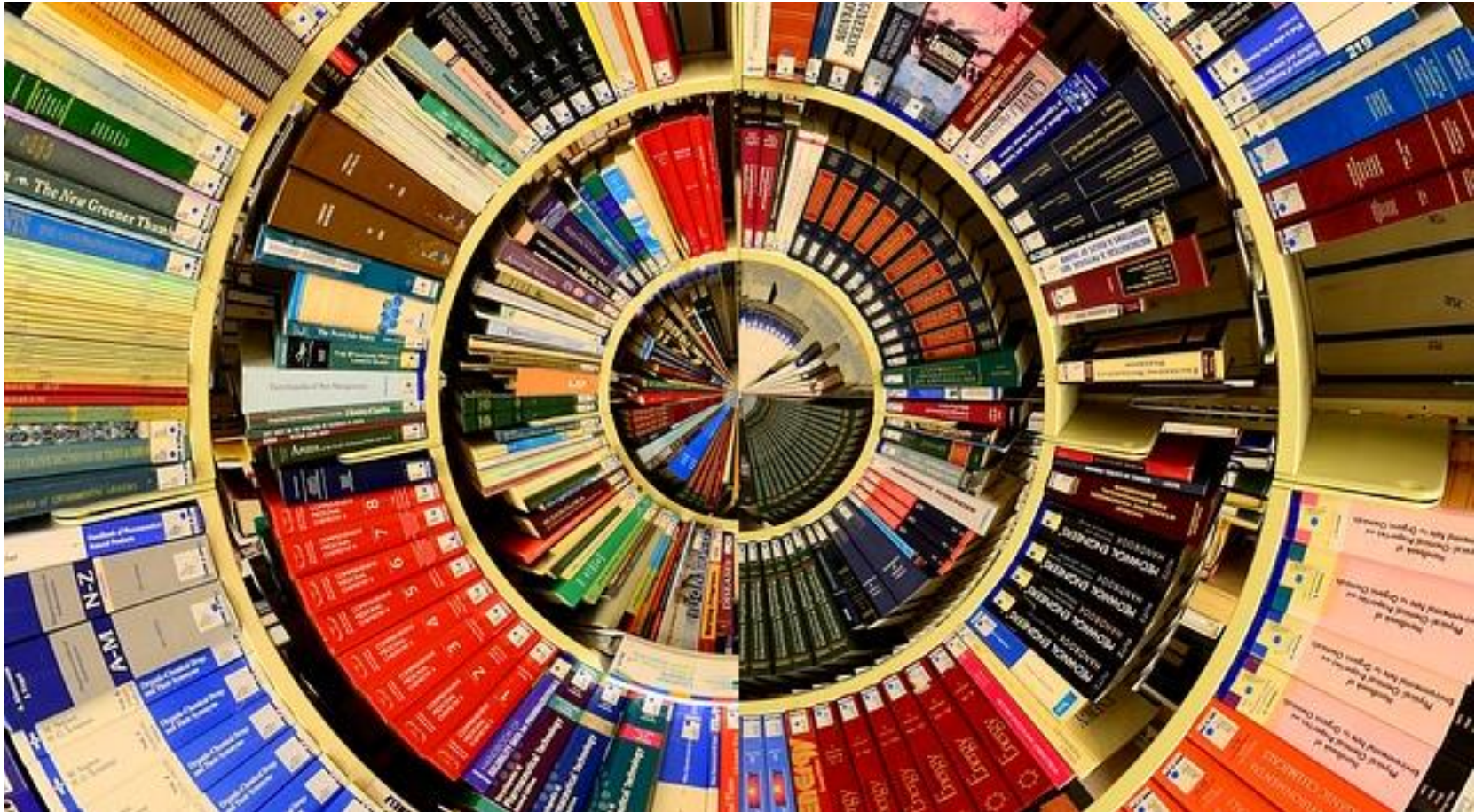
Source of Reference: F. B. Davis;
<https://www.semanticscholar.org/paper/Fundamental-factors-of-comprehension-in-reading-Davis/f452f01277997f5cc5ccd484ba3c25a9e6e9a796>

Skills required in efficient reading comprehension

- Ability to comprehend text is influenced by readers' skills and their ability to process information.
- If word recognition is difficult, students use too much of their processing capacity to read individual words, which interferes with their ability to comprehend what is read.
- There are many reading strategies to improve reading comprehension and inferences, including improving one's vocabulary, critical text analysis (intertextuality, actual events vs. narration of events, etc.) and practicing deep reading

Source of Reference: Maryanne Wolfis;
https://books.google.lk/books?id=HEq1DAAAQBAJ&redir_esc=y

Introduction to different sources of reading



3.1 Introduction to different sources of reading

- Different types of documents hold information in different ways and include varying depths of coverage.
- If you know what you want from an article and recognize its type, you can extract useful information much more efficiently.

3.1 Introduction to different sources of reading

- A source can be:
 - article in a reference book
 - chapter from a book
 - academic, scholarly or peer-reviewed articles
 - popular magazine articles
 - newspaper articles
 - websites
 - etc.,
- A source can be *primary* or *secondary* according to how the contents of the sources were originated.

3.1 Introduction to different sources of reading

- **Primary sources** include original content, first-hand accounts, raw data, documents or objects created at the time of study.
- Primary sources vary dependent upon the focus of study.
- For example:
 - for a historian - diaries, letters, newspaper article written at the time of an event;
 - for a literary scholar - a poem, a short story, or novel;
 - for a musicologist - notes written by the composer;
 - for a biologist - the findings of an original research project.

