

GenAI Overview: Understanding the Power of Generative AI

Activity Workbook

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Overview

During this two-hour session, participants will engage in a series of activities designed to familiarise themselves with crafting effective Generative Artificial Intelligence (GAI) prompts, understanding some of the ethical considerations of using AI and getting interactive by watching and taking part in using some GAI tools. This training is conducted online via Zoom, allowing you the learner to interact and collaborate using chat messages or via your camera. Please ensure you are set up somewhere quiet or you won't be disturbed so you can make the most of the session.

Before we begin.

Set up and sign up to GAI tools.

If you wish to participate during the session, which is optional, you may find it beneficial to have already signed up to the free tools I will be discussing. Please below a list of the tools and instructions for sign up. Please also remember with some free tools you will have limited number of prompts, or queries – for example free version of CoPilot gives you 30 prompts.

Microsoft Copilot

Online instructions - [Personal AI Assistant | Microsoft Copilot](#)

You can use Copilot without creating an account, but signing up will give you access to additional features, such as a history of previous prompts.

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Claude AI

Online instructions - [Claude: How to Sign Up for The AI \(2024\) \(guides.ai\)](#)

You will need to use a Google account or any personal email address (which will also require a phone number) to set up a Claude AI account.

ChatGPT

Online instructions: [ChatGPT | OpenAI](#)

You can use ChatGPT without creating an account, but signing up will give you access to additional features, such as a history of previous prompts.

Using Zoom

The session will take place over Zoom, a link will be sent to your email address where you can join the meeting. The meeting will not be recorded however you will have this activity booklet to refer to.

Cameras

Having your camera on is appreciated but not mandatory. Guidance below, on using your camera with a background image, or blur so viewers cannot see your surroundings:

[How to Blur Your Background in a Zoom Call \(TechRepublic, 2023\)](#)

Chat messaging

You can ask questions either during or via raising your hand. There will be opportunities throughout the session to pause and ask any queries.

Agenda for today's session

- AI Made Simple: Understand the key concepts and terms without the jargon.
- Master the Art of Prompts: Learn how to ask the right questions to get valuable, actionable insights.
- AI Accuracy and Ethics: Develop strategies for fact-checking and navigating AI limitations.

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- Practical, Real-World Uses: Explore innovative ways to apply AI in education, operations, and problem-solving.

AI Made Simple

What is AI?

- AI is defined as “the ability of a computer or other machine to perform those activities [or tasks] that are normally thought to require intelligence.” ([The American Heritage Dictionary](#))

Generative AI tools versus Assistive AI tools

Generative AI tools use large datasets and algorithms to create new content, such as text, images, and audio. They work by identifying patterns in the data and generating outputs based on user prompts and instructions. In contrast, assistive AI tools are designed to enhance and support human abilities. These tools, like text-to-speech and the Immersive Reader in Office 365, help automate tasks or improve efficiency, making them useful for augmenting human performance rather than creating new content.

AI Jargon Buster

Data: Facts that can be analysed or used to gain knowledge or make decisions; information.

Algorithm: A finite set of unambiguous instructions that, given some set of initial conditions, can be performed in a prescribed sequence to achieve a certain goal and that has a recognisable set of end conditions.

Model: A function produced after it has been trained to recognise certain types of patterns in data. For example, ChatGPT-4 is a model, and so is Claude 3 Opus.

Training: The process of providing the model with an algorithm that it can use to reason over and learn from a set of data

LLM: Large Language Model – trained on vast amounts of data, to generate a human like response, by predicting what words comes next.

AI Tool overviews and UK usage statistics

‘Three in five (60%) people in the UK are now aware of a Gen AI tool, up modestly from 52% in May 2023’ (Deloitte 2024) [Digital Consumer Trends 2024: Generative AI | Deloitte UK](#)

In a survey of 13–18-year-olds, Generative AI usage increased from 37.1% in 2023 to 77.1% in 2024

[Children, young people and teachers’ use of generative AI to support literacy in 2024 | National Literacy Trust](#)

Best Practices and Ethical Considerations

OpenAI uses anonymous feedback from interactions (when users enable history and contributions) to identify gaps and improve responses across industries and scenarios. Contributions are anonymised, meaning personal identifiers are not stored alongside the data. OpenAI must also adhere to GDPR.

- Data is collected and could be shared to 3rd parties without your permission.
- You can turn off chat history, however data is stored for up to 30 days.

Why is this important to you? A study ([WILDCHAT: 1M ChatGPT Interaction Logs in the Wild](#)) revealed deeply personal conversations, including a man’s private reflections post-divorce, those these were anonymous they were shared with researchers.

