



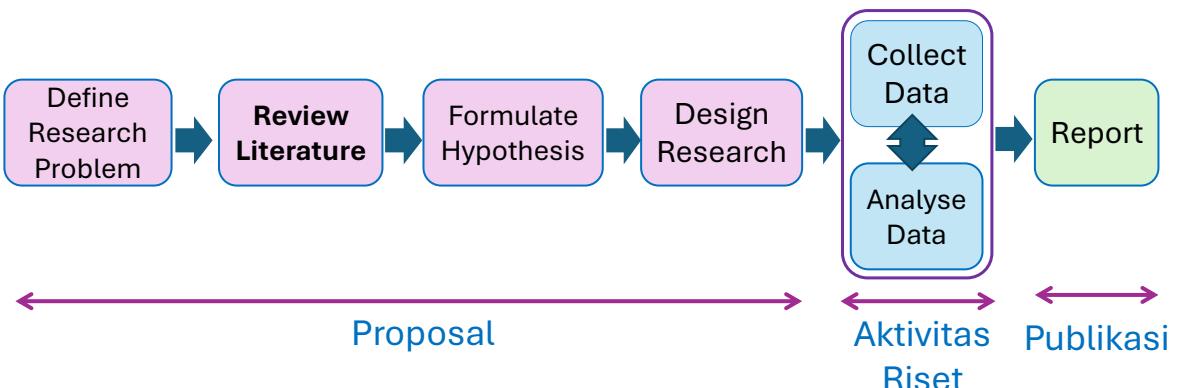
## Materi

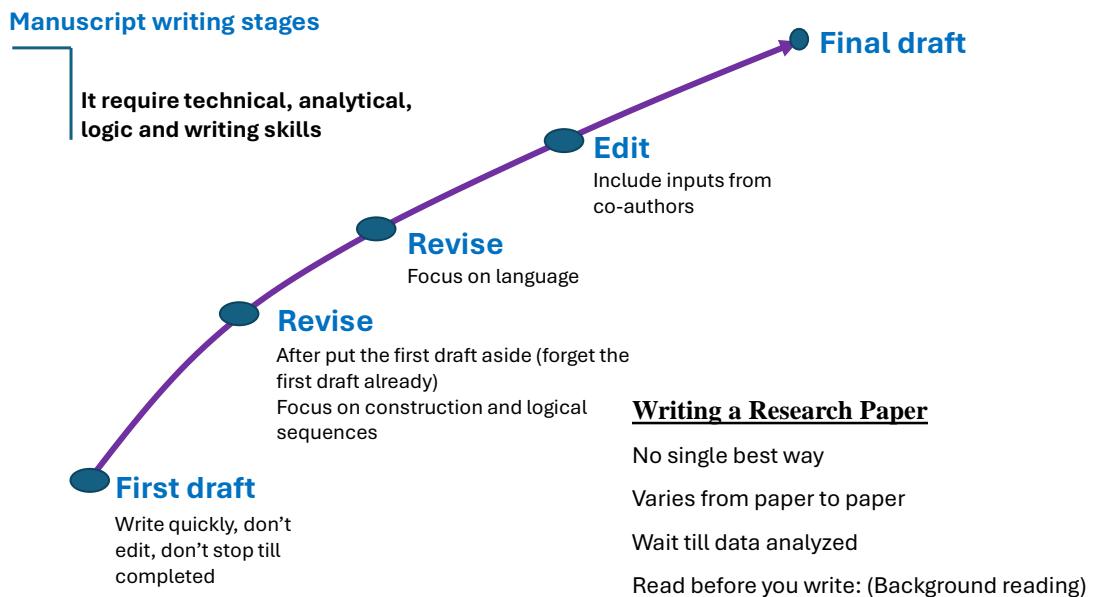
**Sesi 1:** Prompting Untuk Akademik, Editing

**Sesi 2:** Persiapan dan Menulis Naskah

**Sesi 3:** Pengeditan Akhir Naskah, Persiapan Publikasi, Dunia Publikasi

**Research Process:** series of actions or steps necessary to effectively solve a research problem.





### Materi Sesi #1

1. Intro – Gurita AI - Pengenalan ChatGPT
2. Recap – Menulis metode tradisional
3. Perekayasaan Prompt untuk Akademik (Demo editing) – Custom GPT
4. Menulis dengan Custom GPT: Manuscript Editing
5. Menulis dengan Custom GPT: Advanced Editing

### Materi Sesi #2

1. Pre-writing
2. Recap - Data analytics and visualization
3. Drafting manuscript from pre-writing data
4. Advanced Editing

### Materi Sesi #3

1. Pre-submission preparation
2. Best practices of effective journal submission

## 1. Gurita Disrupsi AI



The New York Times

A.I.'s Threat to Jobs Prompts Question of Who Protects Workers

The Guardian

AI will take some jobs, but mass unemployment isn't inevitable

Forbes

Goldman Sachs Predicts 300 Million Jobs Will Be Lost Or Degraded By Artificial Intelligence

IoT For All

The Impact of Artificial Intelligence - Widespread Job Losses

CNN

300 million jobs could be affected by latest wave of AI, says Goldman Sachs

Financial Times

Generative AI set to affect 300mn jobs across major economies

Analytics India Magazine

Future Tense: What Happens to a Data Scientist in an LLM World?

