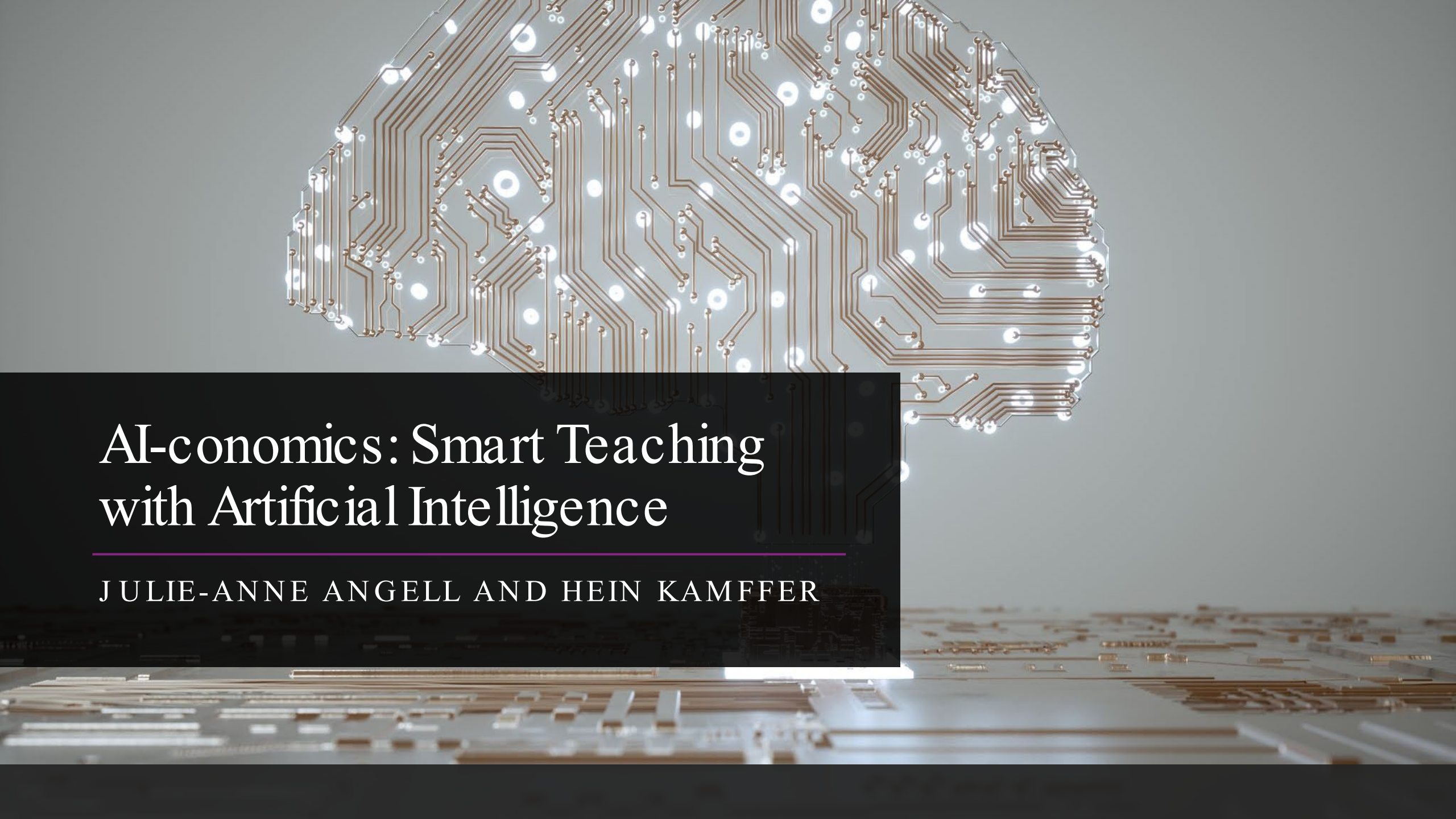
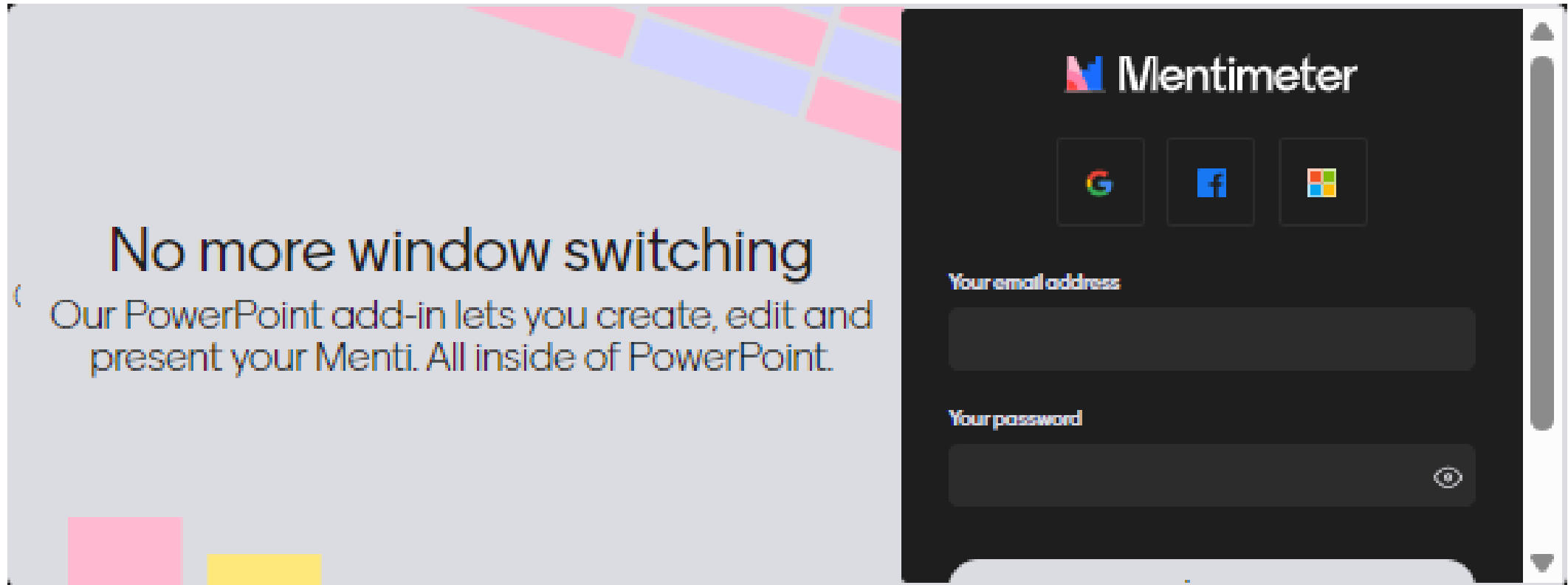


