



Welcome to AI Workshop

AI - Today and Tomorrow



July 2024

Provocation...



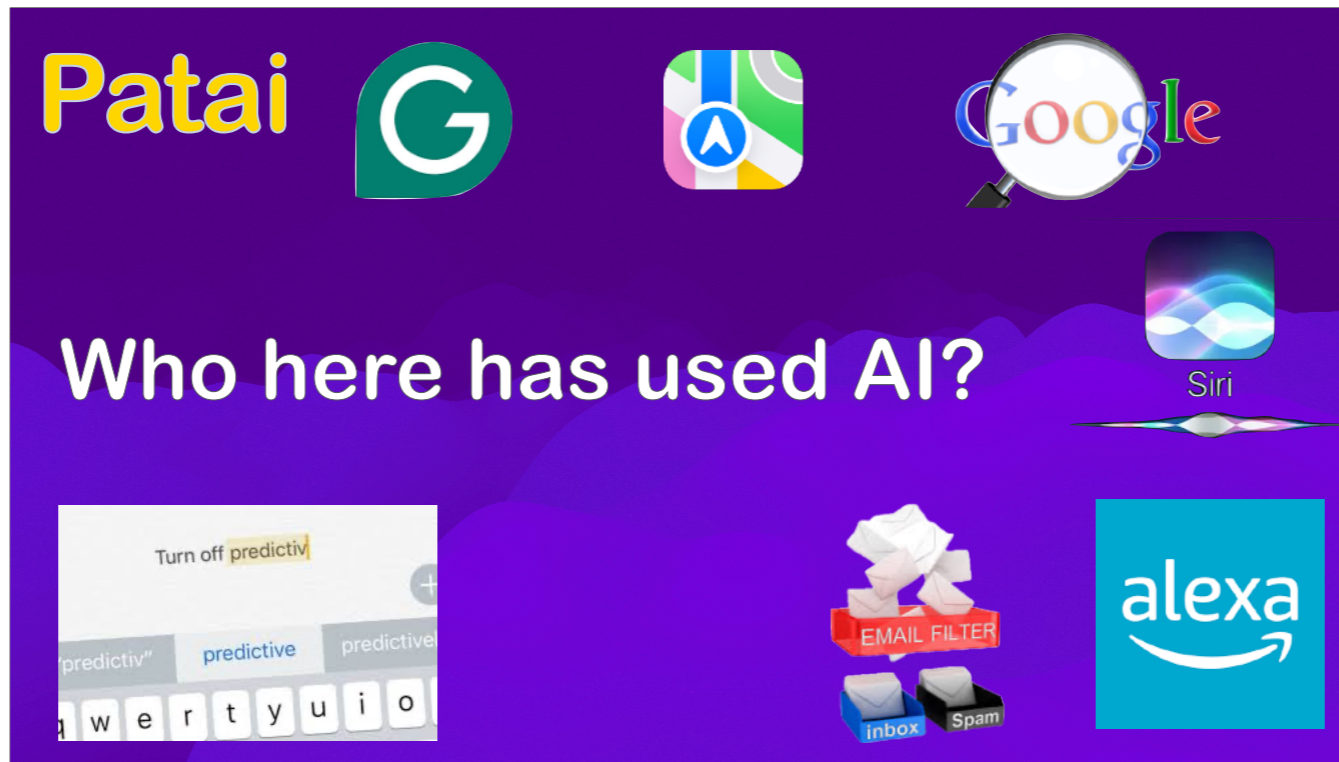
“Tino rangatiratanga: mō tātou,
ā, mō kā uri ā muri ake nei”

The ability to create and
control our destiny for
generations to come

There is a new generation of children who will not know life without AI and it is our role to create the new normal for them.

Keeping it Fresh





Actually you ALL have - If I said Google Search is AI then what else might you have used that is AI
Maps is another example.
Alexa and Siri.
Predictive text
Spam filters

What about AI that you talk to?
What about AI when you are texting?
What about AI that sorts email?
Grammarly is another example

AI is...

Artificial intelligence is the science of making machines that can think like humans.

It can do things that are considered "smart."