The role of data scientists is swiftly transforming and probably being elbowed out by foundational models.

## Gurita AI

Graduate Research Academy  
Do more with less by utilizing AI

Membuat Video Dengan Input Text  
Membuat Lagu/Musik Dengan Input Text  
Dangdut?



Published: September 19, 2023 6:56am BST

**Virtual influencers:** meet the AI-generated figures posing as your new online friends – as they try to sell you stuff



lentaripagi Follow Message

370 posts 188K followers 473 following

Lentari van Loraine ID X NL

lentaripagi

Digital creator

The 1st Virtual Idol from id

Developed by Imagined Studio

Business inquiries wa : +62877-6024-1655



ai.isabella\_ Following Message

26 posts 10.6K followers 170 following

Isabella Gutierrez

Artist

Hii! I'm Isabella, a Spanish/Indonesian AI Model created by

@tommysiahan Thank you for following my journey. 🌟🌟🌟

## Mengenal dan beradaptasi dengan LLM (ChatGPT)

Kecerdasan Buatan (AI), mesin yang meniru kecerdasan manusia.

Sebuah model bahasa AI adalah jenis sistem kecerdasan buatan yang dirancang untuk memahami dan menghasilkan teks mirip manusia.

The screenshot displays a list of Large Language Models (LLMs) categorized into three main sections: GPT-4, Llama, and PaLM. Each section includes a sub-section for specific applications.

Model	Sub-Section	Description
GPT-4	Aya	Cohere
GPT-4	BERT	
GPT-4	Translation	
GPT-4	Coding	
GPT-4	Orca	
GPT-4	Falcon	
GPT-4	MPT	
Llama	BLOOM	
Llama	LaMDA	
Llama	Vicuña	
Llama	Content creation	
Llama	Question answering	
Llama	Bard	
Llama	Gemini	
PaLM	Claude	
PaLM	Alpaca	
PaLM	Anthropic	
PaLM	Natural language process...	
PaLM	Sentiment analysis	
PaLM	Llama by Meta AI	
PaLM	StableLM	

ChatGPT adalah model bahasa AI yang dikembangkan oleh OpenAI; memahami dan menghasilkan teks **mirip manusia**.

Akses ChatGPT: <https://chat.openai.com/>

Upgrade your plan

The screenshot shows the ChatGPT pricing page. It compares two plans: 'Plus' (USD \$20/month) and 'Team' (USD \$25 per person/month). The 'Team' plan includes an 'Add Team workspace' button. Below the plans, a list of features for each is provided. To the right, the GPT model selection interface is shown, listing GPT-4o (selected), GPT-4, and GPT-3.5, with a 'Temporary chat' toggle.

Plan	Price	Features
Plus	USD \$20/month	- Access to GPT-4, our most capable model - Browse, create, and use GPTs - Access to additional tools like DALL-E, Browsing, Advanced Data Analysis and more
Team	USD \$25 per person/month*	- Everything in Plus, and: - Higher message caps on GPT-4 and tools like DALL-E, Browsing, Advanced Data Analysis, and more - Create and share GPTs with your workspace - Admin console for workspace management - Team data excluded from training by default. <a href="#">Learn more</a>

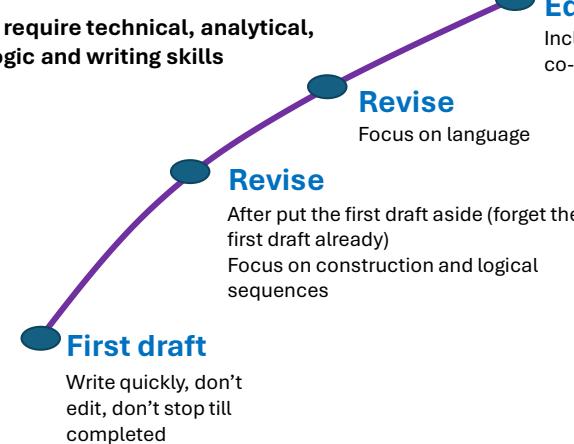
\* Price billed annually, minimum 2 users

Need more capabilities? See [ChatGPT Enterprise](#)

## Eksplorasi Fitur GPT

## 2. Menulis Tradisional

### Manuscript writing stages



### Writing a Research Paper

- No single best way
- Varies from paper to paper
- Wait till data analyzed
- Read before you write: (Background reading)

## Four STEPS in Writing a Research Paper

- Pre-writing  
Think, plan and make a structure
- Drafting  
Write
- Revising  
Make it better
- Editing  
Make it correct, proof-read

### Prepare an outline

#### Format

- Traditional (Sections and sub-sections)
- Mind-Mapping
- Sentence

#### Approaches

- Analyze how others have organized the topic
- Create a tentative outline
- Consider content for tables and figures

#### Best practice in structuring the manuscript

- A definite structure, clear points
- The most difficult: planning structure
- Main point – supporting points
- A scaffold of headings and subheadings
- IMRAD: each on a separate sheet (**block-by-block**)

