



# COMMUNICATION STRATEGIES IN LANGUAGE LEARNING

*Dr. Ir. Suciana Wijirahayu, M.Pd*



Penerbit :  
Yudha English Gallery

COMMUNICATION STRATEGIES IN  
LANGUAGE LEARNING

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Edisi Kedua, Maret 2025

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**COMMUNICATION STRATEGIES IN  
LANGUAGE LEARNING**



## **PREFACE**

We express our gratitude to Allah SWT for the blessing given to us. Shalawat and greetings we convey to our beloved Prophet Muhammad SAW. Alhamdulillah, by His grace, we could complete the e-book entitled Communication Strategies in Language Learning. The authors' success in completing this e-book is from the support of various parties' encouragement, guidance, and participation. Therefore, the author would like to express his deepest gratitude to all parties. I cannot mention us one by one with all the deepest sincerity. Even though he has tried as optimally as possible, the author knows that many shortcomings and errors are still possible. Therefore, we expect input and suggestions from various parties for this e-book.

Tangerang, March 2023

Dr. Ir. Suciana Wijirahayu, M.Pd.



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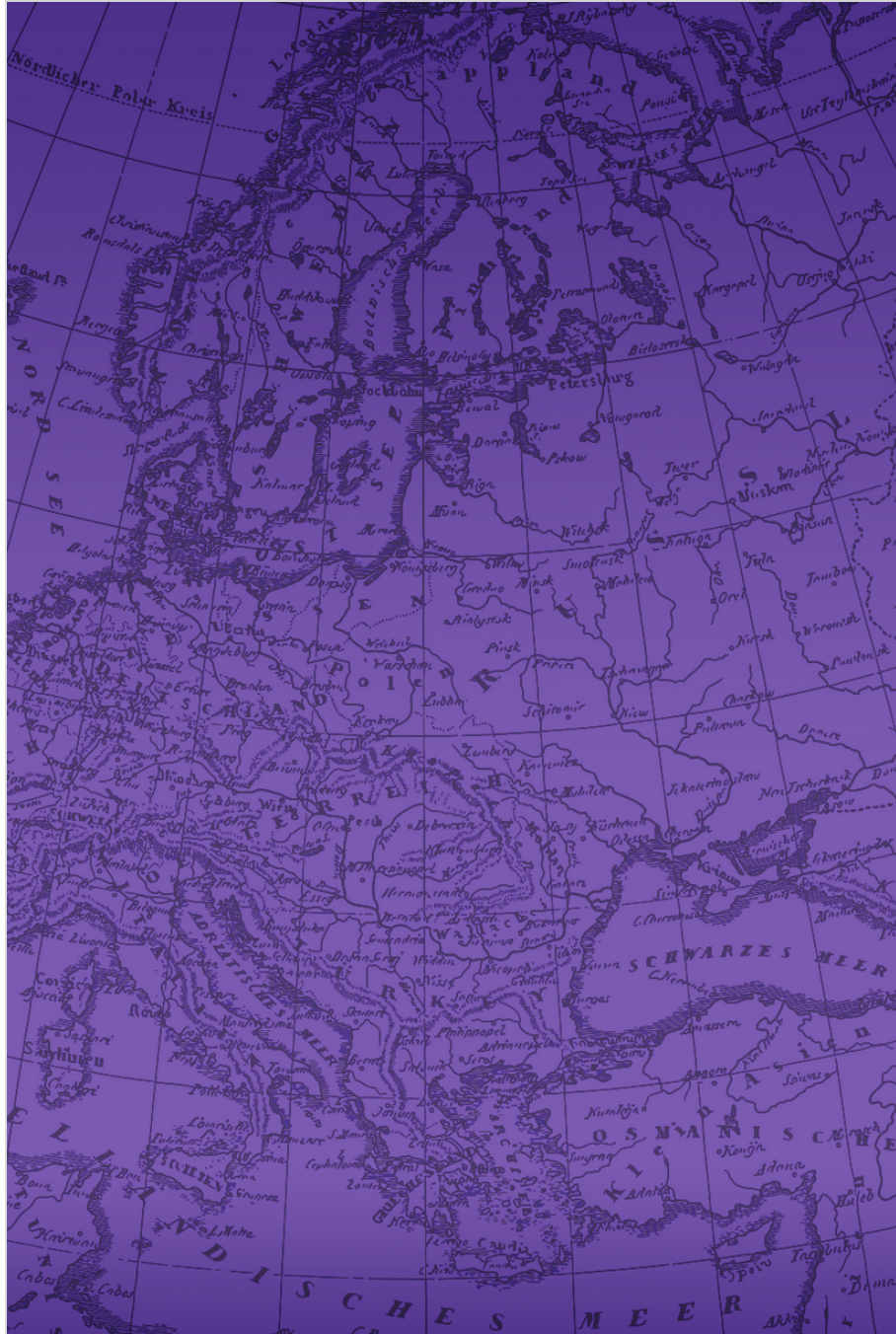
Anggota dari :



Partners :







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# Introduction

## The Importance of Communication in Today's World

Communication, the act of exchanging information and ideas, is more crucial than ever in our fast-paced, interconnected world. It's the foundation of strong relationships, successful careers, and navigating the complexities of a globalized society.

Some chapters in this book are on purposely designed to inspire the scholars from different faculty to develop their strategies in learning English as Lingua franca.



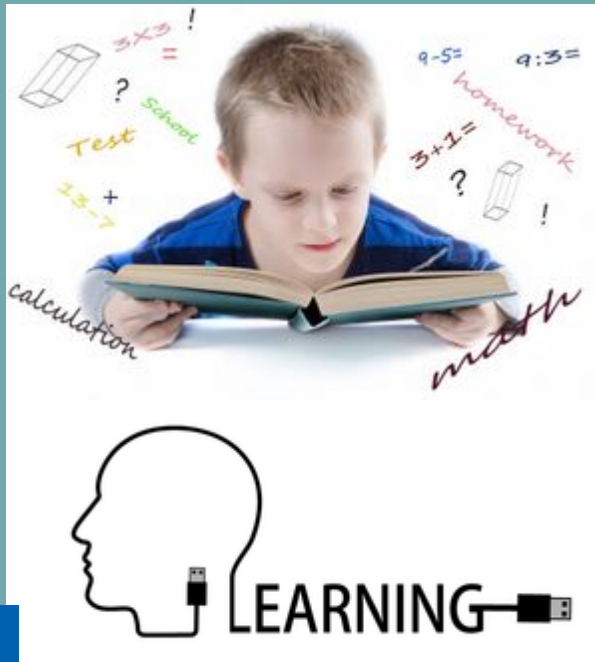
### Why is communication so important?

- **Connection and Relationships:** Communication allows us to connect with others, share our thoughts and feelings, and build strong, lasting relationships. It fosters empathy and understanding, which are essential for navigating personal and professional interactions.
- **Collaboration and Teamwork:** In today's workplace, teamwork is key. Effective communication ensures everyone is on the same page, goals are clear, and projects run smoothly. Sharing ideas and feedback openly leads to better decision-making and innovation.
- **Global Communication:** Our world is more interconnected than ever. Clear communication across borders is essential for international business, diplomacy, and cultural exchange.
- **The Rise of Technology:** While technology offers new ways to connect, it can also create misunderstandings because of the lack of nonverbal cues. Effective communication in a digital age requires mastering written communication and being mindful of online etiquette.

**Effective communication is a two-way street.** It involves not just clearly expressing yourself but also actively listening and understanding the other person's perspective. By honing our communication skills, we can build stronger relationships, achieve success in our careers, and navigate the complexities of an ever-changing world.

# Chapter One

## Data Mining & Language Learning



### Data Mining: Revolutionizing Language Learning

In the realm of language acquisition, a new frontier is emerging: data mining. This powerful technology is transforming how we learn languages by leveraging the vast amount of digital information available.

#### How does data mining impact language learning?

**Personalized Learning:** Data mining can analyze a learner's strengths,

Weaknesses, and preferred learning styles. This allows for personalized learning experiences, focusing on areas that need improvement and tailoring content to individual preferences.

**Real-World Language Use:** Data mining can analyze massive amounts of text and audio data, revealing how native speakers use language in real-world situations. Language learning apps can then incorporate this data, exposing learners to natural language patterns and common phrases.

**Identifying Common Errors:** By analyzing student data, learning platforms can identify common grammatical errors or pronunciation mistakes. This allows for targeted feedback and remediation exercises, leading to faster improvement.