AI can process large amounts of data in ways unlike humans. AI is learning to recognise patterns and make decisions and judgement calls like humans.

Exponential Change

LLMs

Internet Scraping

Deep Mind - GO destroyer

Wild West - Hallucinations - Conspiracies

143 Quadrillion FLOPs floating point operations per second

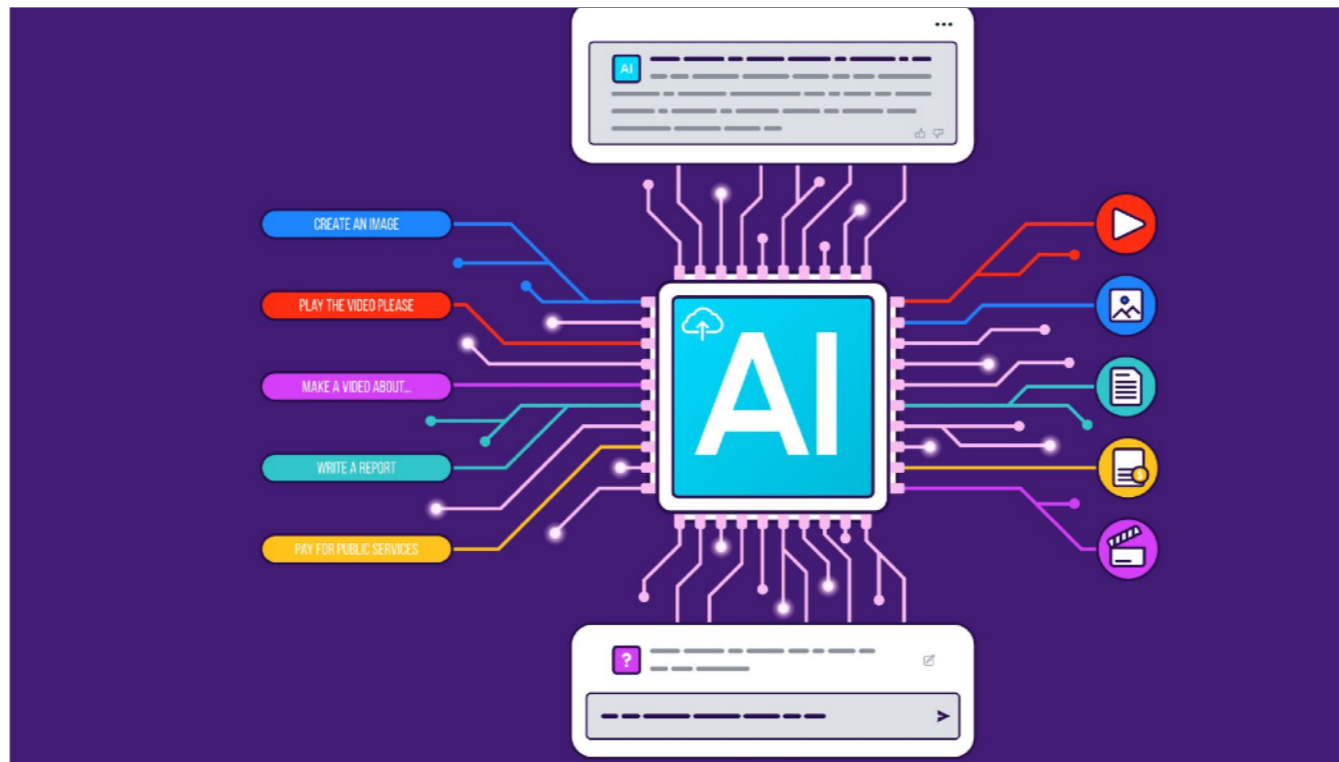
Before computers had to be taught - now they teach themselves. They use a LLM where - pre-trained on massive amounts of data. Now training themselves, scraping the internet and devouring everything. Go Master Destroyer Deep Mind was given the rules but no examples. Played itself thousands of times a minute - new strategies.

Exponential Change

The market for artificial intelligence has grown beyond 184 billion U.S. dollars in 2024, a jump of 50 billion compared to 2023.