To turn off chat history and Training

Go to your profile>settings>data controls>Improve the model for everyone (off)

To understand more how your data is used, please follow the below link

[How your data is used to improve model performance | OpenAI Help Center](#)

To see more information on how to turn off chat history, use this link [How do I turn off chat history and model training? | OpenAI Help Center](#)

Your privacy matters -don't include personal and confidential information in your prompts

Privacy - Just leave out personal details. Data **could** be used to train their systems, meaning others could see it. **Don't share confidential data.**

Why is this important to others, see below article.

[Samsung bans use of generative AI tools like ChatGPT after April internal data leak | TechCrunch](#)

Master the Art of Prompts

Zero-Shot Prompting – Go Fish!

Zero-shot prompting is when you ask the AI a question without giving it any examples or context beforehand. You're relying on the tool to interpret your request based on its general knowledge and training. A bit like the game Go Fish, you make a request, not knowing exactly what the AI tools has in its 'deck'. You might for example ask it 'What is artificial intelligence?' or relating to a topic you know a lot about, to see what the GAI tool comes back with. You are testing the waters, so to speak.

Example Prompt: Write an email inviting colleagues to a meeting.

Few-Shot Prompting – Poker

Few-shot prompting is when you give the AI a few examples or more specific instructions to guide its response. You're giving it a strategy to follow, much like a Poker player uses what they know to make a calculated decision. So, instead of giving the GAI tool the instruction, or prompt that is ambiguous, you are providing more of a structure, to increase the chances to get the exact result you want. A bit like a Poker player you are using your knowledge to influence the outcome of the results.

Example prompt: 'Dear Team, please join me for a strategy meeting on Thursday at 3pm in conference room A.' Now, could you write a similar email for a staff training session for the same day and time.

When starting out to using Generative AI tools, such as CoPilot or ChatGPT, zero-shot prompting is a great way to for exploring what those GAI tools can do (and can't). When you start to get more familiar with it, using examples or providing context helps you get better and likely more accurate results. It's a process of learning how to ask the right questions, much like refining your skills in the game.

What some more academic reading with examples, relating to prompt engineering read here [Exploring Prompt Engineering: A Systematic Review with SWOT Analysis Singh et al 2024](#)

Role-Play Prompting

In role-play prompting, you construct the question, so the GAI tool takes on a persona, for example a marketing expert, a lecturer, a professional development advisor. This can be important as it frames the questions as to how the GAI tool should answer the question or prompt. It can also include the 'tone' of the response you want, for example rather than taking on a persona, it could be you want it to use professional or more academically structured vocabulary.

Examples of type of roles you could use:

- Lecturer [insert specific level of teaching]
- Marketing Manager
- Quality Assurance Advisor, in education.

Best Practices: Do not use the same role for all your prompts, match the role to the output you want. Putting in the wrong role could lead to inaccurate or biased outputs.

Role-play prompting is also known as:

- Persona Prompting
- Role-Based Prompting
- Simulated Persona Interaction

For more information on role-based prompts, including some of its pitfalls read here - [Persona is a Double-edged Sword: Mitigating the Negative Impact of Role-playing prompts in Zero-Shot reasoning Tasks Kim et al 2024](#) and [What 'A Help Assistant' Is not](#)

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[really helpful: Personas in system prompts do not improve performances of large language models_Zheng et al 2024](#)

Examples of role-play prompting

‘You are a project manager. Explain how to organise a team meeting’

- How could you enhance the above prompt?
- What other information could you include that could tailor the response to your exact needs?

Think of the setting or situation, are you completing the meeting online, if so what type of software are you using e.g. MS Teams. Are some taking part in -person, in a meeting room. If so, what resources are to hand, for example flip-chart paper, post it notes etc. If it's a hybrid session, with both online and in-person, how can the session be more interactive and inclusive of those online.

Using P.R.E.P to ask Generative AI a question

Based on Milo @Notion4Ts and @DanFitzTweets [tweet 2023](#), Information on P.R.E.P can be found here [The AI Classroom | TeacherGoals Publishing](#)

Prompt. Role. Explicit. Parameters

Prompt – Introduce the question with a prompt

Role – Give it a role or a voice, or tone.

Explicit – Be explicit in your instructions

Parameters – Set the parameters of the answers

Example below to be copy and pastes into Copilot or similar GAI tools during the session or afterwards.

[Prompt] I want to you create a marketing campaign that includes a short TikTok style videos and posters that will promote the benefits of healthy eating and lifestyle.

[Role] You are a marketing expert, who have been asked to create an engaging and dynamic campaign.

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[Explicit] To promote eating healthy amongst the age demographic 35 – 55 years of age, who live in the north of Scotland

[Parameters] Can you create ideas for a script and video storyboard for the marketing team to use, the video is only 30 seconds to 1 minute long. Also separately include ideas for a poster, A4 size that has the information in bullet points, which is simple and clear along with images that would sit alongside the poster.