**Adaptive Learning Systems:** Data mining can power adaptive learning systems that adjust the difficulty level and learning materials based on a student's progress. This ensures learners are constantly challenged and motivated, avoiding plateaus or frustration.

edureka!



# Data Mining Using R

## R TUTORIAL FOR BEGINNERS

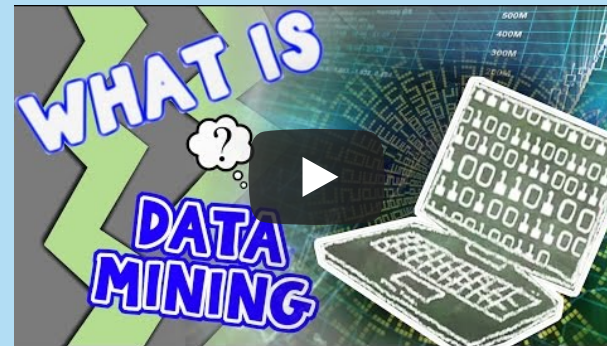


source

<https://www.youtube.com/watch?v=BB204VCu5j8>



3



source

<https://www.youtube.com/watch?v=R-sGvh6tI04>

4





source

<https://www.youtube.com/watch?v=EH3bp5335IU>

### The Future of Language Learning with Data Mining

Data mining offers a glimpse into a future of language learning that is:

- **More Efficient:** focusing on personalized learning paths and targeted practice can lead to faster language acquisition.
- **More Engaging:** Data-driven learning experiences can be tailored to individual preferences, making the process more enjoyable and motivating.
- **Data-Driven Insights:** By analyzing user data, researchers and developers can continuously improve language learning tools and methodologies.

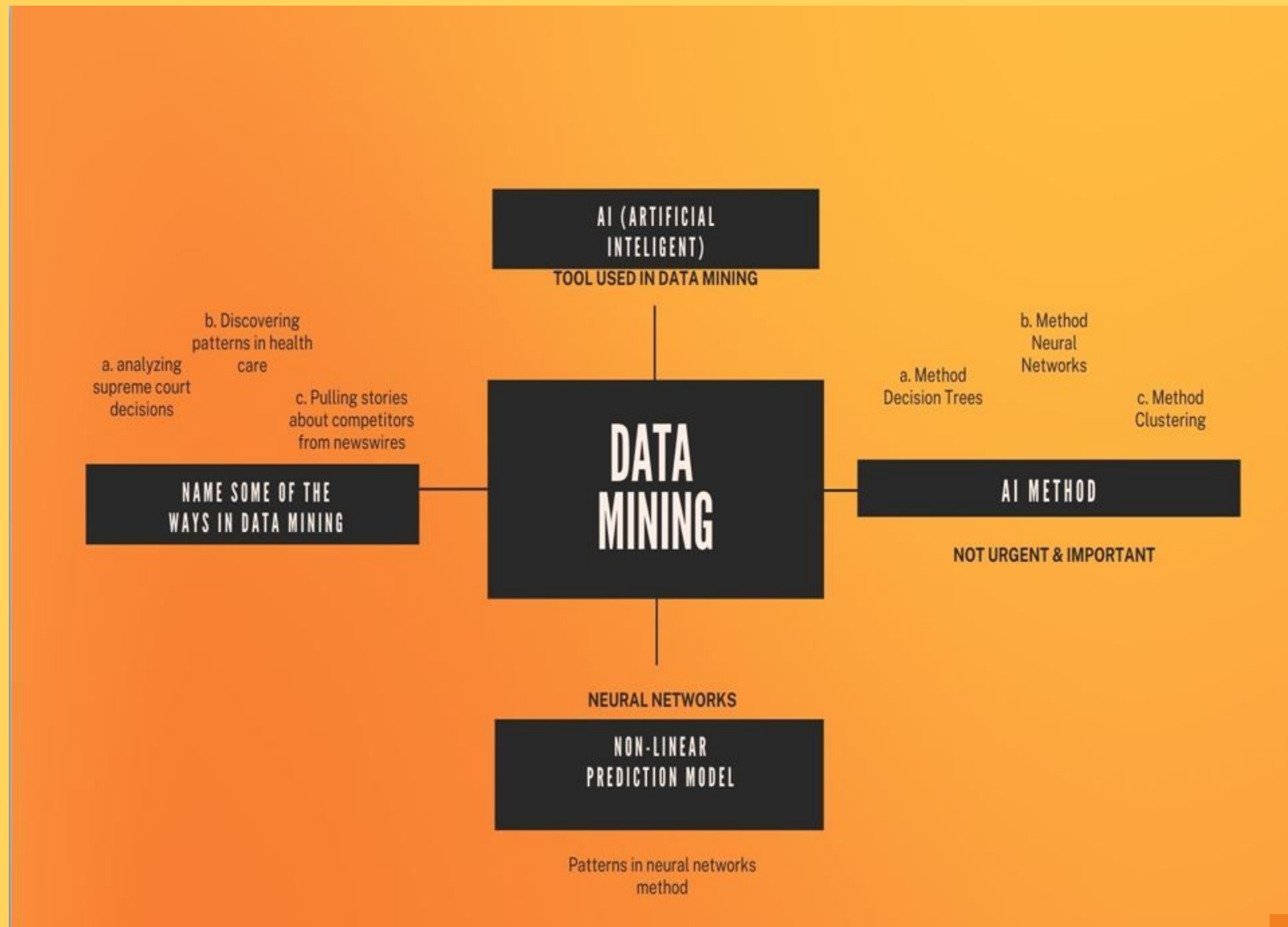


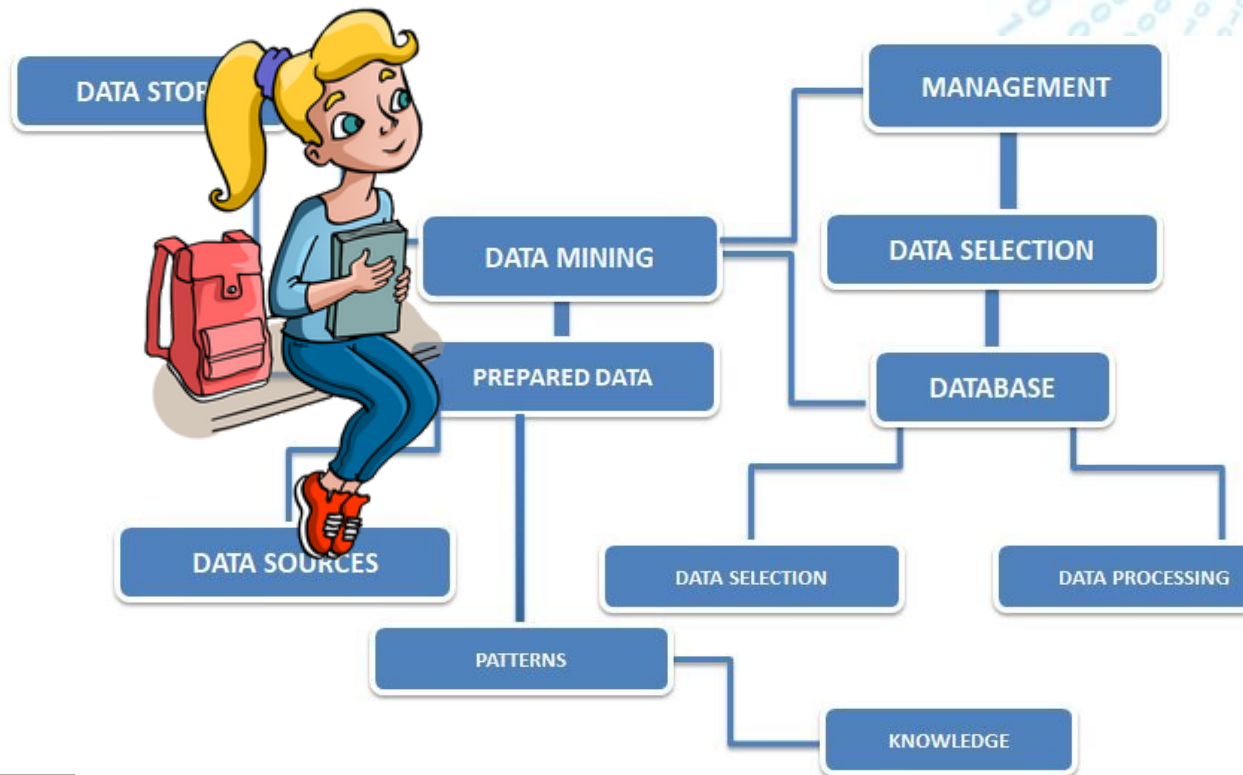
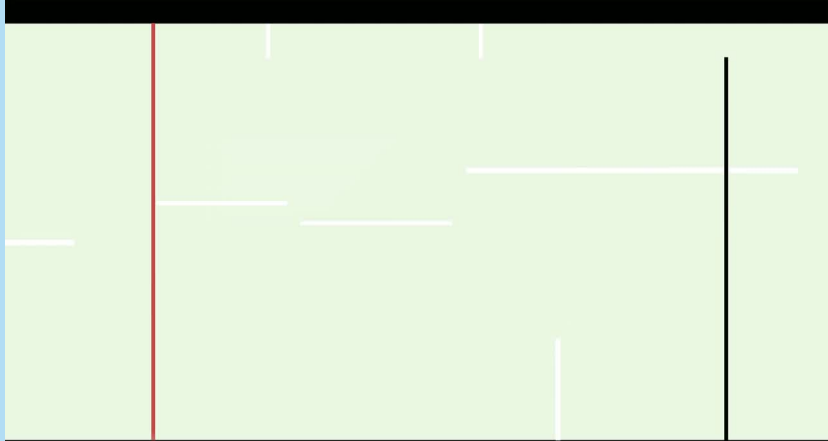
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<https://www.youtube.com/watch?v=-6hoDNZoV5g>