AI startups raised 1.5B dollars just last month.

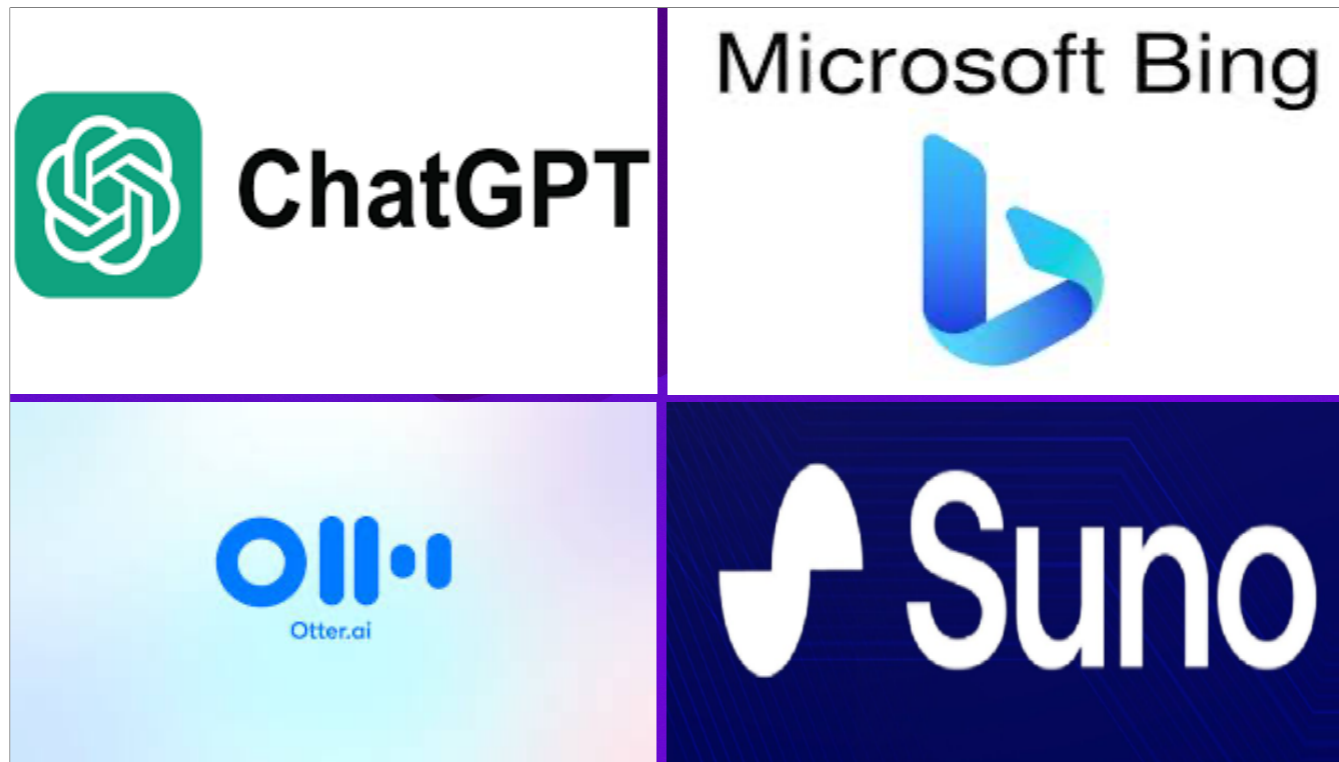
And it will continue to grow.



Generative AI models can take inputs such as ✓ text, image, audio, video, and code and generate new content into any of those modalities - text into an image, an image into a song, or video into text.



Everything in this movie is generated by AI.



These are four Generative AI tools you can use free - we'll use Chat GPT today

Bing can translate text - generate images and help you solve problems.

Otter.ai will attend meetings for you - transcribe them - create a task list for you from the meeting.

It can convert your dictation into text.