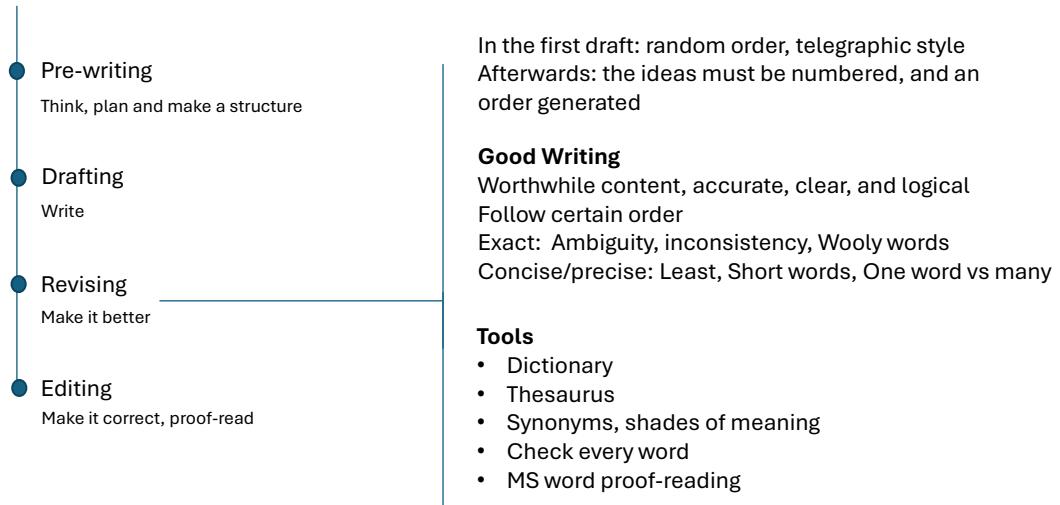
## Four STEPS in Writing a Research Paper

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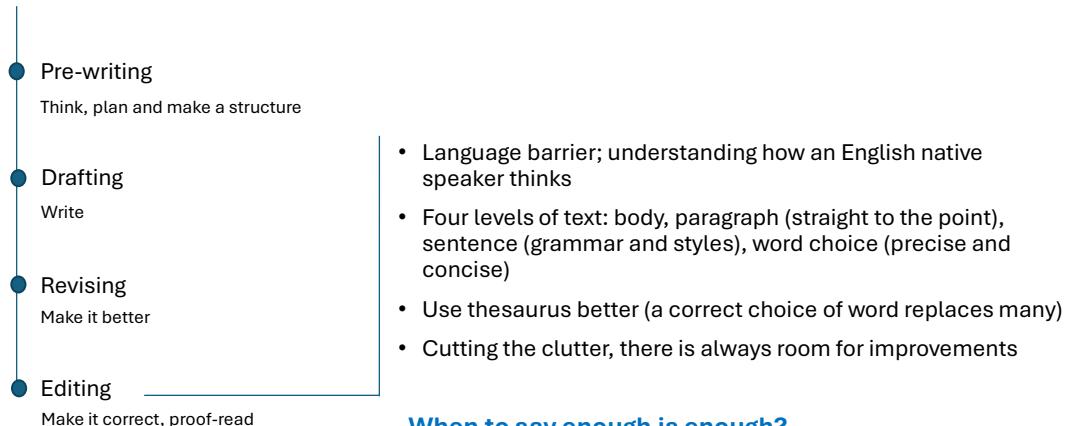
### Common issue: simultaneous drafting and revising

- Write quickly
- As if thinking out loud
- Get everything down
- Ignore spelling, grammar, style
- Skip troublesome words
- Correct and rewrite only when the whole text is ready
- Do not split the manuscript among the co-authors

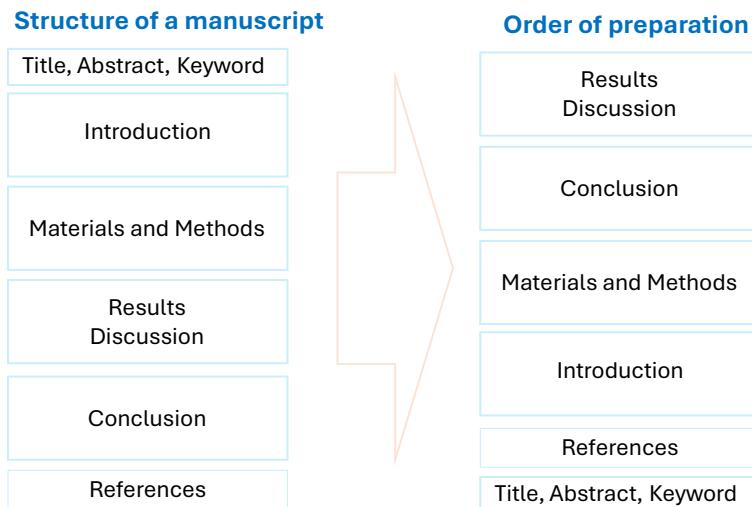
### Four STEPS in Writing a Research Paper



### Four STEPS in Writing a Research Paper



## Anatomi dan kaedah penulisan naskah



## Writing Results and Discussion

Common structure of results and discussion

Present the → Describe → Discuss (why) → Compare and contrast  
data/trend/finding

- It tells reader the value of the works
- It help to convince readers about the contribution of the work
- It use data in the results, interprets findings, evaluate their significances examine and state its implications