While data mining holds immense potential, it's important to remember it's a tool, not a silver bullet. Effective language learning still requires dedication, practice, and a love for the language itself. However, data mining offers an exciting new chapter, personalizing the journey and making language acquisition more accessible and efficient than ever before.









# Generating Questions



## How to Generate Critical Questions

Asking questions is essential, but asking critical questions takes your understanding to a whole new level. Critical questions challenge assumptions, spark deeper analysis, and push you beyond surface-level information.



## Developing a Critical Mindset

### Practice Curiosity:

Cultivate a genuine curiosity about the world around you. Approach information with a questioning mind and a desire to learn more.

### Read Widely:

Exposure to diverse perspectives expands your knowledge base and challenges your existing views.

**Embrace Open Discussions:** Engage in discussions where you can exchange critical questions and respectfully debate different viewpoints.

By actively employing these techniques and nurturing a critical mindset, you'll transform from a passive recipient of information into a skilled questioner, uncovering the complexities and nuances of any subject you encounter.



## Techniques for Critical Question Formulation

**The "Why" Factor:** Make liberal use of "why." Ask "why" something happens, "why" it's important, and "why" certain choices were made. This continuous questioning digs deeper for the root causes and rationale behind information.

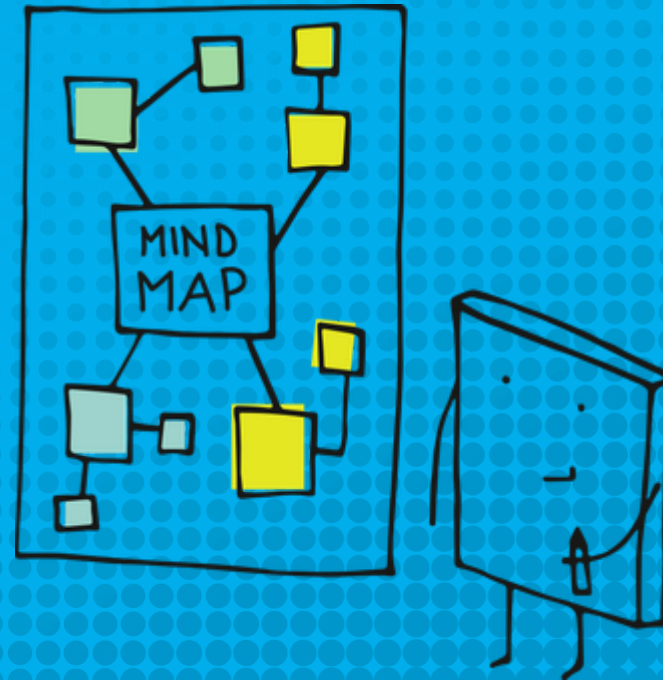
**"What If...?" Scenarios:** Explore hypothetical situations. Ask "what if" things were different or "what are the potential Consequences" of a certain action. This helps evaluate the strengths and weaknesses of an idea and consider various outcomes.

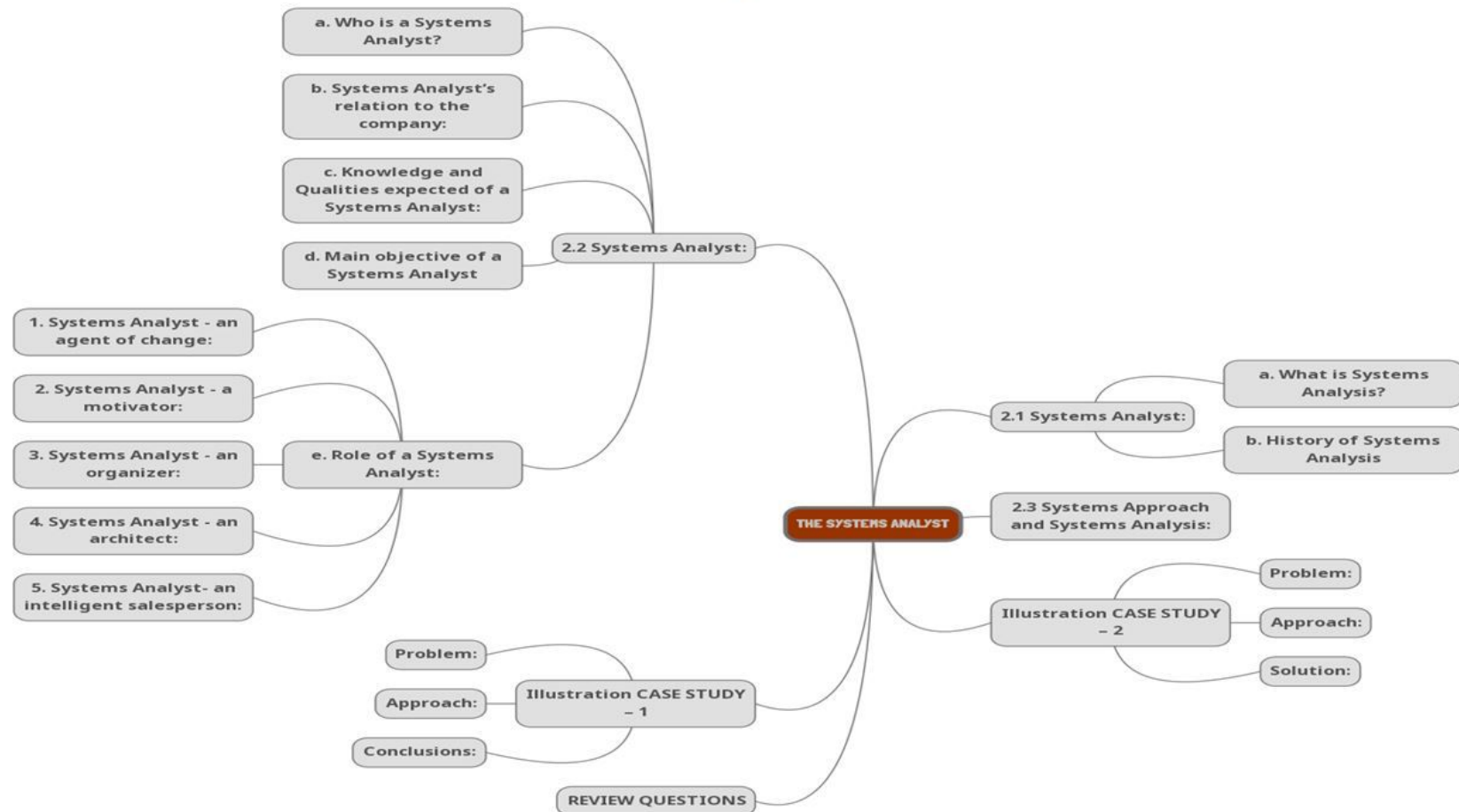
### Connect the Dots:

Look for relationships between seemingly disparate concepts. Ask questions like "how does this relate to...?" or "what are the broader implications of this?" This helps build a more comprehensive understanding of the topic.