Suno will generate music from text prompts - we'll try this out today too

Chat GPT Claude Microsoft Copilot Perplexity Bard
Character.ai Github Copilot GPT 4 Open API - AI clients
Stable Diffusion Leonardo Dall-E 2 Descript
Midjourney Duet AI - image clients
Suno - music Murf.ai - voice Synthesia - video
OtterPilot Type Studio Chatsonic Cohere Generate
Copy.ai Gemini - business clients

Some more examples

Image apps with free daily - or monthly - credits:

Ideogram - <https://ideogram.ai/t/explore>
4 images per prompt. - 20 free slow prompts per day.

Dzine - <https://www.dzine.ai/>
4 images per prompt - 30 free credits per day.

Leonardo.AI - <https://leonardo.ai/>
4 images per prompt - 150 fast tokens per day, enough for 5–10 images

Gemini by Google - <https://gemini.google.com/app>
4 images per prompt. It is free to use with the chat bot.

Freepik - <https://www.freepik.com/>
Awesome infinite generation - offers a lot of options. 20 free slow prompts per day,
and 2 free Upscales per day.

Image specific apps with free daily - or monthly - credits.

He Patai

When was AI first conceived - '50s

Who said we should fear AI - it could spell the end of the human race?

Bill Gates, Elon Musk, Stephen Hawking, Nick Bostrum

Whose mission is to “solve intelligence and use it to solve everything else”?

Google,

1956 the Dartmouth Project

All of them did

Google - Deep Mind Project begun in 2011

Patai Fastest to 100,000,000 users ??

Google

Mobile Phone

YouTube

Candy Crush Saga

Netflix

Apple App Store

Chat GPT

Give each person present one of these seven applications.

Between you, stand in the order in which you think these apps reached 100,000,000 users.

Slowest at left to fastest at right

Fastest to 100,000,000 users -

Google

Mobile Phone

YouTube

Candy Crush Saga

Netflix

Apple App Store

Chat GPT

How close were we?



Kōrerorero



Groups of 2 or 3

How

AI uses for a Teacher..

...

Come up with three good AI uses for a teacher...



Me Wānanga Tātou

Your Suggestions

...

Generative AI for Education

Teacher Support Tools

Lesson generation

Teaching advisor

Analysis of student data

Incorporating research-based practice

I have a document covering the apps and guidance for each sub-heading shown

Classroom Material Tools

Activity-specific content

Explanations

Student questions generation

ESL student content

I have a document covering the apps and guidance for each sub-heading shown

Classroom Material Tools

Worked examples

Flashcard generation

Graphic organisers

Less-cheatable questions

I have a document covering the apps and guidance for each sub-heading shown

Evaluation + Feedback Tools

Feedback on student work

Student Support Tools

24/7 Tutor

Early reading coach

Curiosity coach

I have a document covering the apps and guidance for each sub-heading shown

Eyes Wide Open - BE AWARE

The Null Hypothesis

Hallucinations.

Atrophy of Critical Thinking

Atrophy of Critical Thinking

I have a document covering the apps and guidance for each sub-heading shown

Eyes Wide Open - BE AWARE

The Deluge

Distraction

Bias

Information Bubbles

Dehumanisation

I have a document covering the apps and guidance for each sub-heading shown



Karawhiua

<https://chatgpt.com/>

Chat GPT



If we can't get online and actually DO all the things planned today that's OK.

We can practice on paper. Today gives you a taster of what's possible. You might not use it tomorrow but now you know about it and one day can come back to it.

Have A Go

What is your topic for next term?

What do you want your children to know and do by end of unit?

On your paper (or laptop) write down the prompts you will give it.

Have A Go

How could Chat GPT help you?

What prompt could you use?

Ideas...

On your paper (or laptop) write down the prompts you will give it.



Me Wānanga Tātou

Your Ideas

...

Try this Prompt in GPT

“Can you guide me through a beginner's drawing exercise focusing on basic shapes and lines?”...

How could you use this with children?

Follow-up Prompt in GPT

“Can you guide me through a beginner's drawing exercise focusing on creating a Polynesian warrior?”...