3.1 Introduction to different sources of reading

- **Secondary sources** interpret or analyze a primary source. A secondary source provides commentary and discussion of a primary source.
- For example:
 - a magazine article that discusses a research study that analyzed data collected from a survey about literacy in rural school districts.



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Technical Reports

3.1.1 Technical Reports

- **A technical report** is a formal report designed to convey technical information in a clear and easily accessible format.
- Technical reports are documents that are prepared for supervisors, subordinates, peers, customers, clients, and various government agencies.
- They are divided into sections which allow different readers to access different levels of information.

3.1.1 Technical Reports

- A technical report should contain the following sections

Section	Details
Title page	Must include the title of the report. Reports for assessment, where the word length has been specified, will often also require the summary word count and the main text word count
Summary	A summary of the whole report including important features, results and conclusions
Contents	Numbers and lists all section and subsection headings with page numbers
Introduction	States the objectives of the report and comments on the way the topic of the report is to be treated. Leads straight into the report itself. Must not be a copy of the introduction in a lab handout.
The sections which make up the body of the report	Divided into numbered and headed sections. These sections separate the different main ideas in a logical order

3.1.1 Technical Reports

Section	Details
Conclusions	A short, logical summing up of the theme(s) developed in the main text
References	Details of published sources of material referred to or quoted in the text (including any lecture notes and URL addresses of any websites used.
Bibliography	Other published sources of material, including websites, not referred to in the text but useful for background or further reading.
Acknowledgements	List of people who helped the research or prepare the report, including the proofreaders
Appendices (if appropriate)	Any further material which is essential for full understanding of the report but not required by a casual reader

3.1.1 Technical Reports

Progress reports

-A document that explains in detail how far you've gone towards the completion of a project. It outlines the activities you've carried out, the tasks you've completed, and the milestones you've reached vis-à-vis your project plan

- [Software Engineering Project Progress Report](#)
- [A Progress Report on Undergraduate Software Engineering Education](#)

Feasibility studies

-A feasibility study is an assessment of the practicality of a proposed project or system. A feasibility study aims to objectively and rationally uncover the strengths and weaknesses of an existing business or proposed venture, opportunities and threats present in the natural environment, the resources required to carry through, and ultimately the prospects for success.

- [Sample Software Engineering Feasibility Study Report](#)
- [A Feasibility study for establishing a sustainability consulting firm](#)

3.1.1 Technical Reports

Specifications

-A specification often refers to a set of documented requirements to be satisfied by a material, design, product, or service. A specification is often a type of technical standard. There are different types of technical or engineering specifications (specs), and the term is used differently in different technical contexts. They often refer to particular documents, and/or particular information within them.

- [SRS for Online Passport Registration](#)
- [SRS for Management System for Distribution of Medicine](#)

Proposals

-is the initial document used to define an internal or external project. The proposal includes sections such as title, start and end dates, objectives and goals, requirements, and a descriptor of the proposed solution.

- [Proposal for Restaurant Application Development](#)
- [Proposal for Digital Library](#)

3.1.1 Technical Reports

Manuals

-A user guide, also commonly called a technical communication document or manual, is intended to give assistance to people using a particular system.

- [Canon Camera User Manual](#)
- [WISN Software Manual](#)

Procedures

-A procedure is a document that instructs workers on executing one or more activities of a business process. It describes the sequence of steps, and specifies for each step what needs to be done, often including when the procedure should be executed and by whom.

- [CDC Policies & Procedures](#)
- [Pharmacy Operating Procedure](#)

3.1.1 Technical Reports

Planning documents

-A project plan is a series of formal documents that define the execution and control stages of a project. The plan includes considerations for risk management, resource management and communications, while also addressing scope, cost and schedule baselines.

- [Odessa Mobile Project Plan](#)
- [Portfolio Management System](#)

Environmental impact statements

-The environmental impact statement (EIS) is a government document that outlines the impact of a proposed project on its surrounding environment. Environmental impact statements are meant to inform the work and decisions of policymakers and community leaders.

- [USDA EI Statement](#)
- [NTEPA EI Statement](#)

3.1.1 Technical Reports

Safety analysis reports

-Safety Analysis Report presents design criteria and preliminary design information for the proposed project. It also gives detailed data on the proposed project. The report discusses hypothetical accident situations and describes the safety features that will be provided in the project to prevent such conditions. It also details the features provided to mitigate the effects of an accident if one should occur.

- [IAEA Safety Analysis Report](#)
- [INEL Safety Analysis Report](#)

Bug reports

-A bug report is something that stores all information needed to document, report and fix problems occurred in software or on a website. A bug report contains device logs, stack traces, and other diagnostic information to help you find and fix bugs in your app.

- [Sample Bug Report](#)

3.1.1 Technical Reports

- There are many other types of technical reports.
- All have a unity of purpose: to convey specific information in an archival way.
- By “archival” mean that the document is intended to be stored and referenced for many years.



Business Communications

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3.1.2 Business Communications

- Business communication is the process of sharing information between employees within and outside a company.
- Business communications include a wide range of correspondence that must be written in the course of business activities.
- Effective *business communication* is how employees and management interact to reach organizational goals.
- Its purpose is to improve organizational practices and reduce errors.

3.1.2 Business Communications

Resumes

-A resume is a brief summary of personal and professional experiences, skills, and education history. Its main purpose is to show off your best self to potential employers.

- [Sample Resumes](#)

Cover letters

-A cover letter is a one-page document that you submit as part of your job application (alongside your CV or Resume). Its purpose is to introduce you and briefly summarize your professional background.

- [Sample Resumes](#)

3.1.2 Business Communications

- Transmittal letters

-A Transmittal Letter is a business letter and is formatted accordingly, it should include the recipient's address, sender's address, distribution list, a salutation and closing. It typically includes why it should receive the reader's consideration, and what the reader should do with it.