### Tips in developing a good discussion

- Begin with a sentence that answer research question
- Mention new findings, knowledge and concept that discovered in the study
- State if the work achieve the goal of answering the research question
- State if exceptions or unexplained results are found
- Discuss any possible application of the findings
- Compare results and interpretation with published work, overthought it may disagree with the findings

## Writing the Conclusion

- First: summarized the main results, state the claim!!!
- Second: Summarized the main discussion
- Provide implication of the major findings
- Suggest future works (optional)
- **It should NOT be another abstract**

## Writing Materials and Methods

### The functions:

- To allow readers repeat the experiments if required
- To convince that the works have been done systematically and thoroughly using appropriate equipment and following standards
- It is the easiest section to write
- Write it after the discussion and conclusion
- Most of the sentences are in the past tense

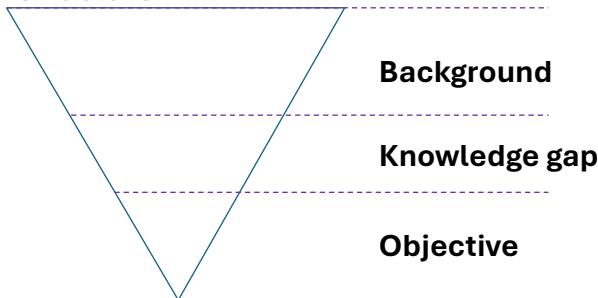
### It contains

- selection and description of study component
- Data collection process
- Method used for analysis
- It includes exact technical specifications, quantities, source or method of preparation
- Sometimes, it is required to list the physical properties of the reagent/materials used

## Writing Introduction

- It is a place where readers settle into the “story” of your research
- Make it interesting; readers will read in full
- It follows reverse-pyramid structure

### Structure



## Writing Introduction

### What to do?

- Consider the nature of the scope of the problem
- Literature review
- Rationale (why we do the study)
- Include only important references
- Define a special term (first time mentioned)
- Clearly state the objective
- A brief outline of scope and rationale in method selection

### What NOT to do?

- Lengthy
- Mixing introduction with results, discussion, and conclusion
- Vague expression (i.e., novel, first time, first-ever, never reported)
- Citing outdated references
- Excessive citation from one author

## Referencing

- **When need to cite a reference?**
- Follow formatting according to journal guideline
- It is tedious and laborious work if done manually
- Use referencing manager
  - Zotero → free
  - Mendeley → free
  - End-note → requiring subscription
- Always re-check – multiple citations of one reference sometimes happen
- Adjust to the aimed journal (cite their paper, cite highly cited articles in the field)

## Writing Title

- The most important phrase of the manuscript; It appears first, but prepared last
- **Types**
  - **Descriptive:** Describe the subject of the article and do not reveal the outcome or conclusion
  - **Declarative:** Include what article say (main conclusion), not just what it covers
  - **Question:** Indicate the subject of the article in the form of a question
- **Criteria of a good title:**
  - It captures attention
  - It sets the tone for the readers to read or not read an article
  - Limit the number of words (maximum 20)
  - Be specific!
- **Remark:**
  - A catchy title can persuade reader to read, but will not turn a bad article into a good one
  - **Keywords and terms used by search engines like “google” → Citation!!!**

## Writing Title

### Best advices

- Capture the topic of the paper and possibly the findings
- Avoid the term “novel”
- Avoid abbreviation since it often confuse readers
- Abstracting and indexing used (only) the title to extract keywords for computer searching
- .....

### Avoids:

- “A comprehensive study of .....”
- “Research on.....”
- “Studies on.....”
- “Investigation on .....”
- “A study of .....”
- .....

## Writing Abstract

- An abstract is a short version of a paper
- It stand on its own without the need to read the full manuscript
- It follows the order of the main text
- Follow a certain style and format
- Normally has limited length (150-300 words)

### A good abstract

- The first sentence is the most important:  
Must be well-written, informative and capture the reader's interest
- It **should not** contain information that is absent in the manuscript
- Limits the use of abbreviations
- Does not include references
- Should be a single paragraph
- Is written after completing the main text

### Structure

Introduction and Objective	15%
Methodology	20%
Results and Discussion	50%
Conclusion	15%

### 3. **Prompting** dalam Naskah Akademik

- Memberikan teks awal/pertanyaan untuk membimbing AI dalam menghasilkan respons/jawaban.
- Berperan penting dalam memunculkan respons otentik, memastikan responsnya relevan, kohesif, dan sesuai kemauan pengguna.
- Prompting yang efektif: **Digital Organism**
  - Jelas dan spesifik
  - Konteks yang relevan, **berikan waktu untuk berpikir**
  - Gunakan bahasa yang ringkas (mudah dipahami)
  - (Jika bisa) lebih baik menggunakan Bahasa Inggris
  - Batasi/Tidak meluas; tidak juga terlalu detail → Berikan ruang kreatifitas
  - **Berikan contoh**
  - **Berikan umpan-balik/feedback (biarkan GPT mengenalmu)**

## Simple vs Complex Prompting

### Simple Prompting

Ringkas artikel berikut ini:

"Perubahan iklim adalah perubahan signifikan dalam pola cuaca yang terjadi selama periode waktu yang panjang. Fenomena ini disebabkan oleh aktivitas manusia seperti pembakaran bahan bakar fosil, deforestasi, dan emisi gas rumah kaca lainnya. Dampak perubahan iklim meliputi naiknya permukaan laut, cuaca ekstrem, dan hilangnya biodiversitas."