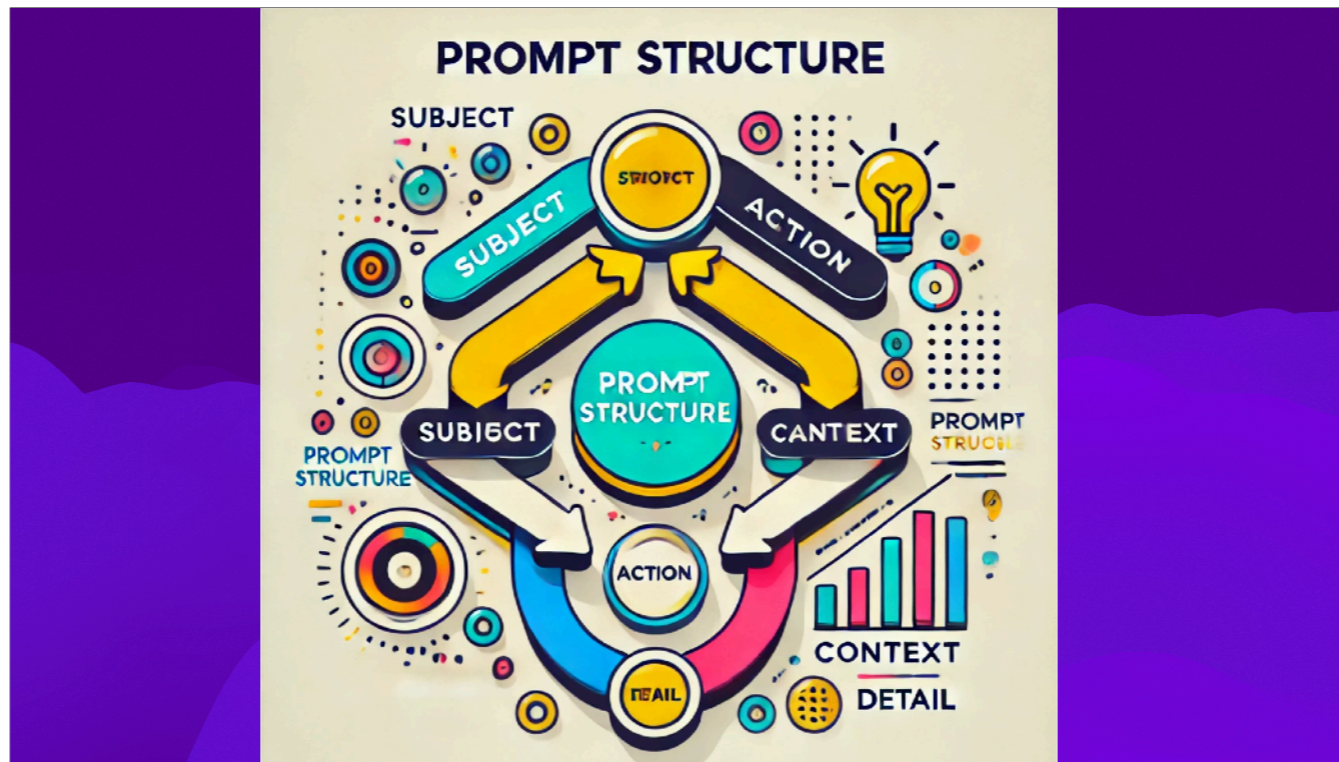
Where else could you go with this line of prompt?
How about.....

Use Examples

1. Write and Illustrate a children's book on..
2. Cooking recipes based on ... ingredients.
3. Create a workout routine for fitness goals.
4. Summarise an article or book chapter.
5. Offer gardening tips for specific plants.

6. Provide a list of must-read books on topic
7. Create a resume from scratch.
8. Offer fashion and style advice.
9. Create a lesson plan for a topic.....
10. Provide list of learning resources on a topic.

11. Create pre and post tests for a topic...
12. Create a travel packing checklist.
13. Generate a list of fun science facts.
14. Guide me through a job interview.
15. A list of motivational songs on



Iteration One - Give me an intro image for a slide on prompt structure

Iteration Two - Regenerate this image making it brighter, snappier and more interesting - make sure all words are spelled correctly

1. Be clear and specific:

Clearly communicate your request or questions

2. Start with Instructions:

Tell the model how you want it to behave.