- [Sample Transmittal Letters](#)

- Customer relations writing

-Customer relations, are the process in which an organization creates and maintains a positive relationship with their consumers. In a nutshell, customer relations focuses on communicating with current and potential customers to get a better understanding of how the organization can improve in multiple areas.

- [Reference](#)

3.1.2 Business Communications

- Human resources communications
 - Human Resources communication can be extensively used to communicate messages to internal stakeholders about the state of the organization (think investor news, or training and development policies). This helps management and employees make better and informed decisions on how to grow the organization.
- Administrative communications
 - Administrative communications involve writing business correspondence such as memos, notices, reports and letters, speaking in meetings and presentations.
- Trip reports
 - Trip reports are a common part of organizational communication. They generally follow the format of a memorandum, addressed to one or more members of a group of associates. They should include the reason for the trip, what was found, and one or more conclusions.



Scientific Writing

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3.1.3 Scientific Writing

- Scientific writing is not just writing about science
- It is the technical writing that scientists do to communicate their research to others.
- Scientific writing is predicated on the rigors of scientific inquiry, so it must reflect the same precision as that demanded in the research process.
- Scientific writing includes experimental research and associated documentation, as well as the scholarly publications that emerge from that work.
- Scientists and engineers can publish their work in a variety of venues, including: Books, Journals, Magazines, Conference Proceedings, Websites, etc.

3.1.3 Scientific Writing

Books

-A book is a medium for recording information in the form of writing or images, typically composed of many pages. A book is prototypically a composition of such great length that it takes a considerable investment of time to compose and still considered as an investment of time to read.

- [Example books on Software Development](#)

Journals

-A scientific journal is a periodical publication intended to further the progress of science, usually by reporting new research. Articles in scientific journals are mostly written by active scientists such as students, researchers and professors instead of professional journalists.

- [Top Journals in Computer Science](#)

3.1.3 Scientific Writing

Magazines

-A science magazine is a periodical publication with news, opinions and reports about science, generally written for a non-expert audience. In contrast, a periodical publication, usually including primary research and/or reviews, that is written by scientific experts is called a "scientific journal". Science magazines are read by non-scientists and scientists who want accessible information on fields outside their specialization.

- [Top Science Magazines](#)

Conference Proceedings

-Conference proceeding is a collection of academic papers published in the context of an academic conference or workshop. Conference proceedings typically contain the contributions made by researchers at the conference. They are the written record of the work that is presented to fellow researchers.

- [Top Computer Science Conferences](#)

3.1.3 Scientific Writing

Newsletters

-A newsletter is a printed or electronic report containing news concerning the activities of a business or an organization that is sent to its members, customers, employees or other subscribers. Newsletters generally contain one main topic of interest to its recipients.

- [Top Data Science Newsletters](#)

Websites and blogs

-A *website* is a collection of web pages and related content that is identified by a common domain name and published on at least one web server.

- [Most popular Websites](#)

-A blog is a discussion or informational website published on the World Wide Web consisting of discrete, often informal diary-style text entries (posts).

- [Top Computer Science Blogs](#)



Reading Methods and Techniques

3.2 Reading Methods and Techniques

- Reading effectively means reading in a way that helps you understand, evaluate, and reflect on a written text.
- There are several reading methods & techniques.
- It is important to learn to distinguish between them and choose the right method or technique according to what you want to achieve.

Reading Methods



3.2.1 Reading Methods

1. Browsing
2. Speed Reading
3. Reflective Reading
4. SQ4R Method

3.2.1 Reading Methods

1. Browsing

- You must have a goal for your reading. What are you looking for?
- Get an overview. Read only selected parts of the text.

These selected parts can be:

- book cover, date of publication, preface, summary, abstract, table of contents, index, headings, images, graphics, tables.
- You may browse the book and spend 5-10 seconds per page.

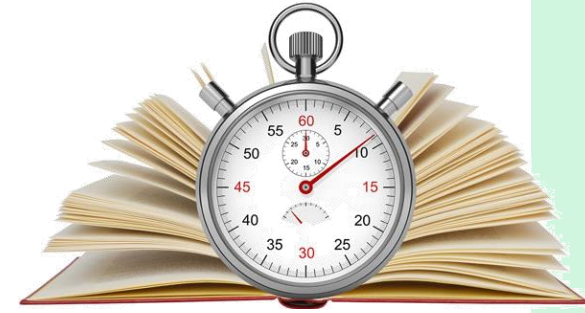


3.2.1 Reading Methods

1. Browsing

- You use a technique called 'photo-reading'.
 - You fix your gaze on the text line and let the gaze slide down quickly.
 - Use a finger in the beginning. You point to the text and move your finger quickly down in a zigzag pattern.
 - You will then fix and read the words that you think might be interesting.
 - This gives an overview of the structure and main content.
- If you are looking for specific information, use a skim reading method called scanning.
- You use the same technique, but you are very conscious of looking for specific keywords.

3.2.1 Reading Methods



2. Speed Reading

- You read as fast as you can.
- You should be able to reach up to 400-500 words per minute.
- To achieve this, you must train yourself to:
 - not vocalize. Do not move your lips. Hold your finger over your lips to check.
 - reduce fixation time - reduce the number of times your gaze stops per line by reading several words at once. You should manage to come down to two or three fixations per line.
 - reduce skip-backs. Avoid letting your gaze revert to previous words.
 - use your index finger or a pen for reading support when you train yourself in speed reading.