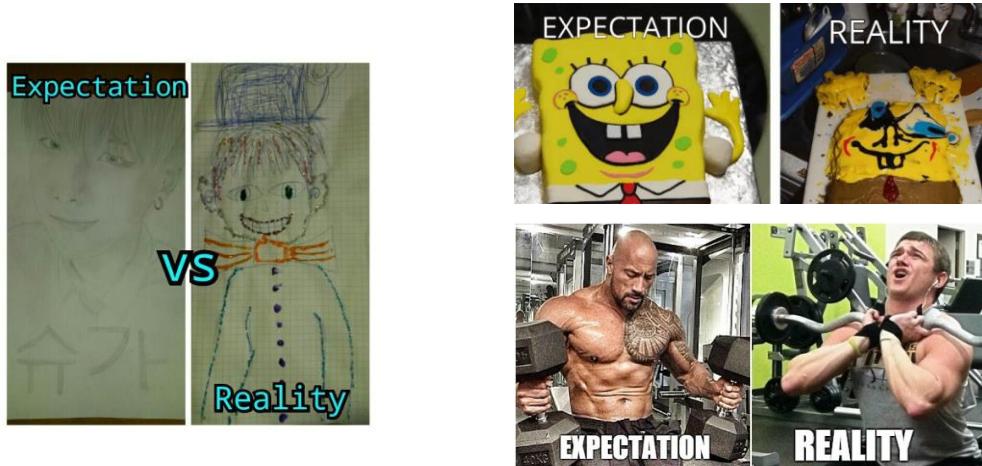
Buat 3 pertanyaan kuis berdasarkan topik "Sistem Pencernaan Manusia".

Apa definisi dari 'Fotosintesis'?

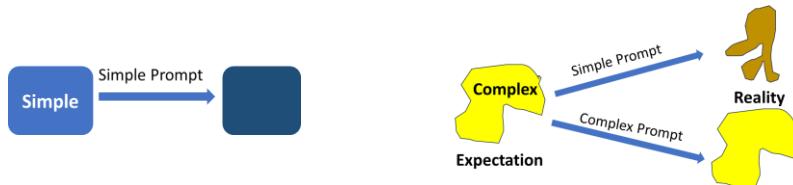
Berikan tiga ide proyek sains untuk siswa sekolah menengah.

Buat paragraf penutup untuk esai tentang pentingnya olahraga.

## Working with GPT – Managing Expectation: Art of Prompting



### (Standard) Prompting

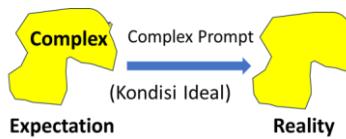


### Prompt + Detail

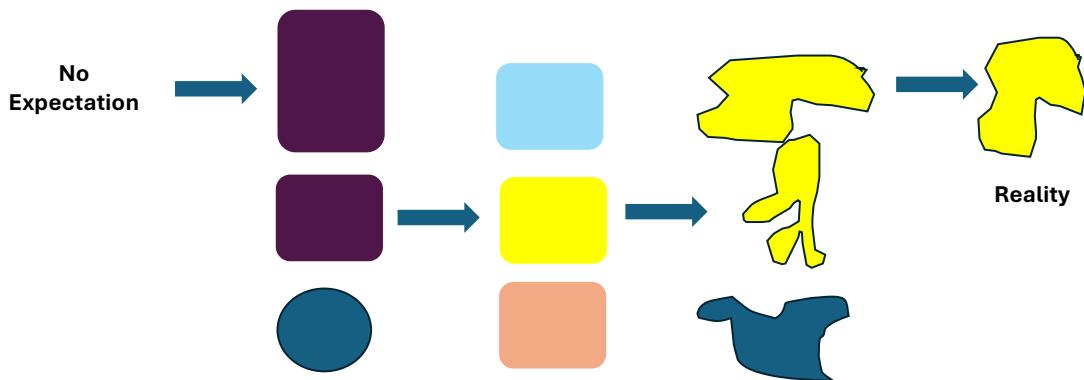
- Outcome
- Spesifikasi/detail
- Plot/Cerita/flow
- Bagaimana Respon GPT
- Instruksi Material
- Knowledge

**Demo Edit Naskah**

## Prompting

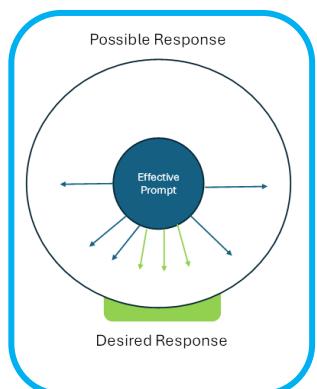
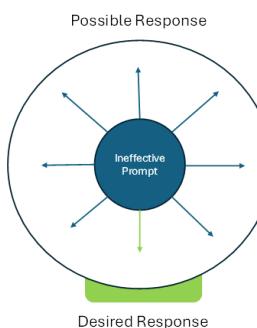
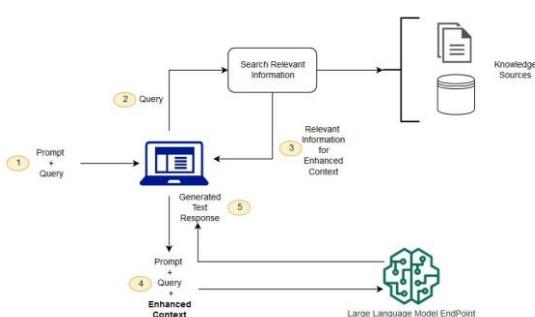