# Chapter Two

## Mind Mapping

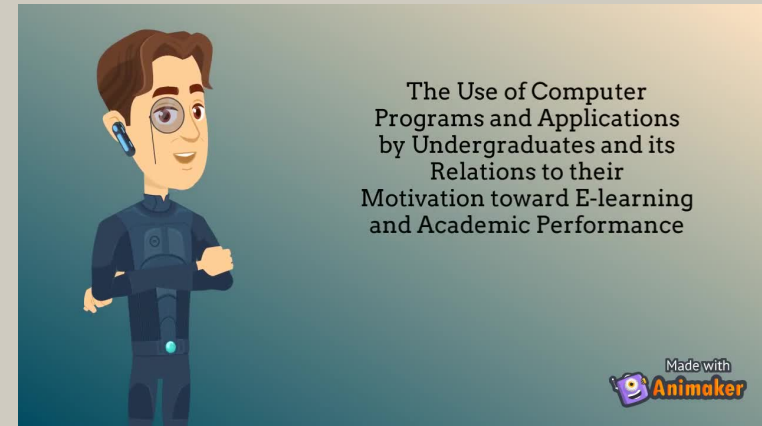




Group 4

Class 2.A

Al-Jaberi, N. M. (2018). The Use of Computer Programs and Applications by Undergraduates and its Relations to their Motivation toward E-learning and Academic Performance. *International Journal of Education and Literacy Studies*, 6(4), 114-121.







## COMMUNICATION SYSTEM

CLASS 2A  
GROUP 1



### **Effective Communication Systems: More Than Just Technology**

While technology plays a crucial role, a successful communication system relies on more than just its components. Clear communication protocols, data security measures, and user-friendly interfaces are all essential for seamless information exchange.

# Mind Mapping Software

## Great Resource of the Best Mind Mapping Software

Public Speaking 4A Group 2

Erlina Widyia Shifanda

Aulia Amalina Putri

Sekar Fuan Maharani

Wahyu Pangestu

## Great Resource of the Best Mind Mapping Software

This tool is for brainstorming, planning. It's so quick, so easy to use and it's so intuitive.

This is the website and the tools actually called Xmind 8 Pro and you can see on the website that it says the most popular mind mapping tool on the planet. This tool is free and awesome. Now, they do have some paid plans and I think those are mostly aimed at cooperates because there's all kinds of team sharing and all that kind of thing and you'll notice that on their page, they have huge clients' global companies.

## ✧ How to use tools in Xmind 8 Pro ✧

### Blank & Templates

There is a Mac version, Windows version, and Linux. Windows and Mac are covered. There are gorgeous templates that you can use to get started. There's also templates tab and there's also a lot of things.

You can actually export this to PDF or to a graphic and if you have a client or somebody that you need to share something with you can create a gorgeous mindmap and then send them or if you're creating a course and you have a list of subscribers you could use this software to mindmap all the steps that they need to do for whatever the course is about, just create a really nice graphic or presentation. You can even create lead magnets that people can download if you have a blog and you get subscribers that way. This can be a great lead magnet creation software.

General topic

Click on this and make it for your plan. Example: your today's plan. Use the keyboard keys for shortcuts. It will take you five minutes to sit down and figure out all the key shortcuts. You'll find all that information on the software. It will just make life so much easier.

General topic

Click the 'tab' and that can create a branch. When you click 'enter' it creates a new branch. You can make three branches very easy quickly. You can make another subtopic just by tapping the key.

Here is the way to change the structure:

- Click right
- Choose structure
- Then, you can choose what structure template you want to



Then, if you want your mind map more attractive, you can choose "markers" on the right side. You just have to drag the markers to your structure. You can scroll down if you want to see another marker.



✧ If you want to link two related subtopics, you can:

1. Click right
2. Click insert
3. Click "Relationship"



From This



To This

✧ If you want to group important subtopics, you can:

- Choose the subtopics that you want to group
- Click Right
- Click Boundary



From This



To This

✧ Last but not least, if you want to save your mind map, you can click this icon in the top left, then click export, and choose image. Then, finish



Once again, you can find this software easily on google. Just type xmind on google and this software will show up!





# Chapter Three

## Summarizing



### Summarizing: Capturing the Essence in Fewer Words

Summarizing is the art of condensing a text into a shorter version that captures the main points. It's like creating a miniaturized version of the original, ensuring the most important information is retained.

In our fast-paced world, information comes at us from all directions. Summarizing offers a powerful tool to cut through the clutter and efficiently grasp the key points of any text. Imagine a long article – summarizing allows you to condense it into a shorter version that captures the main ideas. It's like creating a miniature of the original, ensuring the most important information is preserved.

## **Applications of digital technology in COVID-19 pandemic planning and response**



The background from the article is because of the children to school in the flood area. The elementary school is the first stage formal school that teaches the paradigm about clean and healthy life behavior. If we do not plan it early, this will disrupt the learning performance and quality of children in the future. 08 Rawa Buaya elementary school has complained about the number of children suffering from diarrhea.

Almost 80% in 4th and 5th grade have diarrhea. The incidence of worms and leptospirosis is also prone to occur in a flood area. Quality of life is the primary effort to improve the quality of human resources related to the development and the country's economy. Why is the quality of life of children an influence on the future in development and the nation's economy?

This cross-sectional study involved observing all population members at one specific point in time. Here, the study involved all 4th and 5th-grade students as 127 people. The reason for selecting the group sample is that the 4th and 5th-grade students can describe their figures, write well, cooperate, and not disturb the National Examination execution.

They analyzed data using the chi-square test to find the relationship between Knowledge and Quality of life and the relationship between The Clean and Healthy Behavior (PHBS) and the quality of children. They measured those variables using questionnaires that have been validated and reliable.

The results show that children's knowledge about clean and healthy living behavior is still low. The proportion of PHBS is still lacking, so many have not practiced clean living behavior. These results show that to improve the quality of life of children, clean and healthy living behavior is needed. What are the things that significantly affect the quality of life of children in carrying out clean and healthy lives?





Families during the pandemic get wisdom because there is more time to the actual family with family. Fathers have more quality time, such as being a priest and helping to educate children at home. Mothers must be more thoughtful because children will ask many questions to their mothers. Happiness is simple and easy to achieve, just spending time with them sharing stories and laughing. For us as a family, this sense of togetherness and sense of belonging between us is what makes every moment of our family beautiful and memorable, wherever it may be.

## *Healthy Life style from Religious*

Nailiyah Hamdi	1805015123
Farhana Fadhilah	1805015066
Rezsa Izza Adriani	1805015027
Sarah Nur H	1805015054
Rachma Putri Harlani	1805015291
Hezra Syauqi	1805015164

Why summarizing is valuable:

**Saves Time:** Summaries allow you to grasp the gist of a lengthy text quickly, saving you precious time.

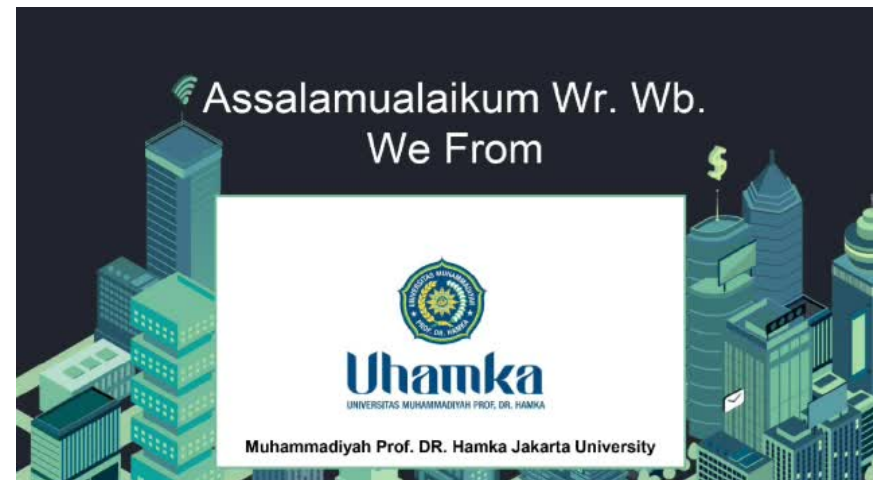
**Improves Comprehension:** summarizing requires close reading and analysis, leading to a deeper understanding of the original material.

