

Graduate Research Academy
Do More With Less by Utilizing AI

Graduate Research Academy and Lingua Institute proudly present

WRITING CAMP #3

— Penulisan Artikel Ilmiah pada Jurnal Terindeks SCOPUS dengan Bantuan AI —

2, 7 dan 10 Agustus 2024
19.00 - 21.00
LIVE ON ZOOM

Materi Utama

- ChatGPT dan Prompt Engineering untuk Penulisan
- Struktur, Logika, dan EDA Penulisan Artikel Ilmiah
- Menulis Ekstif dengan GRA Custom GPT
- Final Editing dan Penulisan Publikasi

Fasilitas dan Manfaat

- Sertifikat I2 JP
- Materi writing camp
- Rekamian writing camp
- Review artikel oleh mentor
- Konultasi dengan mentor
- Sharing Akun ChatGPT Iblisan
- Tergabung menjadi member GRA Scholar Community

3 Pertemuan
IDR 300k

Pendaftaran
<https://bit.ly/GRAWritingCamp3>

Pemateri

Dr. Muhammad Roil Bilad

- Penulis 300 artikel SCOPUS
- H-Index SCOPUS 45
- Pembimbing lebih dari 25 mahasiswa S2/S3
- Pengujii disertasi doktorat Internasional

gro.lipam GRA-Crash Course gro.lipam.com

Materi

Sesi 1: Prompting Akademik, Editing Naskah

Sesi 2: Persiapan dan Menulis Naskah

Sesi 3: Pengeditan Akhir, Persiapan Publikasi, Menulis Proposal, Menulis Literatur Review

Materi Sesi #1

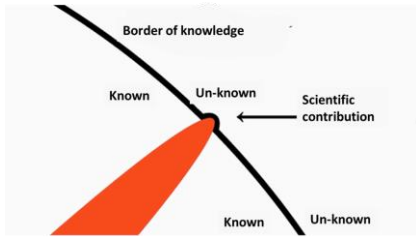
1. Intro – Gurita AI - Pengenalan ChatGPT
2. Recap – Menulis metode tradisional
3. Perekrayaan Prompt untuk Akademik (Demo editing) – Custom GPT
4. Menulis dengan Custom GPT: Manuscript Editing

Materi Sesi #2

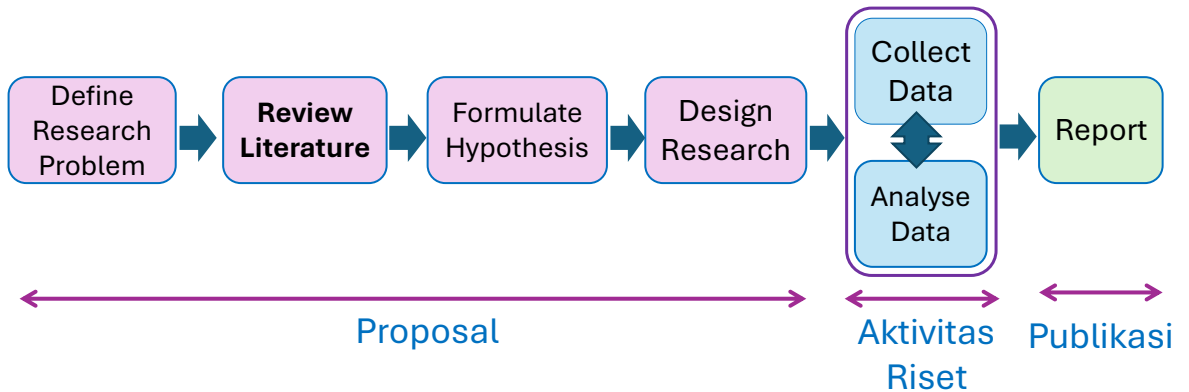
1. Editing
2. Pre-writing + Data analisis dan Visualisasi
3. Drafting manuscript from pre-writing data
4. Advanced Editing

