

2025



EMPOWERING EDUCATION WITH AI CHAT

7 Steps for Enhanced Active Learning

Transforming Teaching with AI Chat *A Pedagogy-First Approach*

A Resource for Educators

Unlock engagement, foster inquiry, and drive innovation.

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7-Step Process for Integrating AI Chat in Education

A Pedagogy-First Approach



Step 1 – Pedagogy Over Tech

Key Goal:

Define clear, measurable learning objectives and prepare aligned AI prompts. (Outcome: Establish your teaching foundation with outcome-based planning.)

Step 2 – Inquiry-Based Dialogue

Key Goal:

Foster critical inquiry by having students propose ideas and refine them through targeted questions. (Outcome: Enhance critical thinking and reflective learning.)

Step 3 – Simulations & Role-Plays

Key Goal:

Engage students in realistic, AI-driven scenarios and interactive role-plays. (Outcome: Build practical decision-making skills through dynamic simulations.)

Step 4 – AI-Generated Case Studies

Key Goal:

Use AI to expand outlines into detailed case studies for in-depth analysis. (Outcome: Promote deep inquiry and multi-perspective problem solving.)

Step 5 – Discussion Starters

Key Goal:

Spark engaging dialogue by critiquing AI-generated content. (Outcome: Develop collaborative inquiry and critical analysis.)

Step 6 – Critical Evaluation & Ethics

Key Goal:

Critically assess AI outputs for accuracy, bias, and ethical issues using a structured template. (Outcome: Cultivate ethical thinking and rigorous evaluation skills.)

Step 7 – Practical Implementation

Key Goal:

Test, refine, and integrate AI prompts into your lesson with an iterative, feedback-driven approach. (Outcome: Seamlessly incorporate AI into your curriculum and share best practices.)

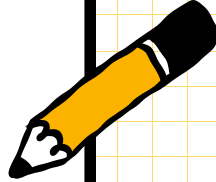
Step 1 – Pedagogy Over Tech

Prepare Your Lecture with Clear Learning Outcomes



Teacher's Quick Brief

- Set clear learning goals before using AI.
- Use AI to support teaching, not to drive it.
- Focus on what you want students to learn.



Ready, Set, Prompt!

Paste this prompt into your AI Chat to kick-start your lesson planning:

"You are an experienced educational consultant. I'm preparing a lecture that integrates AI chat as a supportive tool. Help me clarify my learning outcomes, define the role of AI in my lesson, and select an appropriate activity. Please ask me targeted questions to refine my objectives and guide my lesson planning. Do not provide complete solutions, just ask for more details."

Pre-Lecture Checklist

Step 1 – Define Outcomes: List the skills/knowledge students should gain.

Step 2 – Identify AI's Role: Choose how AI chat supports your lesson (e.g. discussion partner).

Step 3 – Select Activity: Pick an AI activity aligned with your goals (e.g. inquiry dialogue).

Step 4 – Prepare Prompts: Write clear, focused AI instructions.

Step 5 – Plan Assessment: Decide how you'll measure engagement and learning.

Custom Template

• Learning Outcomes:

"By the end of this lesson, students should be able to _____."

• AI's Role:

"I will use AI chat to help students _____."

• Activity Chosen:

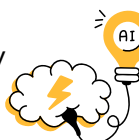
"This activity involves _____."

• Prompt Draft:

"Paste this into the AI chat: _____."

• Assessment Method:

"I will evaluate student engagement by _____."



Final Considerations

• Focus on Outcomes:

Start with clear, measurable learning objectives that drive every AI activity.

• View AI as a Tool:

Use AI to support your teaching—not to replace your expertise.

• Test & Tweak:

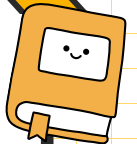
Run your AI prompts in advance. Adjust as needed for clarity and focus.

• Plan for Reflection:

Include checkpoints in your lesson to review and adapt your approach.