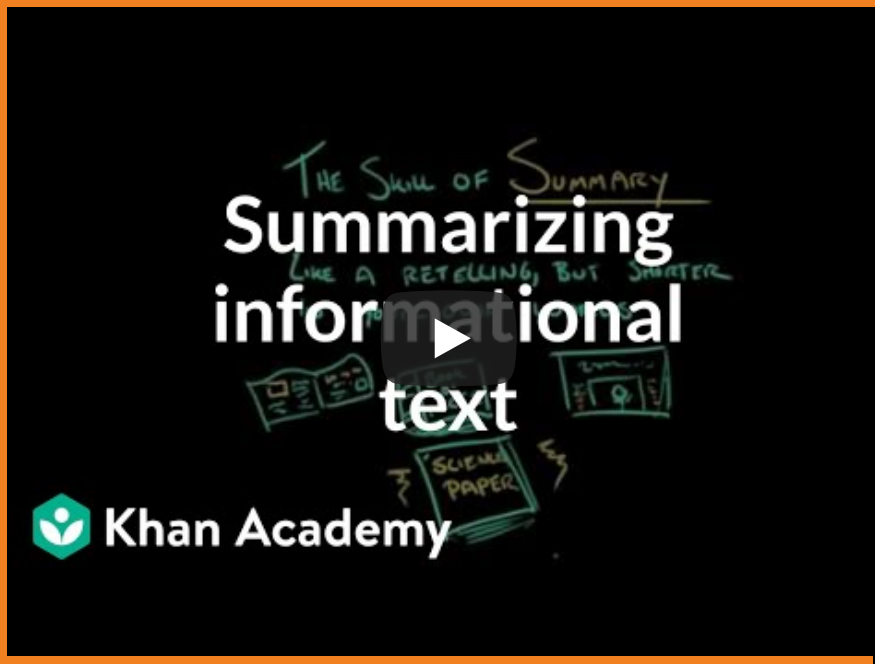
**Boosts Retention:** By condensing information, summaries help solidify key ideas in memory.

There are two main types of summaries:

**Extractive Summary:** This approach identifies and extracts key sentences from the original text. These sentences, often phrased exactly as written, are then compiled to form a concise summary.

**Abstractive Summary:** This method goes a step further. It involves understanding the overall meaning of the text and then rephrasing it in your own words, capturing the essence while potentially using different sentences and phrasing.





source : <https://www.youtube.com/watch?v=as7xe8UQEr4>

Extractive summaries are like a collection of highlights. It is identifying and extracting key sentences directly from the text, often using the exact wording.

Abstractive summaries take things a step further. Here, we delve deeper, understanding the overall meaning of the text and then rephrasing it in your own words. This method requires a stronger grasp of the material but allows for a more concise and potentially creative summary.

Some general tips for effective summarizing:

**Identify the Main Idea:** What is the central point the author is trying to convey?

**Pick out Key Sentences:** Look for sentences that directly express the main idea or supporting arguments.

**Paraphrase:** Restate important information in your own words.

**Maintain Focus:** Avoid getting sidetracked by irrelevant details.

**Keep it Concise:** The summary should be significantly shorter than the original text.

# Procedure

- 1
- 2
- 3
- 4
- 5

## Chapter Four









## A Traditional Beverage From Jakarta

Group one :

1. Yasmin Izzaturahmah Mumtazah (2005025149)
2. Anisa Diah Roselawati (2005025145)
3. Vinca Saraswati (2005025170)
4. Muhammad Daffa Herdiana (2005025179)



**Es Doger**

Jamu is a traditional medicinal drink originating from Indonesia which is used to treat and prevent disease

In Indonesia, there are some areas that have traditional ways to treat and prevent disease, such as in Java where medicinal plants are used to be processed into jamu that can be drunk by people who are sick

## Jamu Beras Kencur

Ita Rahma Hanifah  
2005025155

37



Jamu is a traditional medicinal drink originating from Indonesia which is used to treat and prevent disease

One of the herbs that is beneficial for health is the jamu beras kencur, beras kencur helps to overcome digestive disorders, such as stomachaches and diarrhea, and can prevent diabetes

## 01 Ingredients



### Ingredients

01  
200 grams  
of rice

02  
1500 ml of  
water

03  
50 grams of  
Kencur

04  
15 grams of  
ginger

05  
2 tbsp  
Tamarind

06  
300 grams of  
brown sugar

07  
Salt

08  
Sugar

09  
2 lime

10  
1 sheet of  
pandan leaves

38

## How to make



### First

Soak the rice in clean water for 3 hours

### Second

Take a saucepan, add water & turn on the stove over medium heat



### Third

Add ginger, tamarind, pandan leaves, kencur and palm sugar. Stir until all ingredients are well blended



## Step by step

### Fourth

Cook until the water boils then turn off. Filter the soaking water



### Fifth

Take the dregs, mash finely with the kencur and the soaked rice. Mash all ingredients until smooth

### Sixth

Place the collision of ingredients on top of the filter. Flush with the soaking boiled water from the first pot so that the taste and aroma of the kencur rice is more pronounced

### Seventh

Enter the lime juice that has been squeezed into the water that was poured above. Add salt

# 02 Recipe



Jamu Beras Kencur



It's good to drink when it's hot



## How to make



### First

Soak the rice in clean water for 3 hours

### Second

Take a saucepan, add water & turn on the stove over medium heat



### Third

Add ginger, tamarind, pandan leaves, kencur and palm sugar. Stir until all ingredients are well blended



# 02 Recipe

## Step by step

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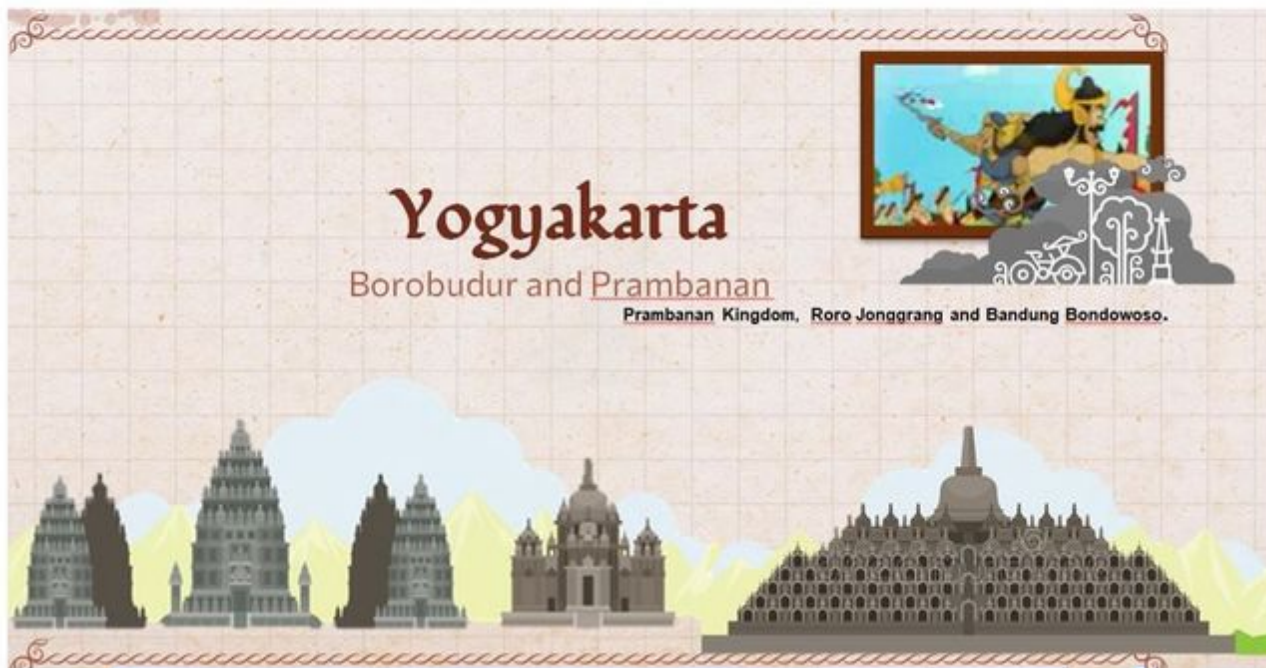
Jamu Beras Kencur



It's good to drink when it's hot



# Local Wisdom





# Language Learning Story

Mustika Dyah Widyasari 2001055037  
Academic Listening Speaking 3B

## My English Language Learning Story

"I will tell you about my journey to learn English as a life journey to learn the language."

This story begins with my mother who is an English teacher at a vocational high school. Since childhood my mother never taught me English but, somehow English is the subject that I like.