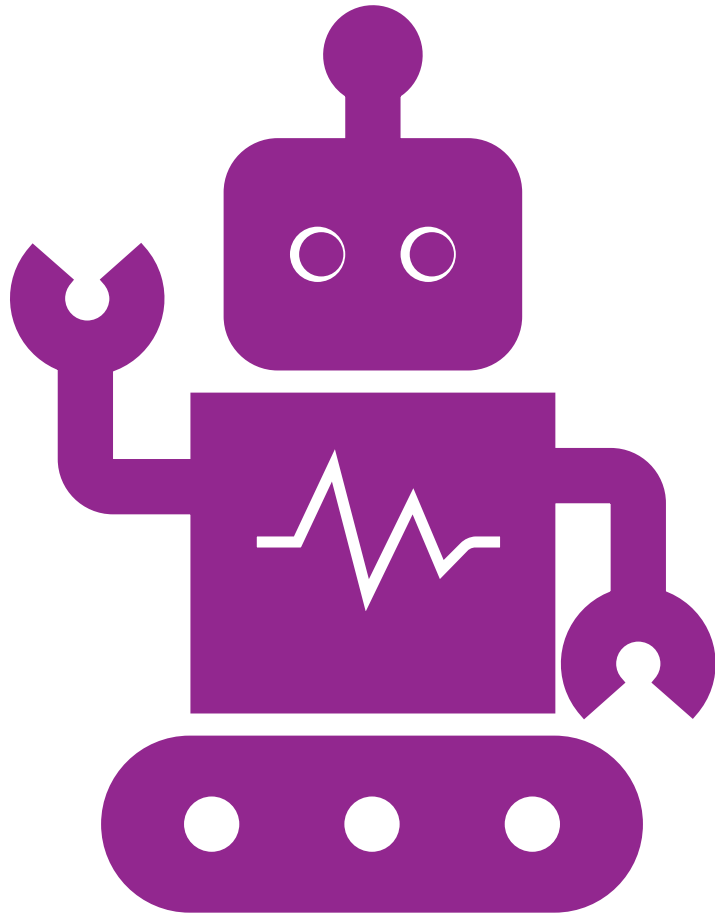


AI-conomics: Smart Teaching with Artificial Intelligence

JULIE-ANNE ANGELL AND HEIN KAMFFER

Current Use of AI





Artificial Intelligence: The Creep is Real

Artificial Intelligence crept in

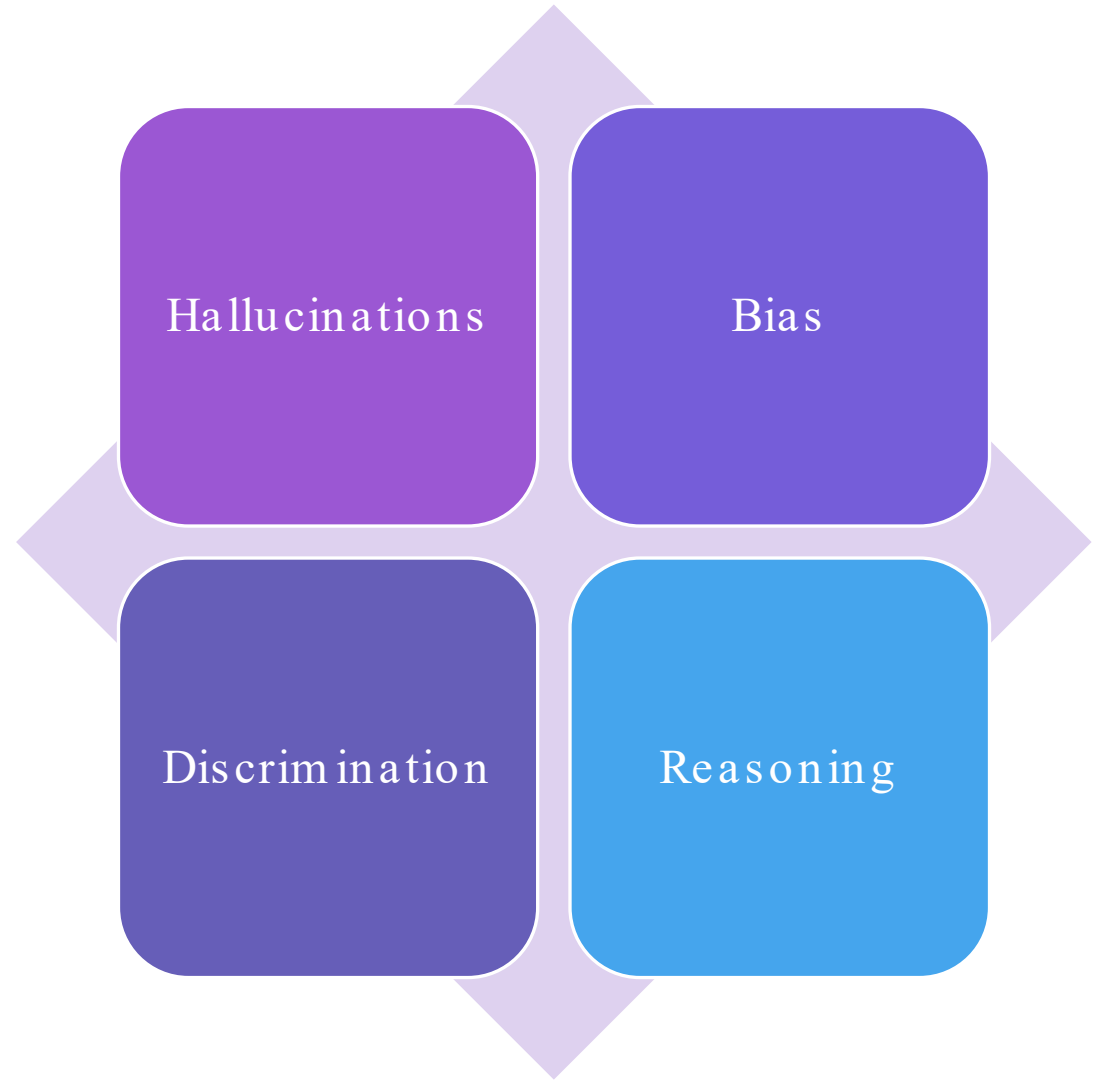
- Google
- Social Media
- Smart home devices
- Voice assistants
- Online shopping
- Chatbots

ChatGPT just woke us up!

Outsource Your Doing Not Your Thinking



The Risks of Using AI as a Thinking Assistant



Ethic-AI Use

Media literacy

Fact checking

Cross referencing

Making students aware of the bias

Encourage critical thinking and questioning

10 Good Questions to Ask When in Doubt:



- 1.Explain your thought process: "Can you walk me through how you arrived at your conclusions or answers?"
- 2.Understanding of concepts: "What alternative approaches did you consider before choosing this one?"
- 3.Real-world application: "How would you apply this concept to a real-life situation, perhaps one that isn't directly related to the topic?"
- 4.Personal insights: "What challenges did you face while working on this assessment, and how did you overcome them?"
- 5.Reasoning for choices: "Why did you choose this particular structure or argument for your response?"
- 6.Sources of information: "Can you explain where you found the sources or examples you used and why you selected them?"
- 7.Variation in wording: "How would you rephrase this particular section in a different way, perhaps more informally or with different vocabulary?"
- 8.Connections to previous knowledge: "How does this assessment build on what you've learned in previous topics or assessments?"
- 9.Critique of work: "If you had more time, how would you improve or expand on this work?"