3.2.1 Reading Methods

3. Reflective reading

- In this mode you study the text.
 - You think through what is said.
 - What is the message?
 - Make notes. Ask questions.
 - Do you agree with the author?
 - Can you think of alternative explanations?
 - Can you use the information to anything?
-
- When you reflect on what you read, and work on the content by paraphrasing it or explaining it in your own words, you transform the information to knowledge.



3.2.1 Reading Methods

4. SQ4R Method

- Designed to help process and increase retention of written information
- Consists of 6 steps that help to guide you through your textbook and other written information.
- One drawback is that it adds times to what you normally set aside for reading.
- The end benefit is increased understanding of written material and more efficient studying.

3.2.1 Reading Methods

4. SQ4R method

1. Survey (S)
2. Question (Q)
3. Read (R1)
4. Respond (R2)
5. Record (R3)
6. Review (R4)



3.2.1 Reading Methods



4.1 Survey (**SQRRRR**):

- Scan the textbook or written material to establish its purpose and/or to get the main ideas.
- This can include skipping to the summary at the end of a chapter and reading the main points and looking at the questions.
- The purpose of this is to get a “big picture” idea of what the material is about.
- While surveying the material look at:
 - a. Titles and Headings – these indicate the main topics and concepts
 - b. Pictures, questions, bold or italicized print – these emphasize important information
 - c. Introduction and Conclusion – may summarize the topics and the purpose of the material
 - d. Footnotes – they may provide extra information for your benefit

3.2.1 Reading Methods

4.2 Question (SQRRRR):

- Before reading the material create questions based on what you observed during the first step.
- These questions can be based on:
 - a. Titles and Headings
 - b. Pictures and bold or italicized print
 - c. Introduction and Conclusion
 - d. Footnotes
 - e. First sentence of a paragraph
- For example, the title “The First Law of Thermodynamics” can become “What is the first law of thermodynamics?”



3.2.1 Reading Methods



4.3 Read (SQRRRR):

- Actively read the text, meaning do not skim through it or passively glance it over.
- In this step you are trying to find the answer to your questions.
- One important point on this step is to make sure you are not trying to find the answer only.
- This may cause you to miss out on other important information.
- If you have a question for each section of the chapter or reading, read only that section then move on to step 4.
- If not, keep reading until you've read the information relating to your questions.
- One last note on this step – do not write down the answer to your question yet. That comes in step 5.

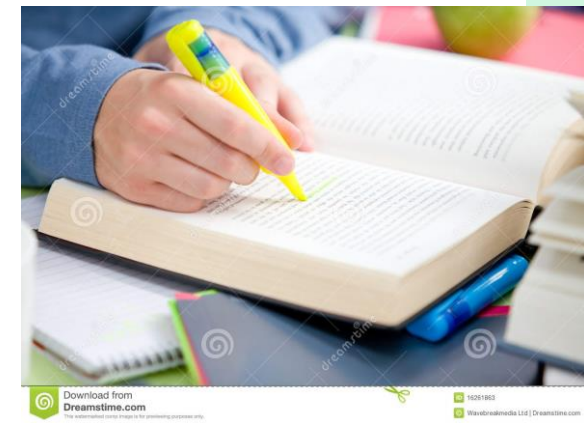
3.2.1 Reading Methods

4.4 Respond (SQRRRR):

- After you've read the section, without looking at the text and in your own words, try to answer your question(s) you made.
- If you can answer them correctly move on to step 5.
- If you are unable to answer the question(s) reread that section until you can.
- If after 2-3 tries you are still not able to answer the question, go on to the next couple of sections and see if it becomes clearer.
- You may find in this step that you need to change your question.



3.2.1 Reading Methods



4.5 Record (SQRR**RR**):

- Once you know the material and are able to answer the question(s), the next step is to record what you have learned.
- This can be done in multiple ways and is based on your preference:
 - a. Highlighting the information
 - b. Make notes in the margins
 - c. Take notes on a separate piece of paper
 - d. A combination of these

3.2.1 Reading Methods



4.6 Review (SQRRRR):

- Reviewing the material on a consistent basis is an effective study strategy that is often overlooked.
- It is best to review the material weekly as it will help you remember more of the information longer.
- Look over your notes and check your memory for the content by reciting the answer(s).

Source of Reference: <https://uwosh.edu/car/wp-content/uploads/sites/37/2018/01/SQ4R-Method.pdf>

Video: <https://www.coursera.org/lecture/glasscock/using-the-sq4r-method-to-preview-or-review-a-text-gDaIU>

Reading Techniques



3.2.2 Reading Techniques

1. Skimming
2. Scanning
3. Intensive
4. Extensive

3.2.2 Reading Techniques

1. Skimming

- Sometimes referred to as gist reading where you're trying to glance over the material to grasp the main idea.
- Read the first and last paragraph and check for any dark headings.
- Skimming may help in order to know what the text is about at its most basic level.
- Would help you mentally and quickly shortlist those articles which you might consider for a deeper read.
- Skimming will certainly save a lot of time as you grasp the main idea of whatever you are reading, but do not expect your comprehension to be high during the process.
- However, skimming is useful when your goal is to preview the text to get a better idea of what it's about.

3.2.2 Reading Techniques

1. Skimming

- Skimming makes it much easier to recall what you're about to read.
- Steps involved:
 1. Take a look at the table of contents first.
 2. Review the subheadings in each chapter
 3. Quickly read the first paragraph in that section
 4. Check out anything in your text that is in bold or italics
 5. If there is a chapter summary, now is a good time read it over.
- This completely prepares your brain to have an overview of what this document is about.