Materi Sesi #3

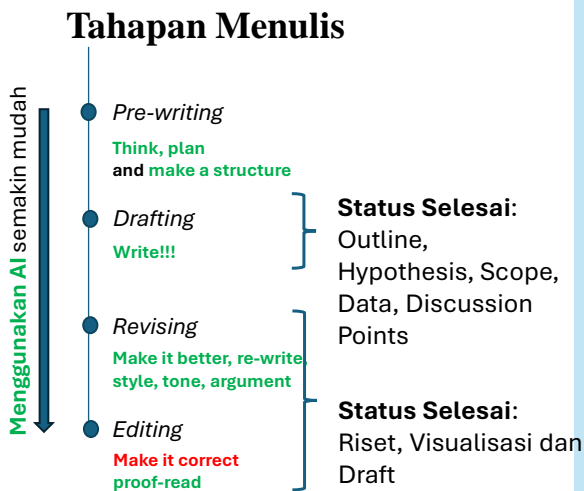
1. Ekosistem Riset
2. Pre-submission preparation
3. Best practices of effective journal submission
4. Menulis Proposal (Penelitian, Disertasi)



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



ChatGPT sebagai Asisten Menulis



Fungsi Chat-GPT (Effective Prompting)

- Penerjemahan
- Gaya penulisan (Ilmiah, formal, etc.)
- Logika (*flow of logic*)
- Merangkum, Menyimpulkan

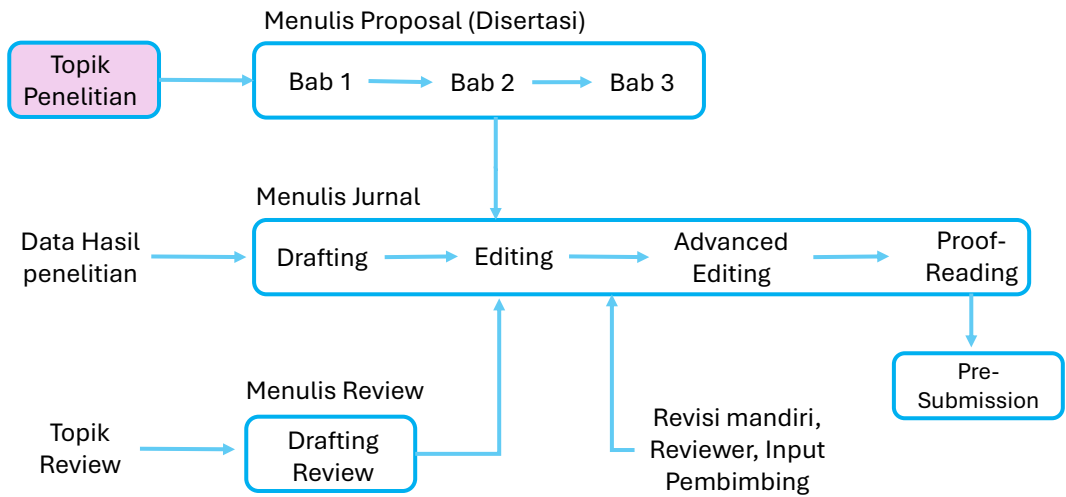
Strategi

- Menulis ulang
- Menulis ulang + Input baru
- Revisi pendek-pendek (per bagian/sub-bagian), gunakan text dalam prompt
- Iterasi/revisi-berulang