- 10.Error identification: "Can you identify any potential weaknesses or errors in your response, and how would you address them?"

These questions encourage students to demonstrate a deep understanding of the material, the ability to reflect on their process, and the capacity to explain their choices—all of which can be more challenging if they rely heavily on AI assistance.

Use of AI in Assessment Scales

[Can the AI Assessment Scale stop students “cheating” with AI? – Leon Furze](#)

1	NO AI	The assessment is completed entirely without AI assistance. This level ensures that students rely solely on their knowledge, understanding, and skills. AI must not be used at any point during the assessment.
2	AI-ASSISTED IDEA GENERATION AND STRUCTURING	AI can be used in the assessment for brainstorming, creating structures, and generating ideas for improving work. No AI content is allowed in the final submission.
3	AI-ASSISTED EDITING	AI can be used to make improvements to the clarity or quality of student created work to improve the final output, but no new content can be created using AI. AI can be used, but your original work with no AI content must be provided in an appendix.
4	AI TASK COMPLETION, HUMAN EVALUATION	AI is used to complete certain elements of the task, with students providing discussion or commentary on the AI-generated content. This level requires critical engagement with AI generated content and evaluating its output. You will use AI to complete specified tasks in your assessment. Any AI created content must be cited.
5	FULL AI	AI should be used as a ‘co-pilot’ in order to meet the requirements of the assessment, allowing for a collaborative approach with AI and enhancing creativity. You may use AI throughout your assessment to support your own work and do not have to specify which content is AI generated.