GAI tools can help you create ideas for:

- Writing emails
- Engagement ideas
- Newsletters
- Marketing Ideas

What do you want or think Generative AI can do for you and your role?

Writing emails

P – Introduce the question with a prompt

R – Give it a role or a voice

E – Be explicit in your instructions

P – Set the parameters of the answers

- P – Write an email about the [topic]
- R – The tone of the email should be professional/natural/informal/conversational (chose one)
- E – Explicit. The goal of the email is [to meet for further discussion/arrange a meeting/ask for clarification] (chose one)
- P - The email should be [short/long/X number of words]

Marketing ideas

Write the LinkedIn post description about [topic] in [insert how many sentences].

Format every new sentence with the new lines so the text is more readable. Include some emoji/hashtags, [insert how many], and the 1 headline should be captivating to the readers.

Create 5 attention-grabbing content hooks for [insert topic]. Each hook should be no more than 17 words and should entice readers to engage with the content.

Activity ‘Let’s Go Prompting’

Scenario 1: Write an email

Prompt: Draft a [Chose one - professional/friendly/informal/urgent tone] email inviting colleagues to a workshop on digital literacy

Compare & Focus

Tone and Professionalism

Scenario 2: Summarise a Document

Prompt: Summarise the following text in under 100 words.

“Part One: Introduction 1.1 The power and potential of artificial intelligence 19. AI is already delivering major advances and efficiencies in many areas. AI quietly automates aspects of our everyday activities, from systems that monitor traffic to make our commutes smoother, 17 to those that detect fraud in our bank accounts. 18 AI has revolutionised large-scale safety-critical practices in industry, like controlling the process of nuclear fusion. 19 And it has also been used to accelerate scientific advancements, such as the discovery of new medicine 20 or the technologies we need to tackle climate change. 21

20. But this is just the beginning. AI can be used in a huge variety of settings and has the extraordinary potential to transform our society and economy. 22 It could have as much impact as electricity or the internet and has been identified as one of five critical technologies in the UK Science and Technology Framework. 23 As AI becomes more powerful, and as innovators explore new ways to use it, we will see more applications of AI emerge. As a result, AI has a huge potential to drive growth 24 and create jobs. 25 It will support people to carry out their existing jobs, by helping to improve workforce efficiency and workplace safety. 26 To remain world leaders in AI, attract global talent

and create high-skilled jobs in the UK, we must create a regulatory environment where such innovation can thrive.

21. Technological advances like large language models (LLMs) are an indication of the transformative developments yet to come.²⁷ LLMs provide substantial opportunities to transform the economy and society. For example, LLMs can automate the process of writing code and fixing programming bugs. The technology can support genetic medicine by identifying links between genetic sequences and medical conditions. It can support people to review and summarise key points from lengthy documents. In the last four years, LLMs have been developed beyond expectations, and they are becoming applicable to an increasingly wide range of tasks.²⁸ We expand on the development of LLM and other foundation models in section 3.3.3 below.’

Excerpt taken from [A pro-innovation approach to AI regulation](#) _Department for Science, Innovation & technology 2023

Comparison & Focus

Accuracy of Summarisation

Could you improve the prompt so the outputs could be more accurate?

Scenario 3: Generate a list of ideas

Prompt: Suggest five ways to improve collaboration between academic and professional services teams.

Comparison & Focus

- Creativity and relevance of those suggestions
- Actionability of those ideas.

Scenario 4: Translate or Reword a Sentence

Prompt: Reword this sentence to make it sound more [Chose one – formal/urgent/friendly/professional] ‘We need to work together to solve this problem’.

Comparison & Focus

- Formality and linguistic choices
- Variations in wording

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Scenario 5: Role-Play

Prompt: You are a [insert role] wishing to support a student who is struggling to balance their coursework with a part-time job. Can you offer practical suggestions and resources to help them manage their time better.

Roles - professional services advisor, lecturer, careers advisor, other/own role.

Comparison & Focus

- Comparison of roles and difference to responses.
- Relevance to suggestions depending on role.

Further thoughts and debrief prompting

How accurate or relevant were the AI outputs based on your prompts?

What challenges or limitations did you face while using the AI tool?

Did you notice any issues with factual accuracy in the AI's responses?

Did any of the AI's responses raise ethical concerns or seem inappropriate?

Which prompting style did you find most effective?

Factcheck and Limitations

Plenty on the web is wrong and in trying to predict patterns in your query, **AI tools can make things up**. Verify, Verify & Verify again! To understand why Generative AI tools are like this, this article explains a bit more about it. [What are AI hallucinations—and how do you prevent them? | Zapier](#)

ASK IT: CAN YOU FACT-CHECK THIS CLAIM? IS THERE A SOURCE THAT CONTRADICTS THIS INFORMATION?