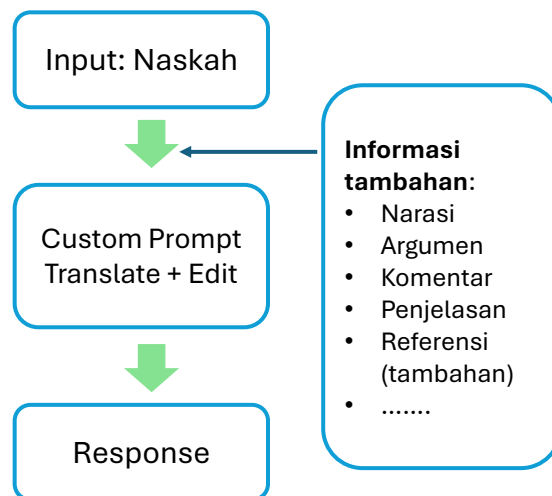
GPTs

- GPT-3.5 (Free)
- GPT-4
- GPT-4o
- **Custom-GPT**

Portfolio GRA: Custom GPT



Mengedit Draft Naskah



Persiapan Menulis (Pre-writing)

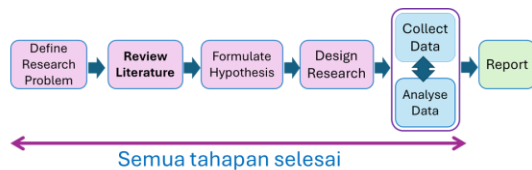
Aspek Logis dalam (struktur) tulisan

Title	Claim of Novelty	Potret terstruktur mengenai fokus utama penelitian, yang akan diuji atau dibuktikan.
Abstract, Keyword		Ringkasan logis mengenai latar belakang, hipotesis, metode pengujian, hasil, kesimpulan, saran.
Introduction	Research gap – Novelty Hypothesis – Objectives/Research questions	Konstruksi logis yang merinci latar belakang dan konteks (yang mendukung hipotesis), masalah atau pertanyaan penelitian sebagai dasar yang kuat untuk menguji hipotesis.
Materials and Methods		Metodologi merinci bagaimana hipotesis akan diuji, mencakup penjelasan metode, pengumpulan data, analisis, dan alasannya.
Results Discussion	Data: Proof – Evidence	Menampilkan hasil uji hipotesis. Menginterpretasikan hasil, menghubungkannya dengan hipotesis, dan mendiskusikan implikasi hasil yang mendukung atau menolak hipotesis tersebut.
Conclusion	Confirmation of the claim Answers to the research questions	Kesimpulan mencerminkan apakah hipotesis telah dibuktikan (atau tidak), dan merangkum temuan utama.
References		

Persiapan Menulis (Pre-writing)

Aktifitas Berpikir: Argumen, Data, Diskusi

- Judul
- Narration/Storyline/storyboard
- Hypothesis
- Objective
- Scope
- Methods (details)
- Data (Presentation: Figures, Tables, Illustration)
- Discussion points
- Explanation/justification/Theory
- Data literature (literature statement)



Constructing the Argument

Argumentative structure	Details
Research gaps	Tingkat variabilitas NOM mempengaruhi kinerja pengolahan air Sungai di Brunei
Hypothesis	Kualitas air minum di Brunei rendah karena kandungan NOM dalam air bakunya sangat bervariasi yang mengganggu proses pengolahan meskipun telah dioperasikan secara optimal.
Novelty	Variabilitas NOM dan mengganggu kinerja pengolahan air
Proof 1: Findings	Data satu tahun air sungai: warna, kekeruhan, pH, kandungan logam
Proof 2: Findings	Data satu tahun air hasil pengolahan: warna, kekeruhan, pH, kandungan logam
Proof 3: Findings	Experiment optimasi koagulasi dan flokulasi
Proof 4: Findings	Optimasi menggunakan RMS
Thesis (new knowledge)	Variabilitas NOM air sungai di Brunei sangat tinggi. Meskipun pengoperasian unit pengolahan air sudah optimal, variabilitas air baku menyebabkan pengolahan tidak efisien dan kualitas air olahan sering tidak memenuhi standard.

Mengolah data - Membuat data “berbicara”

It is all about **the messages**

- What is/are the message(s)?
(idea, concept, trend, ...; list them down clearly)
- Is it worthy of a graph?
(Graph occupies space, space is limited)
- What is the best form?
(graph, illustration, picture,.....)
- What type of data?
(discrete, continuous,; they define the type of graph)

Begin With the End in Mind – Franklin Covey

(Plan your graph before you begin your data collection – know exactly the message!!!)