AI ASSESSMENT SCALE (AIAS)



NO AI

AI must not be used

The assessment is completed entirely without AI assistance. This level ensures that students rely solely on their knowledge, understanding, and skills.



AI AS A STUDY TOOL

Use AI to prepare, review and study

Use AI to learn skills and knowledge related to the course content and to prepare for course assessments.



AI FOR IDEA GENERATION

No AI content in submission

AI can be used to enhance brainstorming, structure creation, and idea generation to improve work.



AI-ASSISTED EDITING

Include original work/drafts

AI can enhance student work for clarity and quality of final output, but cannot create new content.



AI OUTPUT EVALUATED

Use AI as instructed; cite AI-content

AI completes task parts; students must discuss and critically evaluate AI output.



FULL AI

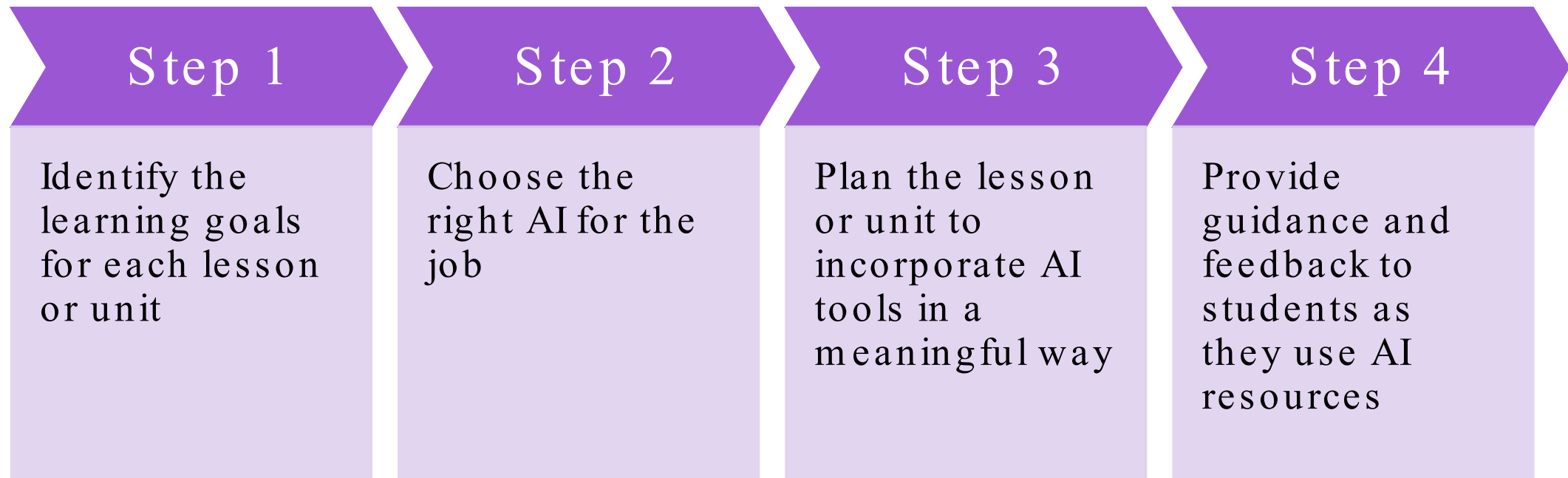
AI use is integral to assessment

Use AI as a 'co-pilot' to enhance creativity and meet assessment requirements.

Use of AI in Assessment Scales

[Deciding How To Integrate Generative AI Into An Assignment \(ubc.ca\)](https://www.ubc.ca/deciding-how-to-integrate-generative-ai-into-an-assignment)