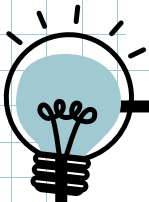
• Finalise Your Lesson Plan:

Confirm your objectives, selected AI role, and assessment method before class.



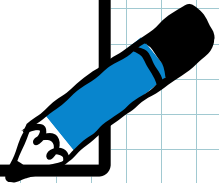
Step 2 – Inquiry-Based Dialogue

Using an AI Tutor to Enhance Inquiry in the Classroom



Teacher's Quick Brief

- Inquiry-based dialogue means students present a proposal and then answer probing questions.
- This approach develops critical thinking and challenges assumptions.



Ready, Set, Prompt!

- Paste this prompt into your Ai Chat before starting:
- *You are a curious tutor. I will present a proposal. Please ask me detailed questions to explore benefits, challenges, and practical considerations. Do not provide solutions. Help me refine my thinking by asking for more detail on my reasons and assumptions.*

The Inquiry Process

Step 1: Student writes a proposal.

(clarifies main idea).

Step 2: AI Tutor asks probing questions.

(reveals gaps and new angles).

Step 3: Student answers each question.

(articulates reasoning and evidence).

Step 4: Student refines the proposal.

(improves clarity, addresses challenges).

Dialogue in Action

1. **Student Proposal:** "I propose introducing a universal basic income to reduce poverty."
2. **AI Tutor's Questions:**
 - "How will you fund this income?"
 - "What might be the impact on employment?"
3. **Student Answers:**
 - "Funding might come from increased taxation."
 - "Phased implementation could manage employment impacts."
4. **Refined Proposal:** "I propose a universal basic income, funded by progressive taxes and introduced gradually to balance economic effects."



Step 2 – Continued

Inquiry-Based Dialogue

Your Custom Template

1. Proposal Statement:

"I propose _____."

2. Reasoning:

- Benefits: _____
- Possible Challenges: _____
- Preliminary Solutions: _____

3. Ai Chat's Questions & My Answers:

(Q1) _____

(A1) _____

(Q2) _____

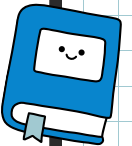
(A2) _____

4. Final Revised Proposal:

"After reflection, I propose _____."

Idea Inspirations

- **Arts:** Fund public art to boost community engagement.
- **Sciences:** Use GM crops to stabilise food supply.
- **Business:** Adopt remote work for greater flexibility.
- **Education:** Integrate digital literacy into core subjects.
- **Law:** Update privacy laws for digital data.



Academic Pro Tips

• Pedagogy Over Tech:

- "Technology must serve teaching, not replace it" – Dr Philippa Hardman.
- "AI should challenge students to think deeply, not just automate responses." – Ethan Mollick

• Evidence & Clarity:

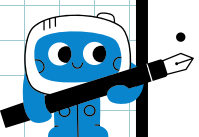
- Reference current research.
- Use concise, direct statements.

• Reflect on Change:

- Encourage students to note how their views evolve during dialogue.
- This reflection deepens their understanding and reinforces active learning.

Wrap-Up & Next Steps

- **Group Discussion:** Share proposals in small groups.
- **Final Review:** Collect and review refined proposals.
- **Iterative Improvement:** Revisit and update proposals after further research.



Step 3 – Simulations & Role-Plays

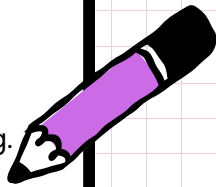


Use AI to Simulate Real-World Scenarios and Authentic Interactions



Teacher's Quick Brief

- Simulations and role-plays engage students in realistic, dynamic scenarios.
- The AI takes on a defined persona to challenge students' ideas and decision-making.
- This approach boosts critical thinking and prepares students for real-world problem solving.



Ready, Set, Prompt!