3.2.2 Reading Techniques

2. Scanning

- Scanning involves getting your eyes to quickly scuttle across sentence and is used to get just a simple piece of information.
- You'll be searching for specific words or phrases that will give you more information and answer questions you may have.
- Research has concluded that reading off a computer screen actually inhibits the pathways to effective scanning and thus, reading of paper is far more conducive to speedy comprehension of texts.
- Scanning pay special attention to the introduction and the conclusion.

3.2.2 Reading Techniques

3. Intensive Reading

- You need to have your aims clear in mind when undertaking intensive reading.
- It is going to be far more time consuming than scanning or skimming.
- This type of reading has indeed beneficial to language learners as it helps them understand vocabulary by deducing the meaning of words in context.
- It moreover, helps with retention of information for long periods of time and knowledge resulting from intensive reading persists in your long term memory.

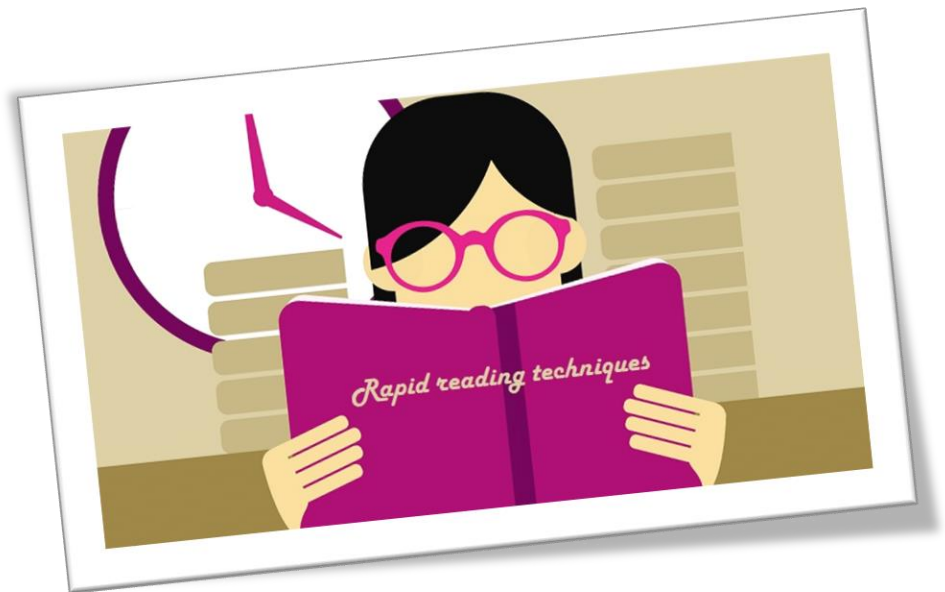
3.2.2 Reading Techniques

4. Extensive Reading

- Extensive reading involves reading for pleasure.
- Because there is an element of enjoyment in extensive reading, it is unlikely that someone will undertake extensive reading of a text they do not like.
- It also requires a fluid decoding and assimilation of the text and content in front of you.
 - If the text is difficult and you stop every few minutes to figure out what is being said or to look up new words in the dictionary, you are breaking your concentration and diverting your thoughts.

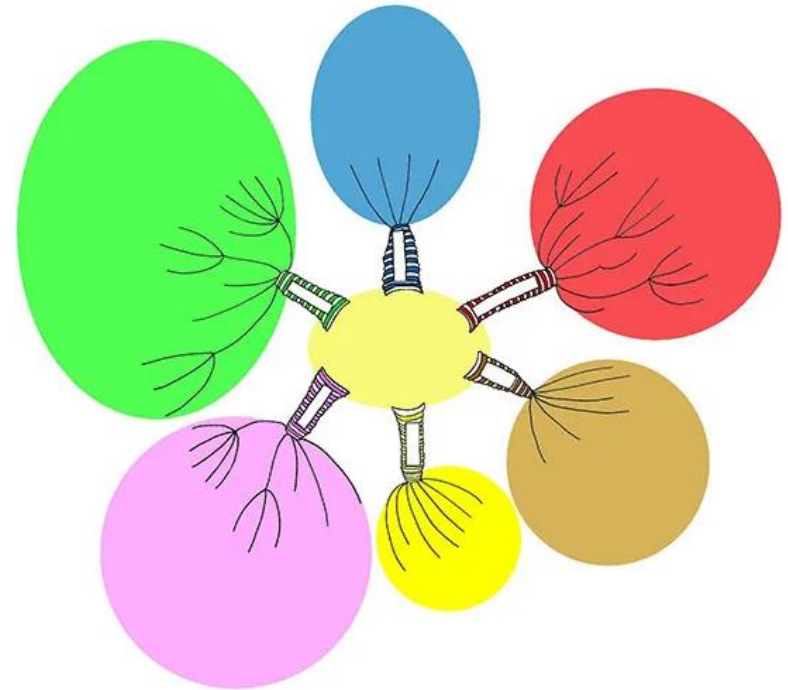
3.2.2 Reading Techniques

- Reading Techniques: [Video](#)
- Skimming: [Video](#)
- Scanning: [Video](#)
- Intensive Reading: [Video](#)
- Extensive Reading: [Video](#)



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Mind Maps



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3.2.3 Mind Maps

- A mind map is a diagram, a graphic organizer that helps readers visualize what they're reading and detect connections between individual pieces of information.
- In a classic mind map, you'll always find the subject prominently placed in the center of the map canvas, with all notes, ideas and keywords arranged around the center in a radiant structure.
- Taking notes while reading is one of the best ways to improve comprehension.
- Traditional, linear notes, however, are not the most effective format for this.