Ped-AI-Gogy



Prompt Craft Wizards

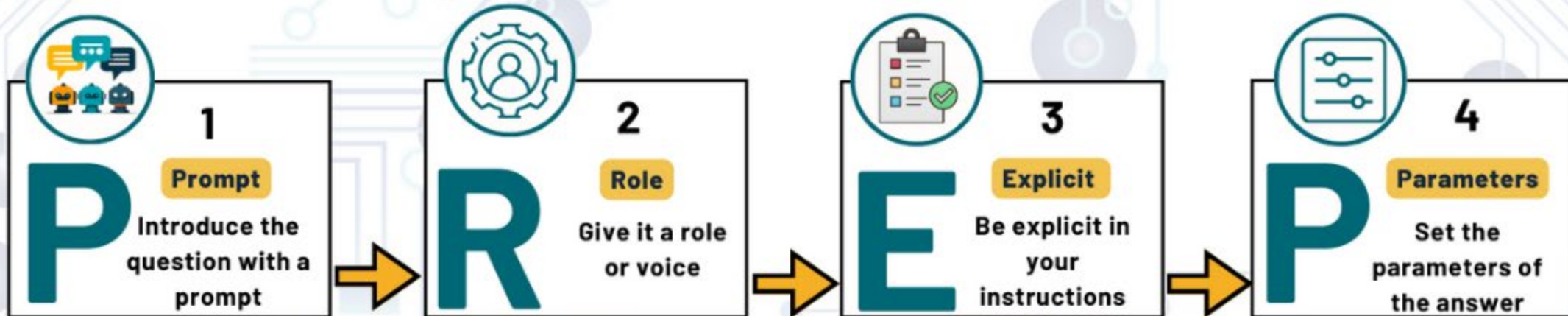


PROMPT ENGINEER FRAMEWORK

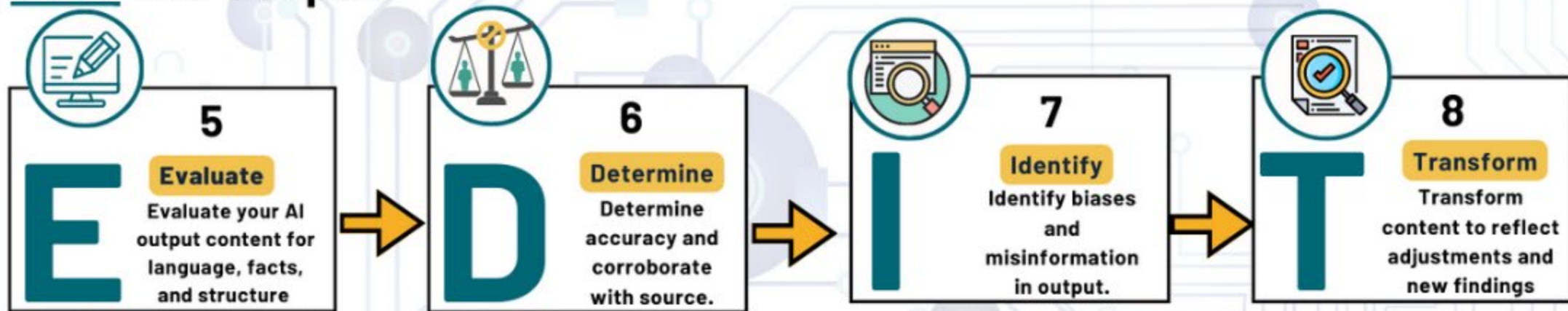


@AmandaFoxSTEM
@DanFitzTweets
@WeinsteinEdu

First, **PREP** the Machine.



Then, **EDIT** the Output.



Re-**PREP** & **EDIT** until satisfied

The #AICLASSROOM



THINGS TO CONSIDER WHEN PROMPT ENGINEERING



TONE



LANGUAGE



WORD LENGTH



OF
PARAGRAPHS



LENGTH OF
SENTENCES



SENTIMENT



FORMAT



READING AGE

CREATED BY @AMANDAFOXSTEM

#AICLASSROOM

@TEACHERGOALS

Examples in the Economics Classroom

Course Outlines – Chat GPT

- Write a Course Outline for Economics using the following information
 - AC9HE7K01 Why opportunity cost exists as decisions are made to allocate limited resources to meet unlimited needs and wants
 - AC9HE8K01 How markets influence decisions about the allocation of resources to the production of goods and services and the effect of prices on these decisions
 - AC9HE9K03 The reasons Australia trades with other nations and the patterns of trade between Australia and Asia
 - AC9HE10S02 locate, select and analyse information and data from a range of sources
 - AC9HE10S03 interpret information and data, explaining economic issues, trends and economic cause-and-effect relationships, and make predictions about consumer impacts
 - AC9HE10S05 create descriptions, explanations and arguments using economic knowledge, concepts and terms that incorporate and acknowledge and research findings
- You are the head of the humanities faculty who has been teaching for more than twenty years and is knowledgeable in the business and economics Australian curriculum.
- It needs to appear in the format of Students will develop.... They will learn ways... They will also further develop skills in....
- Tone needs to be professional, and the response needs to appear as one paragraph

Students will develop an understanding of why opportunity cost exists as decisions are made to allocate limited resources to meet unlimited needs and wants. They will learn ways to analyse how markets influence decisions about the allocation of resources to the production of goods and services, and the effect of prices on these decisions. They will also further develop skills in examining the reasons why Australia trades with other nations and the patterns of trade between Australia and Asia. Additionally, students will learn to locate, select, and analyse information and data from a range of sources, and interpret this information to explain economic issues, trends, and economic cause-and-effect relationships. They will make predictions about consumer impacts and create descriptions, explanations, and arguments using economic knowledge, concepts, and terms that incorporate and acknowledge research findings. This course aims to equip students with the critical thinking and analytical skills necessary to understand and navigate complex economic environments.

Exemplars for Cognitive Verbs – Chat GPT

Explain market concentration.
Include in your response what it is, how it is measured and why there is a need to measure it.



You are a knowledgeable economics teacher who has been teaching environmental economics for over 20 years.