COMPARE AND CROSS-CHECK: USING A SEARCH ENGINE (GOOGLE/BING ETC) COMPARE THE OUTPUTS.

USE CRITICAL THINKING: APPLY YOUR OWN KNOWLEDGE TO THE INFORMATION PROVIDED.

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REMEMBER TO CHECK SOURCES GIVEN: SOME WEBSITES DO CONTAIN FALSE OR MISLEADING INFORMATION.

‘The lawyer for a man suing an airline in a routine personal injury suit used ChatGPT to prepare a filing, but the artificial intelligence bot delivered fake cases that the attorney then presented to the court, prompting a judge to weigh sanctions as the legal community grapples with one of the first cases of AI “hallucinations” making it to court.’

[Lawyer Used ChatGPT In Court—And Cited Fake Cases. A Judge Is Considering Sanctions](#)

‘What All Men Should Know About Low Testosterone - Bradley Anawalt, the chief of medicine at the University of Washington Medical Center who has held leadership positions at the Endocrine Society, reviewed the article and told Futurism that it contained persistent factual mistakes and mischaracterizations of medical science that provide readers with a profoundly warped understanding of health issues.’

[Magazine Publishes Serious Errors in First AI-Generated Health Article](#)

Let’s recap

You’ve seen how AI can act like a teacher, an advisor, or even a historian, and how different prompts can shape its outputs. This adaptability is what makes AI so valuable across different contexts.

You’ve just experienced how AI tools can be influenced by the way we ask questions. This skill—crafting prompts—is key to unlocking AI’s potential in the real-world situations.

Education: Help educators create and design interactive materials such as quiz questions, lesson plans, including presentations slides.

Operations: Automate repetitive tasks, draft emails, policy templates and presentation outlines.

Problem Solving: Use AI to generate ideas for campus events, student away days or staff conferences.

Your next step is simple: Think of one task you find repetitive or time-consuming—try using an AI tool to help with it.

Additional references and links from slides

Slide 1: [American Heritage Dictionary Entry: artificial intelligence](#)

Slide 4: [The History of Artificial Intelligence: Complete AI Timeline \(techtarget.com\)](#)

Slide 9: [More than four million people in the UK have used Generative AI for work - Deloitte | Deloitte UK](#)

Slide 9: [Digital Consumer Trends 2024: Generative AI | Deloitte UK](#)

Slide 9: [More than four million people in the UK have used Generative AI for work - Deloitte | Deloitte UK](#)

Slide 9: [The state of AI in 2023: Generative AI's breakout year | McKinsey](#)

Slide 9: [The state of AI in early 2024 | McKinsey](#)

Slide 10: [Children, young people and teachers' use of generative AI to support literacy in 2024 | National Literacy Trust](#)

Slide 15: [ChatGPT bug leaked users' conversation histories_BBC by Ben Derico 2023](#)

Slide 15: [The Atlantic's article What If Your ChatGPT Transcripts Leaked?.](#)

Slide 15: [\(WILDCHAT: 1M ChatGPT Interaction Logs in the Wild\)](#)

Slide 16: [AI chatbot models 'think' in English even when using other languages | New Scientist](#)

Slide 16: [LLMs Will Always Hallucinate, and We Need to Live With This_Banerjee et al 2024](#)

Slide 16: [Large Language Models Reflect the Ideology of their Creators_Buyl et al 2024](#)

Slide 25: [When "A Helpful Assistant" Is Not Really Helpful: Personas in System Prompts Do Not Improve Performances of Large Language Models_Zheng et al 2024](#)

Slide 42: [The art of the prompt: How to get the best out of generative AI - Source](#)

Slide 44: [Lawyer Used ChatGPT In Court—And Cited Fake Cases. A Judge Is Considering Sanctions ‘](#)

Slide 44: [Magazine Publishes Serious Errors in First AI-Generated Health Article](#)

Slide 44: ['Garbage in, garbage out': AI fails to debunk disinformation, study finds](#)

AI Assistance Acknowledgement

This workbook was developed with the assistance of generative AI tools to support content creation, language refinement, and idea organisation. The following details describe the AI tools utilised:

- **Tool Name & Version:** ChatGPT 4 Turbo
- **Provider:** OpenAI
- **Tool URL:** <https://www.openai.com/chatgpt>
- **Usage Details:** The AI tools were used to generate draft text, suggest content structure, and refine language.
- **Prompt Originator:** All prompts were authored by Fiona McConnell
- **Date of Use:** November & December 2024
- **Role of AI Responses:** The AI-generated content was used as a resource to inform and enhance the final text; all outputs were carefully reviewed and edited before inclusion.