Paste this into your AI Chat to start your simulation role-play:

- *You are a seasoned [role] with extensive experience in [industry/field]. I will assume the role of a [student/entrepreneur/participant]. Engage with me in a realistic scenario where I must navigate [a challenge or decision]. Ask probing questions and respond as you would in a real-life interaction. Do not give direct solutions—focus on simulating your character's perspective.*

Tip: Replace [role], [industry/field], and [challenge or decision] with details relevant to your lesson.

The Role-Play Process

• Scenario Setup:

Define the real-world situation and assign roles (e.g. student as entrepreneur, AI as skeptical investor).

• Role Assignment:

Clearly state the AI's persona and the student's role.

• Interactive Dialogue:

The student initiates a proposal or response; the AI, in character, asks questions and challenges assumptions.

• Debrief & Reflection:

Conclude with a class discussion to review decisions, highlight learning points, and gather feedback.

Dialogue in Action

Scenario Example (Business):

- **Student (Entrepreneur):** "I propose launching an eco-friendly product line."
- **AI (Investor):** "How do you plan to scale production sustainably?"
- **Student Answer:** "We will partner with local suppliers and invest in green technology."
- **AI Follow-Up:** "What challenges do you foresee with supplier reliability?"
- **Student Reflects & Refines:** "I propose starting with a pilot in a single market to manage risks."

This dialogue illustrates how role-play prompts critical inquiry and real-time problem solving.



Step 3 Continued.....

Simulations & Role-Plays

Custom Template

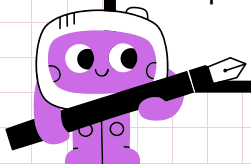
- **Scenario Title:**
"I propose _____."
- **AI Role (Persona):**
"You are a _____ with experience in _____."
- **Student Role:**
"I am acting as _____."
- **Key Objectives:**
Define the challenge or decision point.
- **Dialogue Script:**
(Q1) _____
(A1) _____
(Q2) _____
(A2) _____
- **Debrief Note:**
"After reflection, I propose _____."

Idea Inspirations

- **Arts:** Simulate a curator negotiating a public art exhibit.
- **Sciences:** Role-play a scenario where a researcher debates funding for a new experiment.
- **Business:** Simulate a pitch meeting between an entrepreneur and a venture capitalist.
- **Education:** Role-play a discussion between a teacher and a skeptical parent about curriculum changes.
- **Law:** Simulate a courtroom debate on a current legal issue.

Final Considerations & Next Steps

- **Design Realistic Scenarios:** Ensure your role-play mirrors real-life complexity.
- **Define Clear Roles:** Clearly assign the AI's persona and student's role to guide interactions.
- **Encourage Active Engagement:** Prompt students to challenge the AI persona and think critically.
- **Debrief Thoroughly:** Use group discussions to reflect on the simulation and capture key learnings.
- **Iterate:** Test your simulation with a small group and refine the scenario and prompts based on feedback.



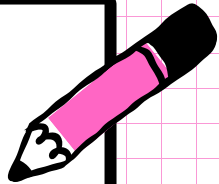
Step 4 – AI-Generated Case Studies

Leverage AI to Create Dynamic, Inquiry-Driven Scenarios



Teacher's Quick Brief

- Use AI to generate detailed, adaptive case studies based on a simple outline.
- The case studies help students explore complex issues and sharpen critical analysis.
- Guide students to identify key challenges, reflect on alternatives, and propose solutions.



Ready, Set, Prompt!

- Copy and paste this into your AI Chat to generate a case study:

You are an expert case study generator. I will provide a brief outline of a scenario. Please create a detailed case study that includes background, key challenges, stakeholder perspectives, and ethical considerations. Do not provide solutions –ask probing questions that guide critical analysis.

Tip: Replace or add details relevant to your subject or context.

The Case Study Process

Define the Outline:

- Provide a brief scenario (e.g. a business facing market decline, a legal dilemma, etc.).