I started studying English since I was in 8th grade. Everything I learned in school was tenses, verb conjugations, plural rules. Every English lesson my teacher requires us to write tenses and new words by writing them 10 times. Learning English has always been a challenge for me. I'm sick of vocabulary, grammar rules, English. And then one day, when I was probably in 11th grade of high school I tried to delve deeper into it, and I bought a book on tenses and I studied. Apart from learning from books and from teachers at school, I learn through watching English TV and English novels. The novel is called the lovely bones. I have taken quite a lot of vocabulary from Novels and it has been an unforgettable experience. I remember at that time, I downloaded many game applications about English to my cellphone and played them every day.



source:

<https://www.youtube.com/watch?v=7P4fzbzwwAg>

### The Three Main Parts:

An essay is like a well-built house; it needs a strong foundation, a solid body, and a tidy roof. In the world of essays, these translate to three key parts:

1. **Introduction:** This is your welcoming handshake. It grabs the reader's attention, introduces the topic, and provides some background information. The introduction should culminate in your thesis statement, which is the central argument or point of your essay.

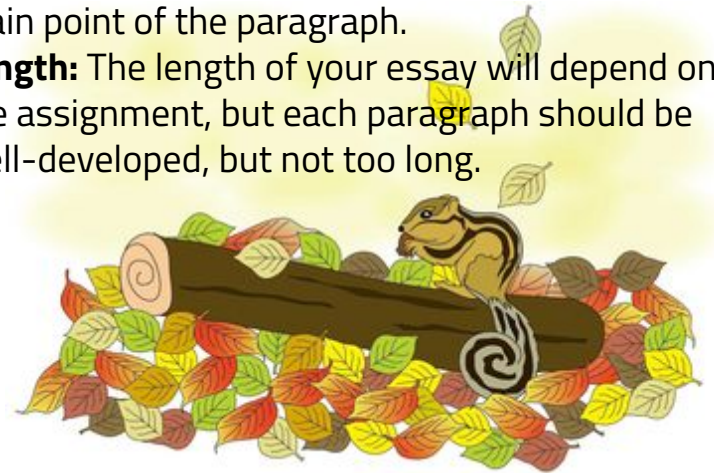
**Body Paragraphs:** Think of these as the supporting pillars of your essay. Each paragraph should focus on a single main point that relates back to your thesis. Use evidence, examples, and explanations to develop your arguments and convince your reader.

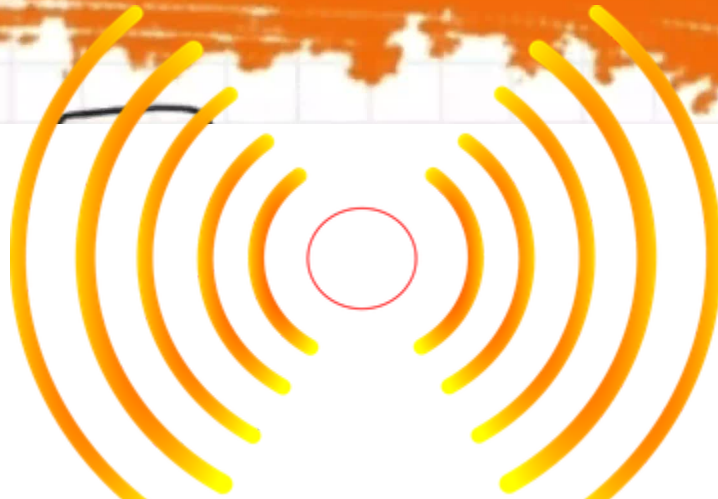
**Conclusion:** This is where you wrap things up. Briefly summarize your main points, restate your thesis in a new way, and leave the reader with a final thought or impression.

### Building on the Basics:

While this is the core structure, essays can be more nuanced. Here are some additional points to consider:

- **Transitions:** Use transitions between paragraphs to smoothly guide your reader from one point to the next.
- **Topic Sentences:** Each body paragraph should start with a topic sentence that introduces the main point of the paragraph.
- **Length:** The length of your essay will depend on the assignment, but each paragraph should be well-developed, but not too long.





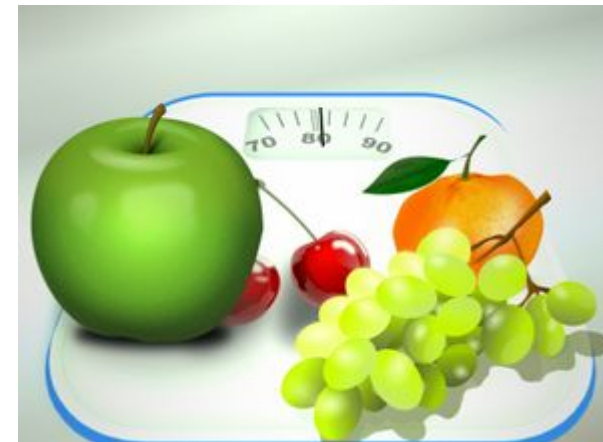
46

*overweight*



*become*

*overweight*

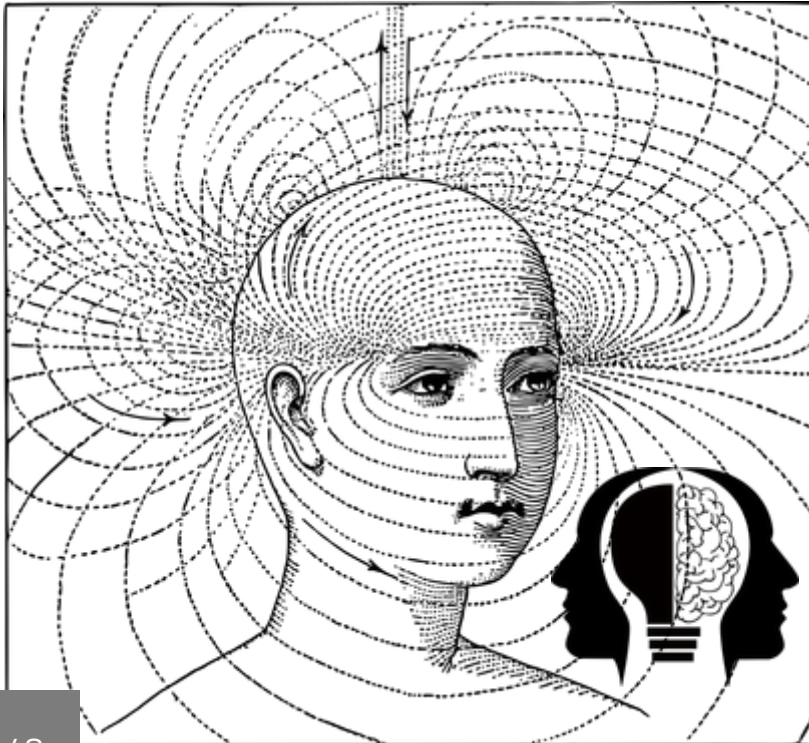


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# Chapter 5

## Language and Mind



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The phrase "Language and Mind" can refer to two main things:

The inherent link between human language and the human mind. How does our brain process language and allow us to communicate and understand complex ideas?

A 1968 book by Noam Chomsky, a famous linguist, that explores this very topic.

The study of language and mind is a fascinating field that sits at the intersection of linguistics, psychology, neuroscience, and philosophy. Researchers in this field are trying to answer questions such as there are many theories about the relationship between language and mind.

Some theorists believe that language is a learned behavior, while others believe that we are born with a predisposition for language. Some believe that language is a modular system in the brain, while others believe that it is more distributed.

The study of language and mind has important implications for our understanding of human communication, education, and artificial intelligence.

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# Brain and Language



source

<https://www.youtube.com/watch?v=zj0yud4wv74>

Our brains are truly remarkable language machines! Let's delve deeper into the fascinating relationship between brain and language.

## The Language Powerhouse:

**Brain Regions:** While language processing is spread across various regions, some areas play a starring role. Located primarily in the left hemisphere, Broca's area is crucial for speech production, while Wernicke's area is involved in language comprehension. These areas work together like a well-oiled machine, allowing us to form sentences and understand spoken or written language.

**The Journey of a Word:** Imagine hearing a word. Sound waves travel to your ears and are converted into electrical signals. These signals zip to the auditory cortex in your temporal lobe, then get relayed to Wernicke's area for comprehension. For speaking, Broca's area takes center stage, selecting the right words and organizing them grammatically. Finally, the motor cortex coordinates your mouth and throat muscles to produce speech.

