Prompt Engineering & Context Engineering
Student Activity Handout

Welcome

In this activity, you will work in small groups using only your mobile phones. Your goal is to transform a weak prompt into a stronger, context-rich, creative and responsible prompt using: **RTAFCE**, **Context Engineering**, and **Verbalized Sampling (VS)**.

All work will be done digitally.

Activity Overview (Mobile Only)

Each group receives one weak prompt. You will collaboratively refine it and submit your final answer

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Step 1: Identify What is Missing (RTAFCE)

Check which elements are absent:

- **Role** — Who is the AI?
- **Task** — What exactly must be produced?
- **Audience** — Who will consume it?
- **Format** — headline? caption? script?
- **Constraints** — tone, word limit, platform
- **Examples** — 1–2 sample lines

Step 2: Identify Risks in the Weak Prompt

Possible risks:

- vagueness or generic content
- tone mismatch (childish, overly formal, etc.)
- clichés and overused phrases
- missing factual clarity
- audience–platform mismatch

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3. Rewrite as a Strong Prompt (RTAFCE + Context)

Use this template:

"You are a _____ creating a _____ for _____ audience on _____ platform. Produce a _____ in _____ tone, limited to _____ words. Here is an example style: _____. Avoid clichés."

4. Strengthen with Verbalized Sampling (VS)

Verbalized Sampling helps the model generate diverse, creative, and less predictable responses.

A. Tail Exploration

"Generate 3 responses from the less typical part of the distribution. Give the approximate probability of each response. Avoid high-frequency answers."

B. Divergent Styles

"Generate 3 versions — (1) emotional, (2) data-backed, (3) metaphor-driven. Provide a one-line note on how each differs."

C. Probability Spectrum

"Give 3 responses ordered by probability: (1) typical, (2) moderately novel, (3) highly unusual. Explain the shift in one line."

5. Toolchain You May Use

- ChatGPT — drafting
- Quartzite / PrompTessor — structuring RTAFCE
- FACTS-H RA-iPromptingToolkit — comparing prompt variants
- Perplexity / Gemini — verifying facts

Weak Prompt Options

1. "Write a headline about a college festival."
2. "Explain AI in simple words."
3. "Make a poster about recycling."
4. "Give me a caption for my college photo."
5. "Give tips for studying."
6. "Give an idea for a short film."

7. "Write something about stress."

8. "Write an article about fitness."

9. "Announce a workshop happening tomorrow."

10. "Write something for the newsletter."

11. "Write a story."

Instructions

Include the following in your analysis:

1. Missing RTAFCE elements

2. Risks in the weak prompt

3. Strong prompt

4. VS-enhanced version

5. Tools used

> **Context engineering is the art of shaping meaning before shaping output.**