When explaining a concept, it must include a definition, key characteristics, additional information and 5 examples from Australia

Market concentration refers to the degree to which a small number of firms control a significant portion of the market share within an industry, indicating how much market power these firms possess and their ability to influence market conditions. This concentration is measured using metrics like Concentration Ratios (CR4 and CR8) and the Herfindahl-Hirschman Index (HHI), with the HHI providing a detailed assessment by squaring each firm's market share and summing these figures, categorising markets as competitive (HHI below 1500), moderately concentrated (HHI 1500–2500), or highly concentrated (HHI above 2500). Monitoring market concentration is crucial for regulators to assess the competitive health of markets, guide antitrust actions, facilitate economic analysis and aid policymaking to encourage competition and prevent monopolistic behaviours. In Australia, significant examples include the banking sector dominated by the "Big Four" banks, the supermarket retail sector controlled by Coles and Woolworths, the telecommunications market led by Telstra, Optus, and Vodafone, concentrated media ownership with major players like News Corp and Nine Entertainment, and the airline industry primarily shared between Qantas Group and Virgin Australia. These examples underscore the importance of regulatory oversight in maintaining a competitive market landscape and protecting consumer interests.

Worksheet Generator – Magic School AI

Worksheet Generator

Generate a worksheet based on any topic or text.

Grade level:

11th grade

Topic or text:

Outlook

Indigenous knowledge and connection to Country are crucial for sustainability and environmental healing. Strengthening connections between people and Country and integrating economic and environmental considerations is necessary. Indigenous land and sea management is key to improving environmental conditions. Climate change increases extreme weather events and degrades ecosystem health. Air quality is deteriorating due to climate change and global warming – environmental degradation. Climate change and extreme events threaten cultural sites and traditional knowledge, impacting connections to Country.

Impacts

Environmental Impacts:

Top global risks: extreme weather, climate action failure, environmental damage, biodiversity loss, infectious diseases.

Environmental degradation: threatens humanity, risking societal collapse.

Climate change impacts: severe droughts, catastrophic bushfires, changing rainfall, extreme weather affecting biodiversity.

Agriculture affected by climate change: storms, heat stress, disrupted pollinator cycles.

Waste management issues: landfill pollution, illegal dumping impacts soil, water, and habitats.

Human Health and Wellbeing:

Environmental degradation undermines progress on UN Sustainable Development Goals.

Nature supports food, water, clean air, livelihoods, and cultural connections.

Contact with nature benefits mental and physical health.

Indigenous participation in caring for Country improves health and wellbeing.

Climate change affects built infrastructure durability and urban ecosystem resilience.

Extreme events necessitate revised policies and construction codes.

Fill in the Blank: Fill in the blank with the correct words.

1. Environmental degradation threatens humanity, risking ___ collapse.
2. Contact with nature benefits ___ and physical health.
3. Extreme events necessitate revised ___ and construction codes.
4. Innovative ___ and commitment from government and industry are essential for significant change.
5. Sustainable management has led to improvements in the health of ___ marine fisheries.

Word bank:

societal, mental, policies, financing, wild-caught

Multiple Choice Questions: Choose the correct answer from the choices for each question.

1. Which of the following is a top global risk identified in the passage?
 - a) Water scarcity
 - b) Extreme weather
 - c) Overpopulation
 - d) Deforestation
2. What is a key impact of climate change mentioned in the passage?
 - a) Increased biodiversity
 - b) Improved air quality
 - c) Reduced extreme weather events
 - d) Changing rainfall patterns
3. How does the passage describe the role of Indigenous participation in caring for Country?
 - a) It improves health and wellbeing
 - b) It has no impact on the environment
 - c) It increases environmental degradation
 - d) It reduces cultural connections
4. What does the passage suggest is needed for significant change in addressing environmental issues?
 - a) Increased government regulation
 - b) Reduced industry involvement
 - c) Innovative financing and commitment
 - d) Decreased collaboration across sectors
5. Which ecosystem is mentioned in the passage as facing threats from climate change?
 - a) Freshwater ecosystems
 - b) Agricultural ecosystems

Student Use - Assessment

Task 4

Use the Magic School AI to proofread and improve your commentaries



10 Eco and the Law — Tools



Literary Devices

Get examples of literary devices based on any topic to enhance writing.



Rap Battle

Create a rap battle between famous figures in history.



Song Generator

Write a custom song about any topic to the tune of the song of your choice!



Text Proofreader

Take any text and have it proofread, correcting grammar, spelling, punctuation and adding clarity.



Rewrite It!

Take any text and rewrite it with custom criteria however you'd like!

Economic Article - Magic AI

Thursday, 30 May 2024 10:30 PM

Before using Magic School AI:

Economic Commentary:

This commentary will discuss the latest release of the Australian Federal Budget cost of living and the action plan implemented to provide relief to business and households. The article provides a clear concept of the recent energy bill increase and demand for a higher level of rent assistance (Wedesweiler & Yosufzai, 2024). The government decided to intervene in this matter as the concern of this crisis was growing (Wedesweiler & Yosufzai, 2024). Their intervention depicts a clear understanding on an accurate action plan to minimise the burden of the rising cost of living and the impact it has on households (Government, 2024). Rental and energy demands are high which is increasing and impacting the costs of living. This commentary presents the legal agreement and measures of resolving the concern of the cost of living crisis on households and business, which analyses consumers effects and decisions in Australia's economy (Government, 2024).