3.2.3 Mind Maps

- This note-taking process is monotonous and encourages students to write whole sentences, which is unnecessarily time-consuming.
- In comparison to linear notes, mind maps offer a number of benefits that can aid students in comprehending and retaining the information they read.

3.2.3 Mind Maps

- Benefits:
 - A mind map can help readers structure their thoughts. No matter how complex an idea or big a topic, a mind map brings order into the chaos.
 - Mind mapping provides a clear overview of a topic. It enables readers to see the bigger picture, find connections and detect hierarchies between individual pieces of information.
 - Mind mapping enhances memory by utilizing a number of mental triggers such as colors, images and a two-dimensional structure.
 - Because mind maps encourage the use of single keywords instead of whole sentences, readers are able to review core concepts and ideas at a glance.

3.2.3 Mind Maps

- Mind Mapping is Perfect for:
 - ✓ Brainstorming and visualizing concepts
 - ✓ Presenting and communicating ideas
 - ✓ Graphic organizers and electronic note books
 - ✓ Running meetings more effectively
 - ✓ Outlining reports and documents
 - ✓ Simplifying task and project management
 - ✓ Writing essays

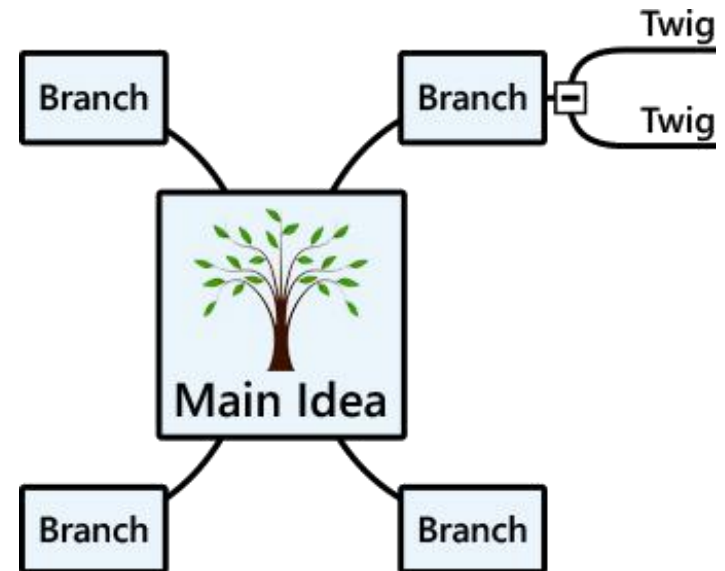


Source of Reference: <https://www.mindmapping.com/mind-map>

3.2.3 Mind Maps

- The Five Essential Characteristics of Mind Mapping:

1. The main idea, subject or focus is crystallized in a central image
2. The main themes radiate from the central image as 'branches'
3. The branches comprise a key image or key word drawn or printed on its associated line
4. Topics of lesser importance are represented as 'twigs' of the relevant branch
5. The branches form a connected nodal structure



3.2.3 Mind Maps

- 6 Easy Steps to Make a Mind Map

1

Enter the Main Topic. Start by entering the main subject in the center of the mind map.

2

Brainstorm Topics. Create main branches to enter your topics. Do not worry about the order of the topics.

3

Create Sub-Topics. Elaborate on your topics by creating sub-topics. Make sure to use very short phrases or even single words.

4

Rearrange the Topics. If you need to rearrange the topics in your mind map, most software tools allow you to drag-and-drop branches. This will enable you to structure the topics that you brainstormed.

5

Add Images and Formatting. According to the [mind mapping theory](https://www.mindmapping.com/mind-mapping-theory), images and colors improve memory retention. You can use different colors and fonts and place images on branches.

6

Notes and Research. Take notes to your topics and attached research files - if your mind mapping software allows you to.

3.2.3 Mind Maps

- Mind maps can be created by simply using a pen and paper or an online tool.
- A simple paper mind map will suffice for some of the used.
- On the other hand, for some, an online mind mapping tool will work best.
- Mind Mapping tools examples:
 - [Mindmeister](#)
 - [Xmind](#)
 - [Mindmup](#)