Developing idea by brainstorming and refining

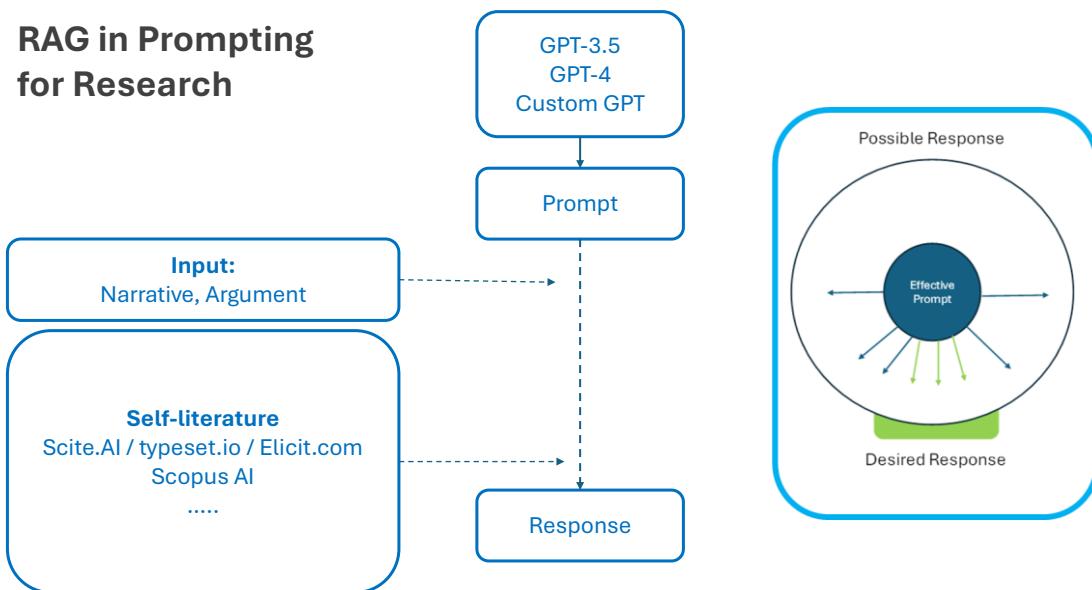


## Retrieval-Augmented Generation (RAG)

The process of optimizing the output of a LLM, so it references [an authoritative knowledge base](#) outside of its training data sources before generating a response.



## RAG in Prompting for Research



## (Standard) Prompting

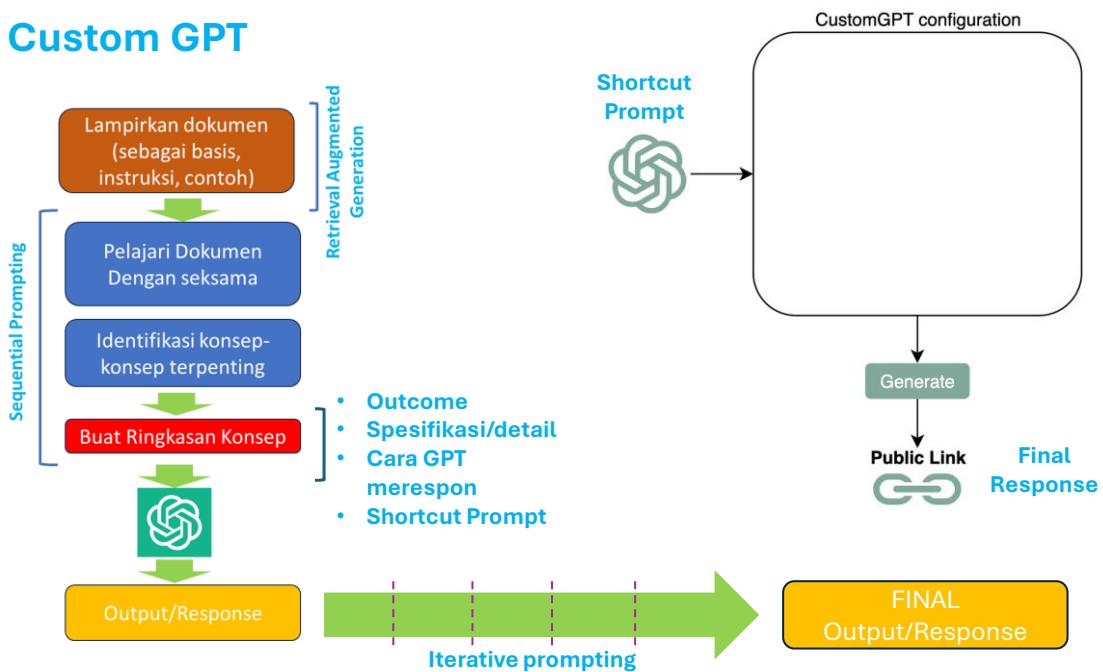


## Prompt + Detail

- **Outcome**
- **Spesifikasi/detail**
- **Plot/Cerita/flow**
- **Bagaimana Respon GPT**
- **Instruksi Material**
- **Knowledge**

Demo Menulis Standard GPT

## Custom GPT



## Graduate Research Academy

Do more with less by utilizing AI

Komunitas pembelajaran inovatif, berfokus pada penggunaan teknologi kecerdasan buatan (**Artificial Intelligence, AI**) untuk meningkatkan kualitas dan efisiensi penelitian serta publikasi.

