Prompt Engineering for Educators: From Basic to Brilliant

What is Prompt Engineering?

It's simply the art of asking AI the right questions in the right way. Like the difference between asking a colleague "help me with teaching" versus "can you suggest three interactive activities for teaching supply and demand to second-year economics students?"

The Key Insight

AI works best as a conversation partner, not a one-shot generator. Your first prompt starts the conversation - follow-ups refine and improve.

Part 1: The Basics (Start Here!)

The Golden Rule: Be Specific

Vague Prompt:

```
Write about climate change
```

Specific Prompt:

```
Write a 300-word introduction to climate change for
first-year environmental science students, focusing on
Australian impacts, using accessible language
```

The Three Essential Elements

Every good prompt needs:

1. **WHAT** - The task you want done
2. **WHO** - The audience or perspective

3. **HOW** - The format or style

That's it! Master these three, and you're 80% there.

Part 2: Before & After Examples

Example 1: Creating Assessment Questions

Before (Basic):

```
Create questions about Shakespeare
```

Result: Generic, random difficulty, no clear purpose

After (Engineered):

```
Create 5 multiple-choice questions about Hamlet for
Year 11 English students. Include one question each on:
plot, character motivation, themes, language techniques,
and historical context. Provide correct answer and brief
explanation for each.
```

Result: Targeted, assessable, complete with answers

Example 2: Student Feedback

Before (Basic):

```
Give feedback on this essay
```

Result: Generic comments, unclear focus

After (Engineered):

```
Review this first-year nursing student's reflective essay.
Identify:
1. Two specific strengths with quoted examples
2. Two areas for improvement with concrete suggestions
3. One recommended resource for further learning

Focus on reflective practice depth, not grammar.
Use encouraging but professional tone.
```

Result: Structured, actionable, appropriate feedback

Example 3: Lecture Content

Before (Basic):

```
Explain photosynthesis
```

Result: Wikipedia-style explanation

After (Engineered):

```
You're teaching photosynthesis to visual learners in
first-year biology. Create:
- One memorable analogy comparing it to a familiar process
- Three key points in bullet form
- One practice question that tests understanding, not memorisation
Keep language at undergraduate level, emphasise practical applications.
```

Result: Engaging, targeted, pedagogically sound

Part 3: The CRAFT Framework (Your Power Tool)

Once comfortable with basics, use CRAFT for consistently better results:

C.R.A.F.T. = Context, Role, Action, Format, Tone

Letter	Meaning	Example
Context	Background info	"Second-year nursing students have completed anatomy but not clinical placement"
Role	Who AI should be	"You are an experienced nursing educator"
Action	What to do	"Create a case study about medication errors"
Format	How to structure	"Include patient history, error scenario, and 5 discussion questions"
Tone	How it should sound	"Professional but accessible, include Australian healthcare context"

CRAFT in Action - Complete Example:

Without CRAFT:

```
Create a case study about business ethics
```

With CRAFT:

```
Context: Third-year business students studying corporate responsibility,
familiar with stakeholder theory but not whistleblowing laws.

Role: You are a business ethics professor.

Action: Create a case study about an ethical dilemma in an Australian
mining company.

Format: 300 words: company background, dilemma, stakeholder impacts,
4 discussion questions.

Tone: Neutral presentation of facts, thought-provoking questions.
```

The Magic: CRAFT + Conversation

Don't stop after your CRAFT prompt! Continue the conversation:

1. **Start with CRAFT:** Get your initial output
2. **Refine:** "Make the dilemma more ambiguous"
3. **Adapt:** "Now create a simpler version for first-years"
4. **Extend:** "Add teaching notes with suggested answers"

   Remember: CRAFT gets you started, conversation gets you perfect.

Part 4: Quick Templates for Common Tasks

Assignment Instructions Template

```
Create assignment instructions for [SUBJECT/LEVEL].
Topic: [SPECIFIC TOPIC]
Word count: [NUMBER]
Include: Clear task, marking criteria, required elements,
submission format
Avoid: [ANY RESTRICTIONS]
```

Discussion Question Template

```
Generate [NUMBER] discussion questions about [TOPIC] for
[STUDENT LEVEL].
Include questions at different cognitive levels:
- 1 comprehension question
- 1 application question
- 1 analysis question
Provide brief facilitator notes for each.
```

Rubric Creation Template

```
Create a marking rubric for [ASSIGNMENT TYPE].
Include criteria: [LIST KEY CRITERIA]
Performance levels: HD, D, C, P, F
Points possible: [TOTAL]
Format as table with specific descriptors for each level.
```

Content Adaptation Template

```
Adapt this content for [TARGET AUDIENCE]:
[PASTE CONTENT]
Maintain key concepts but adjust:
- Language complexity
- Examples to be relevant
- Length to approximately [WORDS]
- Add [specific elements needed]
```

Part 5: Advanced Technique - Prompt Chains

Turn AI into your teaching assistant through multi-step workflows:

Example: Creating Differentiated Assessment

Instead of one massive prompt, chain smaller ones:

Step 1: Base Creation

```
"Create a basic assignment on climate change for Year 10 science.
Focus on causes and effects. 500 words."
```

Step 2: Analysis

```
"What aspects of this assignment might challenge struggling students?"
```

Step 3: Differentiation

```
"Now create three versions:
- Foundational: with scaffolding and sentence starters
- Standard: as is
- Extension: adding data analysis and policy recommendations"
```

Step 4: Rubric

```
"Create a rubric that works for all three versions, focusing on
understanding rather than complexity"
```

Example: Student Feedback Workflow

```
Step 1: "Identify the three strongest arguments in this essay"
Step 2: "Find two areas needing improvement with specific examples"
Step 3: "Suggest resources for addressing those weaknesses"
Step 4: "Combine into encouraging feedback with concrete next steps"
```

> **Pro tip:** Copy outputs from each step into the next prompt for context

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Part 6: Common Mistakes to Avoid

The Kitchen Sink

Bad: Cramming everything into one massive prompt **Fix:** Break complex tasks into steps

The Mind Reader

Bad: "Make it better" **Fix:** "Improve clarity by simplifying sentences and adding examples"

The Novel

Bad: 500-word prompts with unnecessary detail **Fix:** Be specific but concise - aim for under 150 words

The Negative Nancy

Bad: "Don't make it boring, don't use jargon, don't…" **Fix:** Say what you DO want: "Make it engaging, use simple language"

Part 7: Education-Specific Prompting Tips

For Academic Integrity

Always include:

```
"Create original content that serves as a starting point
for student work, not a complete solution"
```

For Differentiation

```
"Provide three versions:
- Foundational (struggling students)
- Standard (on-level)
- Extension (advanced)"
```

For Accessibility

```
"Ensure content is:
- Screen reader friendly
- Uses clear headings
- Avoids idioms and cultural references
- Includes definitions for technical terms"
```

For Engagement

```
"Include:
- One surprising fact or statistic
- One real-world application
- One connection to student experiences"
```

Quick Reference Card

Basic Prompt Formula

[ACTION] + [CONTEXT] + [FORMAT]

Example: "Summarise (action) this research article for undergraduates (context) in 5 bullet points (format)"

Power Words That Improve Outputs

Instead of...	Use...
"Write"	"Create", "Develop", "Design", "Craft"
"Good"	"Engaging", "Clear", "Effective", "Comprehensive"
"Short"	"Concise", "Under 100 words", "3 bullet points"
"Simple"	"Undergraduate level", "Plain language", "Non-technical"
"Interesting"	"Include examples", "Add case studies", "Use analogies"

Quality Checkers to Add

End prompts with one of these: - "Ensure accuracy and cite sources if referencing facts" - "Make it appropriate for [specific audience]" - "Include one specific example to illustrate each point" - "Format for easy scanning with headers and bullets"

When to Use Which Approach?

Quick Reference

Your Need	Best Approach	Example
Quick question	Basic (3 elements)	"Explain photosynthesis simply for Year 8 students"
Quality output	CRAFT framework	Full case study or assessment design
Complex task	Prompt chains	Multi-version assignments, comprehensive feedback
Exploring options	Conversation	"Show me three ways... Now combine the best parts..."

Your Need	Best Approach	Example
Consistent results	Templates	Weekly discussion questions, standard feedback

The Workflow Pattern

Most educators find this pattern works best:

1. **Start simple** → Get something quickly
2. **Add CRAFT** → Improve quality
3. **Conversational refine** → Perfect it
4. **Save as template** → Reuse next time

Example:

```
Simple: "Create quiz on cell division"
CRAFT: Add context, role, format requirements
Refine: "Make question 3 more challenging"
Template: Save for next semester
```

Your First Week Challenge

Day 1: Basic Practice

Take any prompt you'd normally use and add WHO and HOW

Day 2: Before/After

Improve three existing prompts using the examples

Day 3: Try CRAFT

Create one complex prompt using all five elements

Day 4: Templates

Use templates for common tasks

Day 5: Iterate

Take one output and refine it three times

Weekend: Reflect

What worked? What didn't? Share with colleagues

Remember

Perfect prompts aren't the goal — useful outputs are

Start simple, experiment freely, and improve gradually. Even basic prompt improvements can save hours and enhance teaching quality.

The best prompt is the one that gets you what you need, when you need it.

Want to Learn More?

Beginner-Friendly:

- learnprompting.org - Visual guides and basics
- Microsoft Copilot Lab - Built-in prompt templates

More Advanced:

- promptingguide.ai - Comprehensive techniques
- Anthropic's Prompt Engineering Guide - Deep dive into Claude

Education-Specific:

- Your AI Facilitator: [contact]
- Weekly prompt workshops: [schedule]
- Shared prompt library: [link]

Start with the basics. Master those. Then explore. You don't need to be perfect — you just need to begin.

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