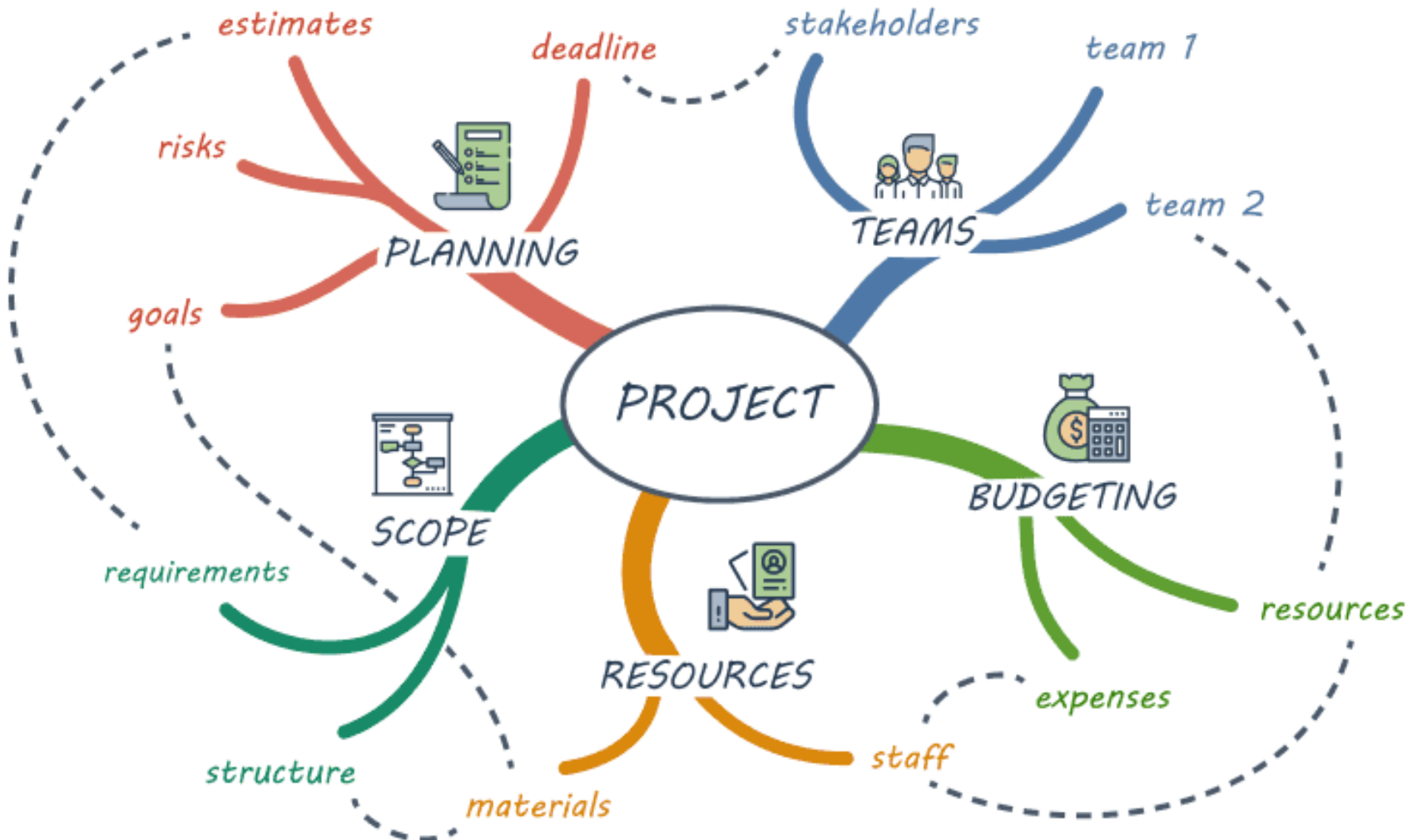
3.2.3 Mind Maps

- Benefits when creating Mind Maps with software:
 - It is faster to brainstorm and enter information.
 - Re-arranging branches and formatting is much easier.
 - You do not run out of “space”, as you tend to do with larger mind maps on paper.
 - You can take unlimited notes and attach files.
 - Some commercial mind mapping software tools enable you to export your mind map to Word, PowerPoint, Excel, Project etc. without re-entering information.