### Akun AI Riset (Sharing)

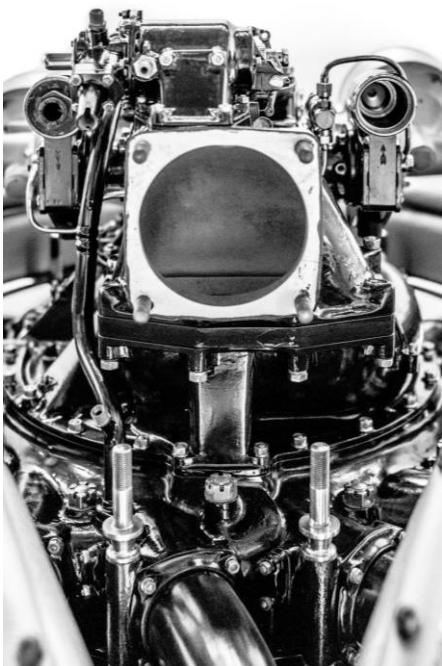
- ChatGPT (Open AI, Team workspace)
- Scite.AI, SciSpace, Turnitin, Biorender, Grammarly, Quillbot
- Custom GPT

### GRA Talks

Group and Personal Coaching

Free/Special Webinar

GRA Camp



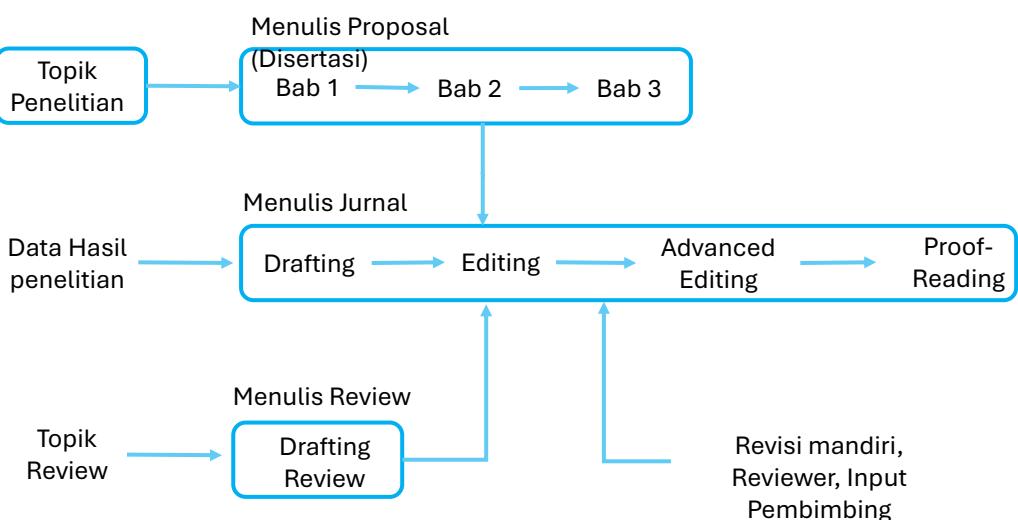
## Fasilitas

### Custom GPT sesuai kebutuhan\*

- Menulis jurnal
- Menulis literatur review
- Membuat *Book Chapter*
- Menulis proposal
- Menulis disertasi
- Custom GPT untuk keperluan lain (update regular)

Akses, Dokumentasi manual (PDF), Video demonstrasi penggunaan ([Padlet](#))

## Portfolio: Custom GPT



## Portfolio: Custom GPT

### Pre-writing



#### GRA - Proposal: Topik Penelitian

GPT ini membantu mahasiswa mencari topik penelitian sesuai dengan bidang studi yang dipelajari.



#### GRA - Novelty Statement

To help formulate research novelty from given literatures

### Drafting



#### GRA - Proposal (Bab 1 Pendahuluan)

GPT ini membantu menulis Bab Pendahuluan dari sebuah proposal penelitian.



#### GRA - Proposal (Bab 2 Tinjauan Pustaka)

GPT ini membantu menulis Bab 2 (Telaah Pustaka) dari sebuah proposal penelitian doktoral.



#### GRA - Proposal (Bab 3 Metodologi Penelitian)

GPT ini membantu menulis Bab 3 (Metodologi) dari sebuah proposal penelitian.

### Revising - Editing



#### GRA - Editing Manuscript

Aids in translating and revising academic manuscripts for better English, argument flow and readability.



#### GRA - Advanced Editing

Lampirkan naskah manuskrip yang akan diedit, kemudian perintahkan melakukan revisi sesuai yang...