Designing a graph

is dictated by **the messages and the data set**

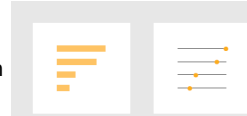
is essentially in **four forms:**

- Comparison (among data)
Lines, bars, pie chart (for fraction)
- Distribution (of a variable)
Histogram, box-plot,
- Correlation (among variables)
Scatter plot, three-dimensional scatter plot,
- Evolution (of a variable)
Line plot,

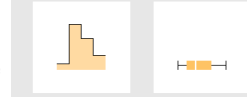
A graph can contain more than one form.

One continuous variable Two or more

Comparison among data



Distribution of a variable



Correlation Among variables



Evolution of a variable



Sources:

<https://www.principiae.be/>



3. Drafting manuscript from pre-writing data

Bab 1 Pendahuluan

- Title
- Narration/Storyline/storyboard
- Hypothesis
- Objective
- Scope
- Informasi literatur

Bab 2 Methods

- Struktur (Skema metodologi)
- Rancangan peralatan
- Proses pengambilan data
- Analisis data/statistik

Bab 3 Pembahasan

- Data (Presentation: Figures, Tables, Illustration)
- Discussion points
- Explanation/justification/Theory
- Data literature (literature statement)

Analisis dan Presentasi Data

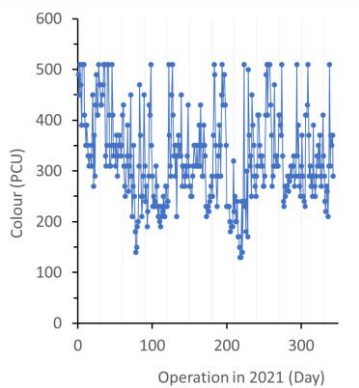


Figure 1. Variability of the color of the river water used as the feed for water treatment process over one year of operation in 2021.

Discussion points:

Average: 325

Maximum: 510

Minimum: 130

Average daily range: 17.3%

The color parameter of the raw water was highly fluctuating even on a day-to-day basis.

The fluctuation was caused by the introduction of NOM from peat forest carried to the river during heavy rain.

Analisis dan Presentasi Data

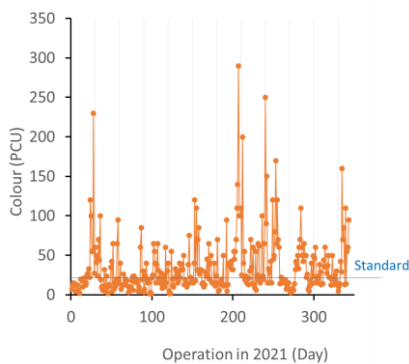


Figure 2. Variability of the color of the treated water one year of operation in 2021.

Discussion points: The Water treatment plant failed to meet the standard in terms of the color parameter.