Source of Reference: <https://www.mindmapping.com/mind-map>

3.2.3 Mind Maps

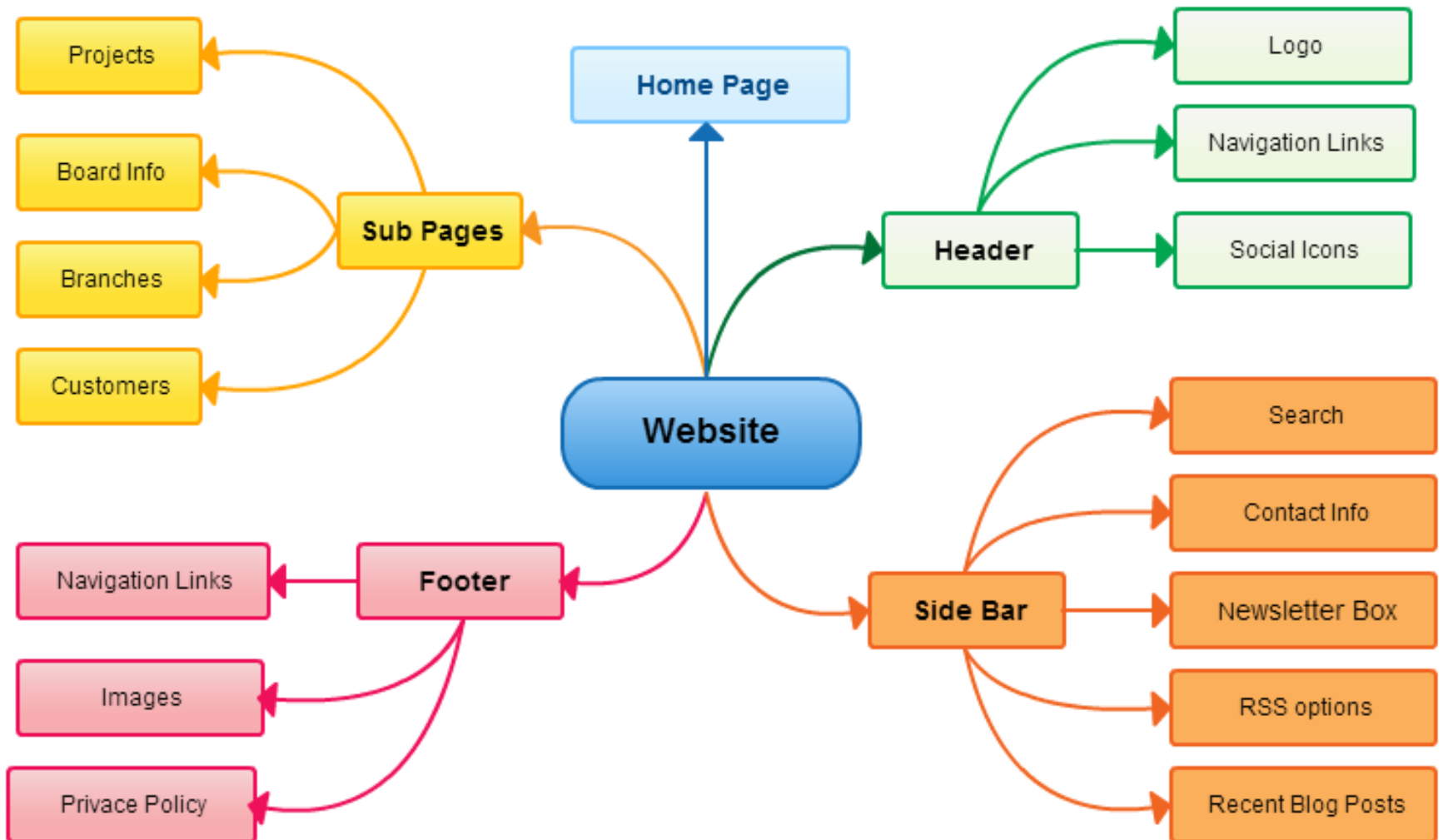
- Example mind map for a project



Source of Reference: <https://www.actitime.com/wp-content/uploads/2019/04/mind-map.gif>

3.2.3 Mind Maps

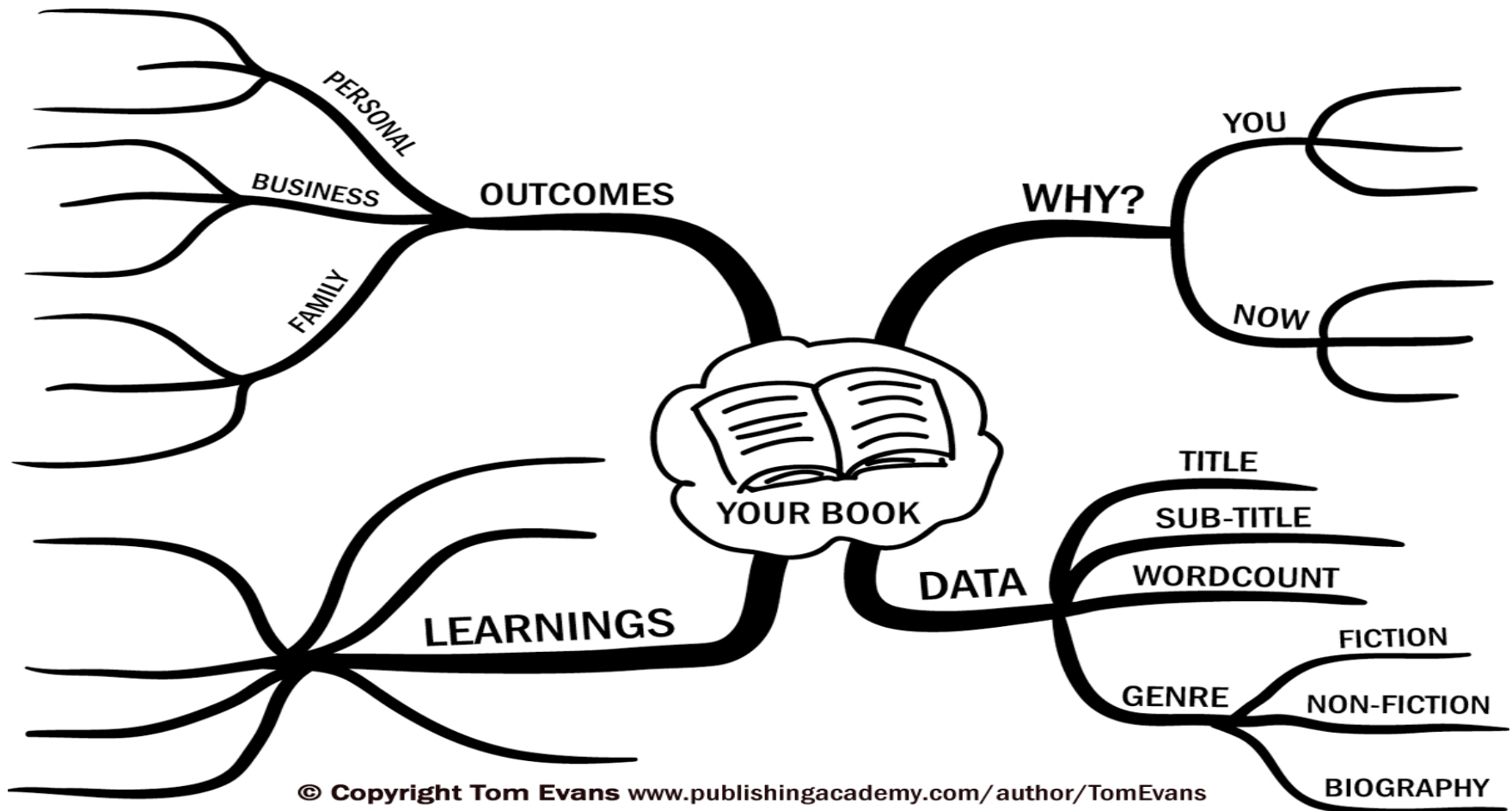
- Example mind map for a website



Source of Reference: <https://i.pinimg.com/originals/9a/17/14/9a17148ef79aea04613c46ab1305e3ae.png>

3.2.3 Mind Maps

- Example mind map for a book



Source of Reference: <https://i.pinimg.com/originals/70/4b/ac/704bacb7b3563803d07edf4d443404e9.gif>

Summary

Now you should be able to



Identify different sources of reading.



Analyze documents using different reading methods and techniques.



Use mind maps to represent the contents of a document.