AI Generates the Case Study:

- The AI expands your outline into a detailed case study with context and challenges.

Student Analysis:

- Students identify key issues and discuss potential strategies.

Debrief & Reflection:

- Facilitate a class discussion to review insights and refine their analysis.

Dialogue in Action

Basic Outline:

"A startup struggles to compete against larger rivals in a rapidly evolving market."

AI-Generated Case Study (Example):

- Background: The startup launched a promising product but now faces stiff competition.
- Key Challenges: Supply chain issues, shifting customer preferences, and ethical pricing.
- AI Questions:
 - "What factors contributed to the market shift?"
 - "How might the startup adapt its strategy to remain competitive?"

Student Task:

- Analyse the case, debate options, and propose strategic adjustments.



Step 4 Continued

AI-Generated Case Studies

Custom Template

- **Scenario Outline:**

"I propose a case study on [topic]."

- **Key Issues:**

Issue 1: _____

Issue 2: _____

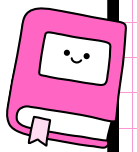
- **AI-Generated Insights & Questions:**

(Q1) _____

(Q2) _____

- **Student Analysis:**

"After reflection, we conclude _____."



Idea Inspirations

- **Arts:** Analyse a museum's challenge in curating controversial art.
- **Sciences:** Examine a biotech firm facing regulatory hurdles.
- **Business:** Explore a startup pivoting in a competitive market.
- **Education:** Discuss challenges in implementing new curriculum changes.
- **Law:** Investigate privacy issues in the digital age.

Final Considerations & Next Steps

- **Review & Reflect:**

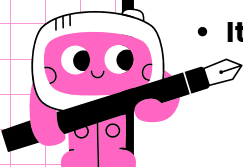
- Discuss the generated case study in class and gather feedback.

- **Refine Prompts:**

- Tweak your outline and AI prompt based on student responses.

- **Iterate:**

- Use insights from each session to improve future case studies and foster deeper inquiry.



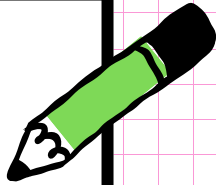
Step 5 – Discussion Starters

Use AI to Spark Debate and Critical Reflection



Teacher's Quick Brief

- Leverage AI-generated interactions to ignite peer discussion.
- Encourage students to critique, compare, and build on ideas.
- Focus on bridging AI output with human insights for deeper analysis.



Ready, Set, Prompt!

- Copy and paste this into your AI Chat to generate discussion prompts:

You are a discussion facilitator. I will provide a transcript from an AI-generated conversation, [insert conversation]. Please create three probing questions that encourage students to analyse the content. Focus on uncovering assumptions, strengths, and weaknesses. Do not provide answers.



Tip: Adjust the details to match the content and focus of your lesson.

The Discussion Process

1. Present AI Output:

- Share a pre-prepared transcript (or one generated live) with your students.
- Example Transcript:
 - "In reviewing our latest market analysis, I propose that our company pursue international expansion. This strategy is based on the assumption that emerging markets will continue to grow and that our product will outperform local competitors. However, potential risks include economic instability and rapid competitor adaptation."

2. Annotate Key Points:

- Ask students to mark strengths, identify gaps, and note any unclear assumptions.

3. Generate Probing Questions:

- Use the following sample questions as a guide:
 - What assumptions underpin this expansion strategy?
 - How could economic instability affect success?
 - What challenges might arise from rapid competitor adaptation?

4. Facilitate Group Discussion:

- Organise students into small groups to discuss the transcript and answer the questions.

5. Debrief & Reflect:

- Bring the class together to summarise insights and record key learning points.

Step 5 Continued

AI-Generated Case Studies

Custom Template

Transcript Excerpt:

- "In the discussion, the AI stated: _____."

Discussion Questions:

- Q1: _____
- Q2: _____
- Q3: _____

Reflection Note:

- "After discussion, we concluded that _____."