## Language Acquisition: A Marvel of Development:

How do we learn language seemingly effortlessly as children? The exact process is still being unraveled, but it involves a fascinating interplay of factors. Newborns appear to have a predisposition for language, allowing them to distinguish speech sounds and patterns. Exposure to language, especially during critical developmental windows, allows the brain to form the neural networks necessary for language processing.

**Beyond Words:** Language isn't confined to spoken or written words. Sign languages also activate similar brain regions involved in spoken language. Additionally, gestures, facial expressions, and tone of voice all play a role in human communication and are processed by various brain regions.

# Meaning and language



source

<https://www.youtube.com/watch?v=-6hoDNZoV5g>

The relationship between meaning and language is complex and fascinating. It's a bit like a chicken and egg situation – does language create meaning, or does meaning exist independently and language simply express it?

Here are some key points to consider:

**Language as a Tool:** On a basic level, language acts as a tool to convey meaning. We use words, phrases, and grammar to express thoughts, ideas, and emotions. Without language, it would be incredibly difficult to share complex concepts.

**Arbitrary Connection:** The connection between words and their meaning is often arbitrary. There's no inherent reason why the word "chair" refers to a piece of furniture for sitting. This connection is established by convention and learned by speakers of a language.

**Shaping Perception:** Language can actually shape how we perceive the world. The words we use can influence our thoughts and understanding of reality. For example, some languages have different words for different shades of blue, while others might have just one word. This difference can affect how speakers of those languages categorize and perceive the color spectrum.

## **Beyond Words:**

Meaning isn't solely confined to words. Facial expressions, body language, tone of voice, and cultural context all play a role in conveying meaning. A simple "hello" can have vastly different meanings depending on how it's delivered.



source

<https://www.youtube.com/watch?v=zmwgmt7wcv8>

The human brain and language have a remarkable partnership. Our brains are the complex machinery behind our ability to understand and use language, while language itself shapes how we think and perceive the world. Let's delve into this fascinating interplay:

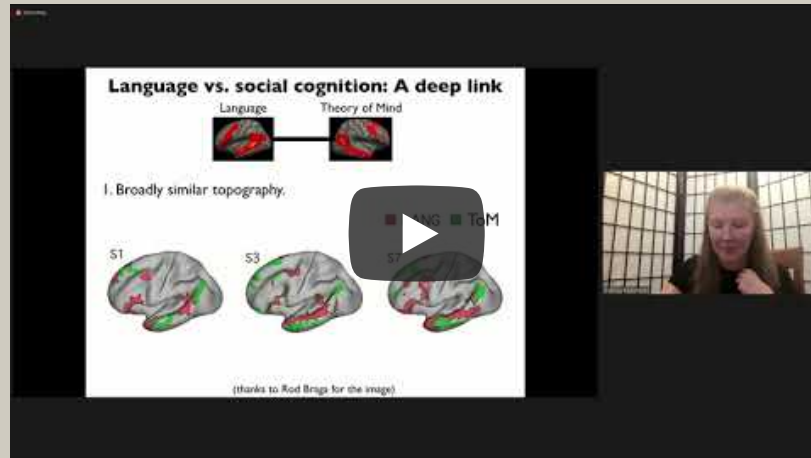
### **Brain Regions for Language:**

While language processing is spread across various brain regions, some areas play a particularly critical role. Located primarily in the left hemisphere, Broca's area is associated with speech production, while Wernicke's area is involved in language comprehension. These areas work together to allow us to form sentences and understand the meaning of spoken or written language.

**The Journey of a Word:** When you hear a word, sound waves travel to your ears and are converted into electrical signals. These signals travel to the auditory cortex in your temporal lobe, which then relays them to Wernicke's area for comprehension. For speaking, Broca's area plays a key role in selecting the appropriate words and organizing them grammatically. The motor cortex then coordinates the muscles in your mouth and throat to produce speech.

**Language Acquisition:** How do we learn language seemingly effortlessly as children? The exact process is still being explored, but it involves a combination of factors. Newborns appear to have a predisposition for language, allowing them to distinguish speech sounds and patterns. Exposure to language, especially during critical developmental windows, allows the brain to form the neural networks necessary for language processing.

## Human Language system in mind and brain



source

<https://www.youtube.com/watch?v=edIY4GbH1tU>

**Beyond Words:** Language isn't just about spoken or written words. Sign languages also activate similar brain regions involved in spoken language. Additionally, gestures, facial expressions, and tone of voice all play a role in human communication and are processed by various brain regions.

**The Impact of Damage:** Damage to specific brain regions can lead to language disorders like aphasia. Depending on the location of the damage, people with aphasia may struggle with speech production, comprehension, or both. Studying these disorders helps us understand the neural basis of language.

The study of brain and language is a continuously evolving field. Researchers are using advanced brain imaging techniques to better understand how our brains process language. This knowledge can not only improve our understanding of communication but also has applications in areas like stroke rehabilitation and language learning.

## Noam Chomsky's : Syntactic Structures, Language and Mind



source

<https://www.youtube.com/watch?app=desktop&v=L.Bb7vuOjmdU>



# Philosophy of language and mind



source

<https://www.youtube.com/watch?v=g72d-OWq1RU>

The philosophy of language and mind dives deep into the intricate relationship between our thoughts, the words we use to express them, and the underlying cognitive processes that make it all possible. Here are some central themes explored in this field:

## 1. The Nature of Meaning:

**Reference and Representation:** How do words connect to the world around us? Do they simply refer to objects and ideas, or do they actively shape how we understand them?

**Mental Content and Thought:** Is language a reflection of pre-existing thoughts, or does it play a role in constructing our thoughts themselves?

## 2. Language and Thought:

**Whorfian Hypothesis:** This theory, proposed by Benjamin Lee Whorf, suggests that the language we speak determines how we think. For example, languages with many words for different colors might lead to a more nuanced perception of color compared to languages with fewer color terms.

**Innate vs. Learned Structures:** Are there universal structures or concepts that underlie all languages, suggesting an innate language faculty in the human brain? Or is language entirely learned through social interaction?

## 3. Communication and Intention:

**Speech Acts:** How do we use language to do more than just describe the world? We can make requests, give orders, or offer apologies through the way we structure our sentences and deliver them.

**Intentionality and Meaning:** What role does the speaker's intention play in conveying meaning? Can the same words have different meanings depending on the context and speaker's intent?

## 4. The Problem of Other Minds:

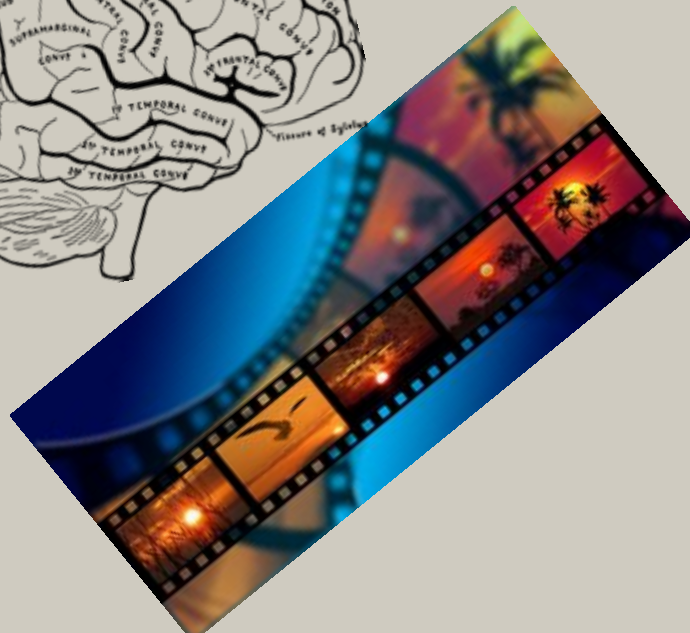
How can we ever truly know what's going on in another person's mind? Do their words reliably reflect their thoughts and feelings, or is there always a gap between what's said and what's meant?

# Chapter Six

## Image and Memory



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Images and memory are closely linked. Our brains process and store information visually very effectively, and images can act as powerful triggers for memories. Here's a breakdown of this fascinating connection:

**Visual Processing Power:** The human brain devotes a significant amount of processing power to vision. This makes images a natural and efficient way to encode information.

**Dual Coding Theory:** This theory by Allan Paivio proposes that our brains store information in two main formats: verbal and visual. Images activate both pathways, potentially creating stronger memories compared to text alone.