#### GRA - Proof-Reading

To assist in proof-reading manuscript by tracing changes

## Portfolio: Custom GPT

### Drafting



#### GRA - Drafting Research Article

I'm your assistant for writing journal papers, helping structure and refine your manuscript.



#### GRA - Drafting Literature Review

Assists in drafting review papers, providing guidance and feedback.

### Revising - Editing



#### GRA - Editing Manuscript

Aids in translating and revising academic manuscripts for better English, argument flow and readability.



#### GRA - Advanced Editing

Lampirkan naskah manuskrip yang akan diedit, kemudian perintahkan melakukan revisi sesuai yang..



#### GRA - Proof-Reading

To assist in proof-reading manuscript by tracing changes



#### GRA - Writing Research Highlight

This GPT aids in preparing research highlights from a journal manuscript prior to submission.



#### GRA - Writing Cover Letter

Preparing journal submission cover letter from the input of a manuscript paper

## 4. Menulis dengan Custom GPT: Manuscript Editing

### Demo Manuscript Editing

## 5. Menulis dengan Custom GPT: Advanced Editing

- *In-depth reading: Correctness, validity*
- Penguatan struktur,
- Segmentasi (perbaiki pengulangan)
- Pendalaman konsep
- (Tambah) Visual:  
gambar/ilustrasi/tabel
- Penambahan detail (informasi kuantitatif, angka-angka)

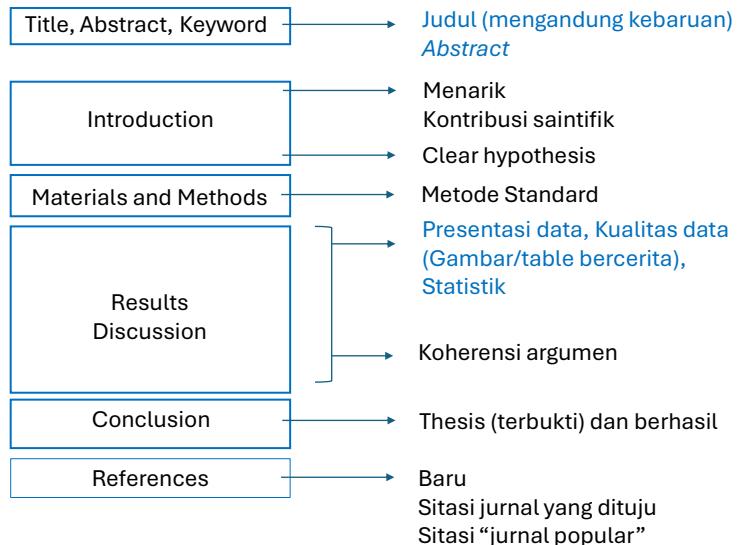
### Intervensi penulis

- Show-off expertise
- Make it better, make it perfect!
- Embody the text (character), own it!
- Follow journal standard  
(Guide, tweaks)

## Pengeditan Akhir (Addressing editor's and reviewers' concerns)

### Aspek Penulisan

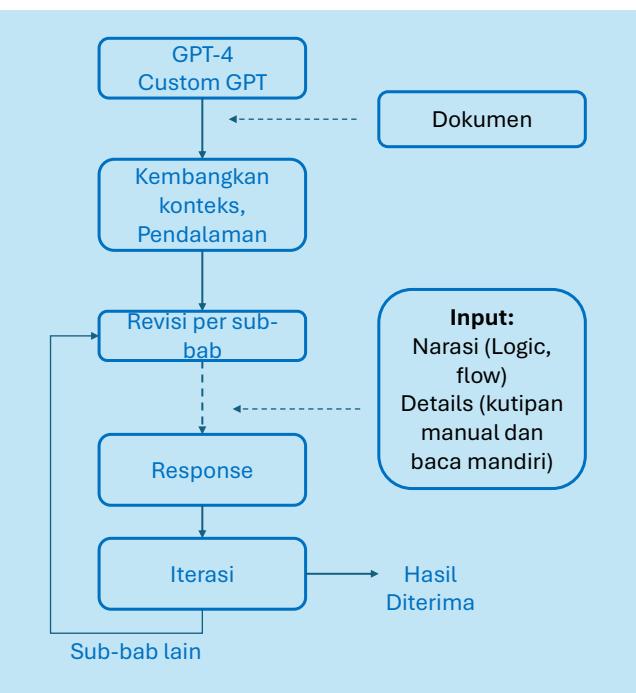
- **Transisi** antar sub-bab (ide yang mengalir)
- **Logis:** Penjelasan dan argumentasi
- Gaya penulisan induktif (Satu kalimat utama + kalimat pendukung)
- **Kedalaman** level diskusi, kekuatan pemahaman, Aspek fundamental
- Pemakaian terminology (yeng tepat)



### Pengeditan akhir (*perfecting*) – menggunakan ChatGPT

In-depth reading → (Kompilasi penyuntingan)

- GPT-4/Custom-GPT
- Lampirkan dokumen
- *Prompt:* pelajari dokumen
- Kembangkan kontek: *Chit-chat*, disusulkan substansi/konten
- Proses Revisi
  - Lakukan per sub-bab
  - Input: Perintah revisi sesuai kemauan
  - Input: detail tambahan
  - Lakukan iterasi hingga optimum
  - Lanjutkan sub-bab lainnya



## **Demo Pengeditan Akhir**