Idea Inspirations

- **Arts:** Debate the interpretation of an art piece or exhibition concept.
- **Sciences:** Compare conflicting scientific findings or data interpretations.
- **Business:** Discuss strategic decisions and market predictions from case studies.
- **Education:** Critique new teaching methods or curriculum changes.
- **Law:** Analyse diverse legal perspectives on a current issue.

Final Considerations & Next Steps

Encourage Open Dialogue:

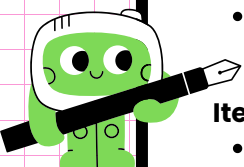
- Ensure every voice is heard during small-group discussions.

Synthesise Insights:

- Summarise key takeaways and reflect on how different views can enhance understanding.

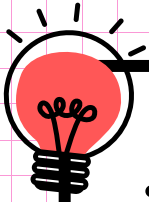
Iterate:

- Refine your discussion prompts based on student feedback to improve future sessions.



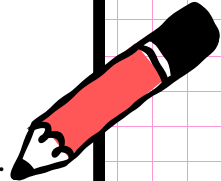
Step 6 – Critical Evaluation & Ethics

Assess AI Outputs for Accuracy and Fairness



Teacher's Quick Brief

- Have students review AI-generated content.
- Focus on checking facts, spotting bias, and discussing ethical issues.
- Use this process to build critical thinking and academic integrity.



Ready, Set, Prompt!

- Copy and paste this into your AI Chat to generate discussion prompts:

You are an expert evaluator and ethics consultant. My goal is to assess a piece of AI-generated text for factual accuracy, bias, and ethical concerns. The context is a higher education classroom discussion on AI outputs, and the source text is provided below. Based on this, please generate three clear, targeted evaluation questions that help uncover assumptions, detect bias, and explore ethical implications. Do not provide any answers—only ask the questions.

Tip: Ensure the prompt includes the text source when sharing with the AI.



The Critical Evaluation Process

1. Present AI Content:

- Display a short AI-generated text to your students.
- Example: "The strategy will improve market performance by targeting emerging regions, assuming these regions are free of risks."

2. Initial Reflection:

- Ask students to read the text and jot down their immediate thoughts.

3. Generate Evaluation Questions:

- Use the provided prompt or ask students to come up with their own questions.

4. Small-Group Analysis:

- Divide students into groups and let them discuss the questions and their observations.

5. Debrief & Reflect:

- Bring the class together to share findings and record key insights.

Dialogue in Action

Example AI Text:

- "The strategy will improve market performance by targeting emerging regions, assuming these regions are free of risks."

Sample Evaluation Questions:

- What assumptions are made about these regions?
- How might risks affect this strategy?
- Are there any ethical concerns with ignoring potential risks?

Step 6 Continued

Critical Evaluation & Ethics

Custom Template

Use this template to guide your students' evaluation of AI content:

1. AI-Generated Content:

- Text: "-----"

2. Evaluation Criteria:

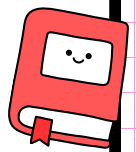
- Factual Accuracy:
 - Are the facts presented correct?
 - Which parts need verification?
- Bias Detection:
 - Does the text show any bias or assumptions?
 - Which perspectives might be missing?
- Ethical Considerations:
 - What ethical issues does the text raise?
 - Are there any potential harms or unfair assumptions?

3. Reflection and Improvement:

- Strengths:
 - What aspects of the text are clear or well-supported?
- Weaknesses:
 - What needs clarification or correction?
- Recommendations:
 - How could the text be improved to better balance viewpoints and uphold ethical standards?

4. Final Reflection:

- Summarise the key insights from your analysis:
- "After discussion, we concluded that -----"

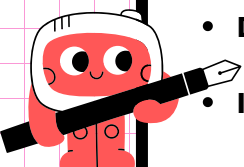


Idea Inspirations

- **Arts:** Evaluate AI interpretations of cultural narratives.
- **Sciences:** Check research summaries for oversimplification.
- **Business:** Spot hidden assumptions in market analyses.
- **Education:** Critique fairness in AI teaching recommendations.
- **Law:** Debate ethical balance in AI-generated legal opinions.