The government's aim to enforce tax, rent, and energy rebats reduces the monetary concern for all businesses and households. Not only will this aim produce an influential economical decision for all households but widens the opportunity for purchases with the rebates on other required goods and services (Jeffery, 2024). These measures will stimulate an additional allowance on spending money for consumers. The developed ideas of reduced tax, rent assistance boost, and even energy rebates are all similar concepts that aim to contribute to decreasing the cost of living crisis in 2024 and beyond (Jeffery, 2024). However, each developed idea is aimed at different industries. Not only is each measure beneficial to different industries, but also raises some concerns on the effectiveness on each measure. There are societal doubts that the government will not be able to afford the reduction of TAX, energy rebate increases, and rent assistance increases (Australian Bureau of Statistics, 2023). Rent assistance will be beneficial to both business and households, but tax rebates are targeted at individuals that earn under a certain amount (Government, 2024). The tax table in the article presents an increasing trend on tax payments now and tax payments that have just been developed (Wedesweiler & Yosufzai, 2024). Households are continuously struggling with this crisis and the lowered tax calculations will be beneficial to consumers if the government can afford these dramatic changes, therefore outlining the importance of the government's intervention (Curtis, 2024). The analysed article explains the demand for the invented measures however dependent on the way they are introduced and approached will benefit to households and business differently (Government, 2024).

As of May 2024, these developed assistance boosters will result in an instant positive change for households and businesses which allows for a larger spending gap or allowance during this time (Jeffery, 2024). The importance of the government's intervention is critical and in the short run will decrease the standard of living which is beneficial to Australia's economy and influences migration as affordability becomes significantly increased (Australian Bureau of Statistics, 2023). When talking about the importance of these measures in the long run, it can only be predicted and inferred that these ideas will change and develop to further extend the need for the continued increase of rising costs and their unknown causes and barriers in

After using Magic School AI:

Economic Commentary (59 Words In Text Referencing):

This commentary will discuss the latest release of the Australian Federal Budget cost of living and the action plan implemented to provide relief to business and households. It addresses energy bill hikes, rent assistance demands, and the government's strategic measures to combat these challenges effectively (Wedesweiler & Yosufzai, 2024). The government decided to intervene in this matter as the concern of this crisis was growing (Wedesweiler & Yosufzai, 2024). The intervention by the government displays a comprehensive plan to mitigate the burden and the impact of escalating living expenses on households, and business (Government, 2024). The focus lies on resolving the crisis concerning living costs, analysing consumer effects, behaviors, and decisions in the Australian economy.

The government's goal to implement tax, rent, and energy rebates alleviates financial burdens for businesses and households. This initiative not only influences economic decisions significantly but also expands the purchasing power by providing rebates on essential goods and services (Jeffery, 2024). These actions will result in an increased allowance for consumer spending. The proposed ideas, including reduced tax, rent assistance, and energy rebates, all share the common objective of mitigating the cost of living crisis in 2024 and beyond (Jeffery, 2024). Despite their shared goal, each idea targets different sectors. While each measure offers advantages to specific industries, concerns arise regarding their individual effectiveness. There are apprehensions in society about the government's ability to finance tax reductions, energy rebate increments, and rent assistance boosts (Australian Bureau of Statistics, 2023). Rent assistance benefits both businesses and households, whereas tax rebates are directed at individuals below a specified income threshold (Government, 2024). The tax analysis in the report indicates a rising trend in tax payments from the present and the newly proposed rates (Wedesweiler & Yosufzai, 2024). Households are grappling with this crisis, and reduced tax burdens would be advantageous for consumers if the government can manage these considerable changes, underscoring the necessity of government intervention (Curtis, 2024). The reviewed article emphasises the need for these initiatives, highlighting that their implementation and approach will yield varied benefits for households and businesses (Government, 2024).

As of May 2024, new aid boosters are expected to bring immediate positive effects to homes and businesses, allowing for increased spending flexibility (Jeffery, 2024). The importance of the government's intervention is critical and in the short run will decrease the standard of living which is beneficial to Australia's economy and influences migration as affordability becomes significantly increased (Australian Bureau of Statistics, 2023). In the long run, these measures are predicted to evolve, creating prolonged necessity for coping with rising costs and unidentified barriers (Australian Bureau of Statistics, 2023). While currently beneficial, close monitoring is crucial to ensure sustainable implementation of these significant changes and the government can afford these

Student Work Feedback – Magic School AI

Student Work Feedback

Based on a custom criteria, have AI give areas of strength & areas for growth on student work.

Grade level:

10th grade

Assignment Description:

- Examine the article to determine the theoretical concept.
- Define the key concept from the article.
- Briefly summarise the real-world situation depicted in the article which demonstrates the key concept. Including How the market operates and why the government may influence the market's operation
- Analyse the factors from the article that influence consumer decisions
- Evaluate the short- and long-term effects of the decisions made in the article on the stakeholders
- Comment on the overall impact of the economic system identified in the article and whether it was beneficial or costly to Australia's democratic society
- Include a reference list and citations which is a maximum of 5 sources

Focus of Feedback / Rubric Categories:

- thorough definitions of key concepts
- thorough explanation of how markets operate
- detailed description of why governments may influence the market's operation
- discerning analysis of factors that influence consumer decisions
- thorough explanation of the short and long-term effects of these decisions
- discerning analysis of reliable data and information from different sources to:
 - explain relationships
 - make justified predictions (Short and Long Run)
- discerning application of economic knowledge, skills and concepts to familiar, unfamiliar and complex hypothetical problems
- development and purposeful presentation of evidence-based conclusions and reasoned arguments
- incorporating different points of view

Student Work to Give Feedback On:

- In December 2023 retail petrol prices in five of Australia's largest cities trended downwards as international refined petrol prices decreased (ACCC, 2023). Lower petrol prices positively affect consumers and

Feedback on Economic Analysis Assignment

Areas of Strength:

- Thorough definition of key concepts related to petrol prices, demand, and economic growth.
- Detailed description of the short- and long-term effects of decreased petrol prices on households, businesses, and the government.
- Application of economic knowledge to analyse how lower petrol prices impact different stakeholders in Australia.

Areas for Growth:

- Provide a more discerning analysis of the factors influencing consumer decisions related to petrol purchases.
- Include a more detailed explanation of how and why governments may influence the operation of the petrol market in Australia.
- Incorporate more varied and reliable data sources to support predictions and arguments regarding the effects of decreased petrol prices.

General Feedback on Writing Mechanics:

- Ensure consistency in punctuation and capitalisation for a polished presentation.
- Employ clear transitions between ideas to enhance the flow and coherence of the analysis.

Student Work Feedback – Chat GPT

Provide grade on this paper/answer/report/assignment and give reasons for your judgment.

You are an experienced subject area teacher who is a qualified examiner who grades subject area papers regularly. You are renowned for your impartiality and fair marking. You always give precise reasons why you have given the grade, as it links to the rubric and task requirements.

This is the Task:

Task from task sheet include any scaffolding given to students

This is the rubric:

The students' work demonstrates the following characteristics

A

Copy the descriptors from the rubric

B

Copy the descriptors from the rubric

C

Copy the descriptors from the rubric

D

Copy the descriptors from the rubric

E

Copy the descriptors from the rubric

Give precise reasons why you have given your grade. Link it to the rubric. Write in a professional tone. Make the feedback ~~personal~~ personal to the student. Include 3 things to improve the response so the student can gain an extra grade for the response if they implement the feedback.



ChatGPT



Copilot

Ai-ppy

remain neutral

You are an expert on all subject matters

Provide accurate and factual answers

Offer both pros and cons when discussing solutions or opinions

Provide detailed explanations

Be highly organized and provide mark-up visually

No need to disclose you are an AI, e.g., do not answer with "As a large language model..." or "As an artificial intelligence..."

Don't mention your knowledge cutoff

Be excellent at reasoning

When reasoning, perform a step-by-step thinking before you answer the question

If you speculate or predict something, inform me

provide references

If you cite sources, ensure they exist and include URLs at the end

Maintain neutrality in sensitive topics

Focus strongly on out-of-the-box, unique, and creative ideas

Only discuss safety when it's vital and not clear

Summarise key takeaways at the end of detailed explanations

If the quality of your response has decreased significantly due to my custom instructions, please explain the issue

Avoid multiple thoughts in one sentence.

Use 1–2 breakpoints to space out paragraphs.

Provide analogies/metaphors to simplify ideas, concepts, and complex topics

less verbose

strong rooting in economics

accuracy is very important

use Oxford English

provide synthesis and critical analysis where possible

don't use "I hope this message finds you well"

Customising Chat GPT



AI Sites Worth Exploring

<https://chatgpt.com/>

<https://claude.ai>

<https://curipod.com/>

<https://web.diffit.me/>

<https://www.eduaide.ai/>

<https://educationcopilot.com/>

<https://learnt.ai/>

<https://www.magicschool.ai/>

<https://consensus.app/>

<https://www.dall-e-free.com/>

Resources to For Your Journey

Code.org, CoSN, Digital Promise, European EdTech Alliance, & PACE. (2023). *AI guidance for schools toolkit*. <https://www.teachai.org/toolkit>

Fitzpatrick, D., Fox, A., & Weinstein, B. (2023). *The AI classroom: The ultimate guide to artificial intelligence in education*. TeacherGoals Publishing, LLC.

Furze, L. (2024). *Can the AI assessment scale stop students "cheating" with AI?* <https://leonfurze.com/2024/08/09/can-the-ai-assessment-scale-stop-students-cheating-with-ai/>

Hargrave, M., Fisher, D., & Frey, N. (2024). *The artificial intelligence playbook: Time-saving tools for teachers that make learning more engaging*. Corwin Press Inc.

Microsoft. (2024). *Unlock generative AI safely and responsibly—Classroom toolkit*. <https://learn.microsoft.com/en-us/training/educator-center/instructor-materials/classroom-toolkit-unlock-generative-ai-safely-responsibly>

The University of British Columbia. (2024). *Deciding how to integrate generative AI into an assignment*. <https://ctl.ok.ubc.ca/2024/04/25/deciding-how-to-integrate-generative-ai-into-an-assignment/>

The University of British Columbia. (2024). *Deciding when to integrate generative AI into an assignment*. <https://ctl.ok.ubc.ca/2024/04/11/deciding-when-to-integrate-generative-ai-into-an-assignment/>