Average: 35, failed to meet the standard of 20 PCU

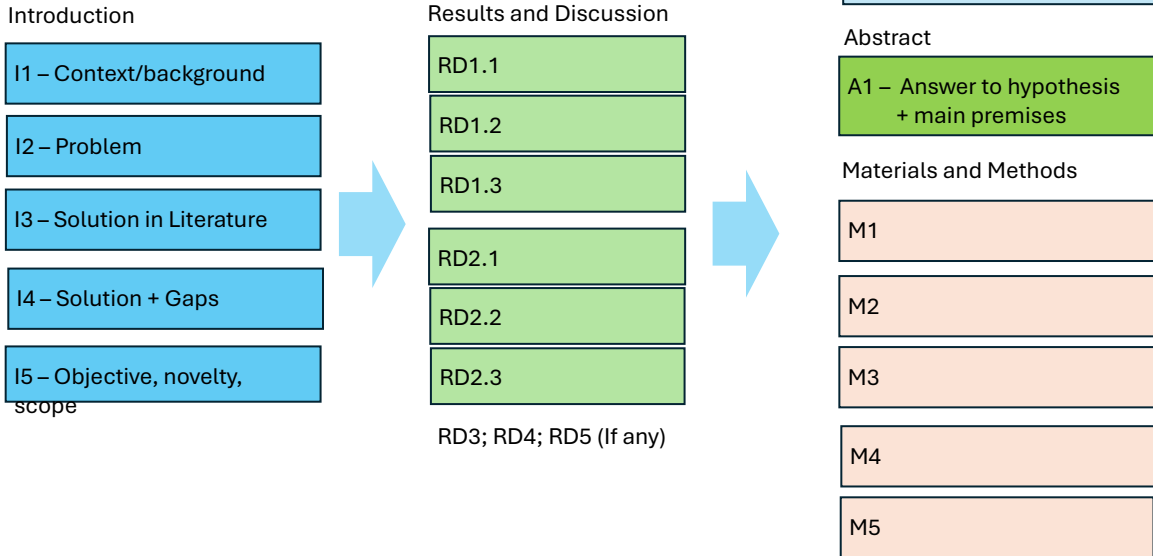
Maximum: 300

Minimum: 1

The color parameter of the treated raw water failed to meet the standard.

Most of the measurements were above the permissible color parameter.

Menulis Draft Jurnal



Menulis dengan CustomGPT

PROMPT - Introduction

Write Block I1, Block I2, Block I3, Block I4, and Block I5 in English (in Bahasa Indonesia)

Title:

Hypothesis:

Objective:

Scope:

Narrative:

Use additional information as the basis of your response. Use EACH provided citation in your response. Maintain the citation integrity.

Additional information:

.....
.....
.....

Isi dengan pernyataan literature dengan reference format (Author et al., YEAR)

Input:

- Catatan sendiri [Penulis et al., TAHUN]
- Intro jurnal relevan
- Catatan dari bacaan AI
- AI+ (Scite.AI, Elicit, SciHub, Consensus,)
- Draft yang ditulis mandiri



Menulis dengan CustomGPT

PROMPT – Results and Discussion

Write Block RD1.1, Block RD1.2 and Block RD1.3
in English (in Bahasa Indonesia)
Captions (Table, Figure):
Discussion points:

Use additional information as the basis of your
response. Use EACH provided citation in your
response. Maintain the citation integrity.

Additional information:

.....
.....
.....

Isi dengan pernyataan literature dengan
reference format (Author et. AL., YEAR)

Input:

- Catatan sendiri [Penulis et al., TAHUN]
- Intro jurnal relevan
- Catatan dari bacaan AI
- AI+ (Scite.AI, Elicit, SciHub, Consensus,)
- Draft yang ditulis mandiri



Best practice:

Lakukan per sub-bab (boleh input >1 gambar atau tabel.
Lakukan secara berurutan RD1, RD2, RD3 dst.
Masukkan otentisitas di discussion point (catatan, pengamatan, penjelasan lanjut)

Menulis dengan CustomGPT

PROMPT – Conclusion

Write Block C1

PROMPT – Abstract

Write Block A1

PROMPT – Keywords

Write 5 keywords in one line separated by semi-colon.

PROMPT – Materials and Methods

Write Block M1, Block M2, Block M3, Block M4 and Block M5.
Use EACH provided citation in your response. Maintain the
citation integrity.

Use the following details as the basis:

Best practice:

- Sub-bab ini sangat unik bergantung kasus dan konteks penelitian
- Penggunaan custom kurang disarankan
- Masukkan detail sebanyak-banyaknya
- Lebih disarankan menggunakan prompting biasa – berbasis instruksi



Isi dengan semua detail eksperimen,
termasuk sitasi jika ada.