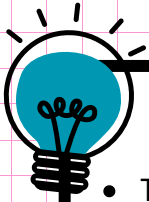
Final Considerations & Next Steps

- **Encourage Inquiry:** Stress the importance of questioning AI outputs.
- **Refine:** Adjust questions based on student feedback.
- **Document:** Record key insights for future sessions.
- **Iterate:** Continuously improve your process.

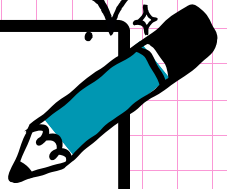


Step 7 – Practical Implementation

Integrate and Refine AI Prompts for Real-World Teaching



Teacher's Quick Brief



- Test your AI prompts in low-stakes settings.
- Gather feedback and adjust prompts to align with clear learning outcomes.
- Use an iterative process to seamlessly integrate AI into your lesson plan.

Ready, Set, Prompt!

- Copy and paste this into your AI Chat to kick-start your refinement process:

You are a classroom implementation consultant. My goal is to refine an AI prompt for an upcoming lesson. The context is a higher education setting where I want to encourage critical thinking. The source is my current draft prompt. Please ask clarifying questions to help me ensure the prompt is clear, aligns with my learning outcomes, and encourages inquiry. Do not provide a final prompt—just ask for more details.

Tip: Adjust the details in the prompt to fit your subject and context.



The Implementation Process

Test Your AI Prompt:

- Run a trial session with colleagues or a small group of students.

Evaluate AI Responses:

- Check if the responses are clear, relevant, and supportive of your learning objectives.

Collect Feedback:

- Ask participants what worked and what could be improved.

Refine Your Prompt:

- Adjust the wording, context, or expectations based on the feedback.

Finalise and Integrate:

- Incorporate the refined prompt into your lesson plan for full-class use.

Dialogue in Action

Example Scenario:

- **Initial Prompt:** "Explain the challenges of implementing sustainable energy."
- **AI Response:** Offers a generic list of challenges.
- **Refinement Process:**
 - Lecturer asks: "Which aspects of sustainable energy interest you most—economic, technical, or political?"
 - Based on feedback, the final prompt becomes: "Discuss the economic and political challenges in implementing sustainable energy solutions, and propose strategies to overcome these issues."

This example demonstrates how testing and iteration sharpen your prompt and better focus student inquiry.

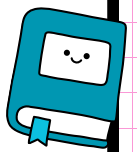
Step 7 Continued

Practical Implementation

Custom Template

Use this template to guide your prompt refinement:

- **Original AI Prompt:**
 - "I need an AI prompt to help students explore [topic]."
- **Feedback & Revision Questions:**
 - What specific learning outcomes are you aiming for?
 - Is the context clear and does it include relevant details?
 - How can the prompt encourage critical thinking?
- **Finalised AI Prompt:**
 - "Discuss the key challenges in [topic] and propose strategies to address them, balancing theory with practical insights."



Idea Inspirations

- **Arts:** Refine prompts to explore creative interpretation and critique.
- **Sciences:** Focus on experimental design challenges and data analysis.
- **Business:** Enhance prompts for market analysis and strategic planning.
- **Education:** Fine-tune prompts to investigate innovative teaching methods.
- **Law:** Improve prompts to debate legal ethics and policy implications.

Final Considerations & Next Steps

- **Document Improvements:** Record what changes work and why.
- **Test in Real Settings:** Use the refined prompt during a lesson and gather student feedback.
- **Iterate:** Continuously adjust based on classroom experience.
- **Share Best Practices:** Exchange ideas with colleagues to further refine your AI integration.