**Emotional Connection:** Images can evoke emotions more readily than text. A picture of a loved one or a cherished place can trigger a flood of memories associated with strong emotions.

**Mnemonics and Memory Aids:** Many memory techniques rely on creating vivid mental images to enhance recall. For instance, the method of loci involves placing memories in specific locations along a familiar path you can visualize.

**Eidetic Memory:** While rare, some individuals possess eidetic memory, also known as photographic memory. This allows them to recall images in incredible detail, almost like a snapshot from their mind's eye.

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## How computer store images



source

<https://www.youtube.com/watch?v=EXZWHumclx0>

Computers don't store images in the same way our brains do. Instead of a visual representation, they store images as digital data using a system of ones and zeros. Here's a breakdown of the process:

1. **Pixels and Resolution:** An image is made up of tiny squares called pixels. The more pixels an image has, the higher the resolution and the sharper the image appears. Each pixel represents a specific location in the image.

2. **Color and Value:** Computers represent color information using various methods, depending on the image format. A common method is RGB (Red, Green, Blue). Each pixel stores a value for red, green, and blue, which determines the final color displayed. For gray-scale images, a single value per pixel represents the shade of gray.

3. **Digital Conversion:** When you take a picture with a digital camera or download an image from the internet, it goes through a process called analog-to-digital conversion. Analog signals from the camera sensor or image file are converted into digital data consisting of ones and zeros.

4. **Image Formats:** Images are stored on computers in various formats, each with its own way of compressing and storing the data. Some common formats include JPEG, PNG, and BMP. JPEG uses compression techniques to reduce file size, while PNG offers lossless compression for sharper images but larger file sizes.

5. **Storage Devices:** The actual digital data is stored on physical storage devices like hard drives, solid-state drives, or even on online storage platforms. These devices use magnetic or electrical means to represent the ones and zeros that make up the image data.

## How does brain store memories



source

[https://www.youtube.com/watch?v=EVGOywcov\\_I](https://www.youtube.com/watch?v=EVGOywcov_I)

The human brain stores memories through a complex interplay between neurons (brain cells) and the connections between them. Here's a breakdown of the key processes:

### **Neurons and Synapses:**

Our brains are composed of billions of neurons, which communicate with each other through tiny gaps called synapses. These connections are like the building blocks of memory.

### **The Power of Repetition:**

When we learn something new, the involved neurons fire together. The more we repeat this process (think practicing a new skill or revisiting information), the stronger the connections between these neurons become. Stronger connections translate to better memory consolidation.

### **Long-Term Potentiation:**

This is a scientific term for the strengthening of synapses that occurs with repeated stimulation. It's a key mechanism in memory formation. As neurons fire together frequently, the synapses between them become more efficient at transmitting signals, making the memory more likely to be stored long-term.

## From Brain to AI



source

<https://www.youtube.com/watch?v=g08A2wiqlxA>

When it comes to artificial intelligence, the human brain serves as a source of inspiration and a point of comparison. Here's how the brain and AI intersect:

### **Brain Inspiration for AI:**

**Neural Networks:** The brain's structure, with interconnected neurons firing together, inspired the development of artificial neural networks (ANNs). ANNs are algorithms loosely modeled after the brain, where artificial neurons process information and learn through adjustments in connections. These networks are the foundation of deep learning, a powerful subset of AI that has achieved remarkable results in areas like image recognition and natural language processing.

**Learning and Adaptation:** The human brain's ability to learn and adapt is another key inspiration for AI. Researchers are developing machine learning algorithms that can learn from data without explicit programming, mimicking how the brain learns from experience.

### **Challenges in AI Inspired by the Brain:**

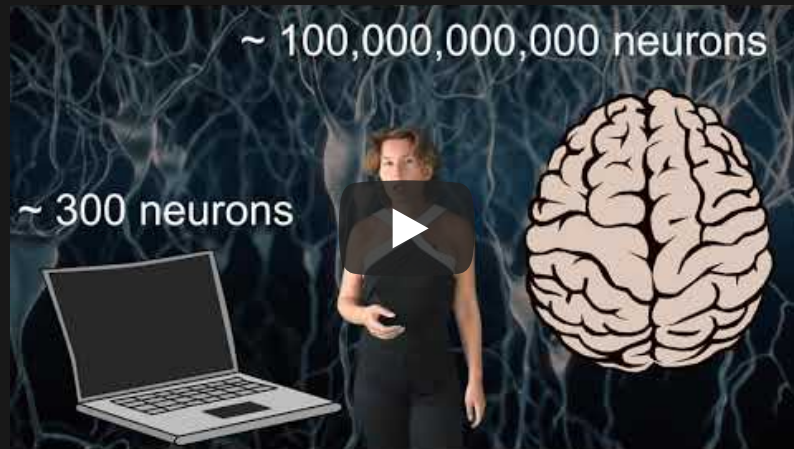
**Efficiency:** The human brain is incredibly efficient, consuming relatively little power while performing complex tasks. Current AI models, while powerful, can be computationally expensive to run.

**General Intelligence:** Humans possess general intelligence, allowing us to apply knowledge and skills to new situations. Most AI systems are narrow AI, excelling at specific tasks but lacking the flexibility of human intelligence.

**Consciousness:** The question of whether AI can achieve consciousness, a hallmark of the human mind, remains a complex debate.



# Human and Artificial Intelligent



source

<https://www.youtube.com/watch?v=fxiHM11w-rk>

The relationship between humans and artificial intelligence (AI) is a complex and fascinating one. Here's a look at some key aspects of this evolving relationship:

## **Collaboration and Assistance:**

AI excels at tasks involving vast amounts of data or complex calculations. This makes AI a powerful tool for humans in various fields:

**Scientific Discovery:** AI can analyze massive datasets to identify patterns and relationships that might elude human researchers.

**Medical Diagnosis:** AI can assist doctors in analyzing medical images or patient data to improve diagnosis accuracy.

**Business and Finance:** AI can analyze market trends, predict customer behavior, and optimize business processes.

## **AI Integration into Daily Life:**

AI is becoming increasingly integrated into our daily lives:

**Personal Assistants:** Virtual assistants like Siri or Alexa use AI to understand voice commands and perform tasks like setting reminders or playing music.

**Smart Home:** AI-powered thermostats, lights, and appliances can learn our preferences and adjust automatically.

**Transportation:** Self-driving cars and delivery drones rely on AI for navigation and decision-making.

## **The Future of Work:**

AI automation is transforming the job market. While some jobs might be replaced by AI, new opportunities will probably emerge:

**Human-AI Collaboration:** Many jobs will involve a collaborative effort between humans and AI, with each leveraging their unique strengths.

**New Roles in AI Development and Management:** As AI becomes more complex, there will be a growing demand for professionals who can design, develop, and manage these systems.

## How AI mimic Human Brain



source

<https://www.youtube.com/watch?v=DMRpjYwA9Pg>

AI mimics the human brain in a number of ways, but it's important to remember it's not creating a perfect copy. Here's a breakdown of the key areas of inspiration and the current capabilities:

### **Mimicking Structure and Function:**

**Artificial Neural Networks (ANNs):** These are loosely modeled after the brain's structure of interconnected neurons. ANNs consist of layers of artificial neurons that process information and learn by adjusting the connections between them. This allows them to identify patterns and make predictions based on data.

**However,** unlike real neurons, artificial neurons are much simpler and don't replicate the complex biological processes that occur in the brain.

### **Mimicking Learning:**

**Machine Learning:** This field of AI focuses on algorithms that can learn from data without explicit programming. Similar to how the brain learns from experience, machine learning algorithms can improve their performance on a task as they are exposed to more data.

**However,** machine learning algorithms are typically trained on very specific tasks and don't exhibit the general intelligence of the human brain, which allows us to apply knowledge to new situations.

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## **COMMUNICATION STRATEGIES IN LANGUAGE LEARNING**

Strategy training is one way to equip the university students to deal with problems they face in learning English. The shared effects of students' attitudes and affective strategy should be considered of contributing the students' speaking and writing performances.

Therefore, a model of affective strategies training, in a form of the combination of both variables is in need to overcome the challenges and create autonomous learning that contributes greater effects on the students' speaking and writing performance to an increase of the students' awareness and responsibilities to learn.

Adjusting the supported learning environment set systematically to build creative thinking and cultural awareness in any other challenging EFL contexts are suggested for further application.