3. Provide Context:

Give the model relevant information about the topic.

4. Use Complete Sentences.

Frame your prompts to ensure the model understands.

5. Use Previous Answers:

Reference the model's previous responses.

6. Experiment and Iterate:

Experiment with different phrasing or variations.

7. Use Explicit Instructions:

Clearly state your instructions in the prompt.

8. Limit The Response length:

Ask the model to provide specific key points.

9. Refine and Review:

Adjust your prompts for more accurate answers.

10. Verify and Fast-check:

Make sure the information is correct.

How to write effective ChatGPT prompts?

1. Start with action words

Initiate your prompts with clear action-oriented words like "Create," "Write," "Explain," or "Generate." Rather than asking, "Can you provide information on AI trends?" try "Generate a report on the latest AI trends." Action-based prompts tend to produce specific and actionable responses.

2. Add context

Context is the key to guiding ChatGPT effectively. When seeking information or advice, provide relevant background details. For instance, state your focus context, target audience, and objectives. Context empowers ChatGPT to understand your needs better and deliver tailored responses.

3. Be clear and specific

Vague or ambiguous prompts lead to equally vague responses. Ensure requests are concise and specific.

4. Experiment and iterate

Experiment with different prompts. ChatGPT's versatility allows for creative exploration. Try various approaches for your specific goals.

5. Use examples

Convey your expectations clearly by providing examples within your prompts. Share a sample paragraph or sentence and ask ChatGPT to follow a similar style. Examples serve as effective guides for generating content that aligns with your vision.

6. Specify length

State desired response length when necessary - a concise answer, a paragraph, or a detailed essay.

7. Guide the AI

Providing explicit instructions to the AI is often beneficial. Specify what you want to include, avoid, or prioritise in the response.

8. Clarify the tone

If your content requires a particular tone, clearly state it in your prompts - formal report, casual blog post, humorous response, etc

9. Review and refine

Like any skill, crafting effective prompts improves with practice. Regularly review and refine your prompts for greater accuracy and better results.

The art of writing ChatGPT prompts is a dynamic process. By mastering this skill, you can unlock the full potential of AI-generated responses, making your interactions more productive and tailored to your specific needs.

Best ChatGPT prompts for education

Teach me the <topic of your choice> and give me a quiz at the end, but don't give me the answers and then tell me if I answered correctly.

Describe <topic of your choice> in detail.

Give me an example of how to solve a [Problem statement]?

Provide a summary of a specific historical event?

Write a paper outlining the topic [Topic of your choice] in chronological order.

I need help understanding how probability works.

Please provide a definition for the medical term 'tachycardia'.

Come up with 10 ways to improve memory and recall while studying for exams.

Suggest 10 Chrome extensions for students designed to improve productivity while studying.

Create a list of 5 types of data that teachers can collect to monitor student learning and progress.

Create a quiz with 5 multiple-choice questions that assess students' understanding of [concept being taught].

Generate a list of specific and actionable steps that a student can take to improve their performance in [subject/task].

Create a lesson outline for a lesson on [concept being taught] that includes learning objectives, creative activities, and success criteria.

Create a list of 5 teaching strategies that could be used to engage and challenge students of different ability levels in a lesson on [concept being taught].

Create a list of interactive classroom activities for [concept being taught].

Create a marking scheme for evaluating student writing in line with the [concept being taught].

Create a list of 10 unique qualities to include in a teacher's resume.

If you want to invest some time, I would recommend signing up to a couple of courses. Here are some free recommendations:

Datacamp - introduction to chat-GPT - It takes one hour and is free. It will teach you the basics of prompt engineering.

Udemy - ChatGPT for Beginners - The Ultimate Use Cases for Everyone. Another 1-hour free course putting context around what you can do in your daily life

<https://dayofai.org/>

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AI is for everyone.

Empower your students with the knowledge and skills to thrive in a world with AI.

Check out our new courses on Data Science and Climate Change

LEARN MORE

A unique opportunity to help your students **shape our world's digital future...and their own.**

Fantastic AI resources to explore

<https://quickdraw.withgoogle.com/>



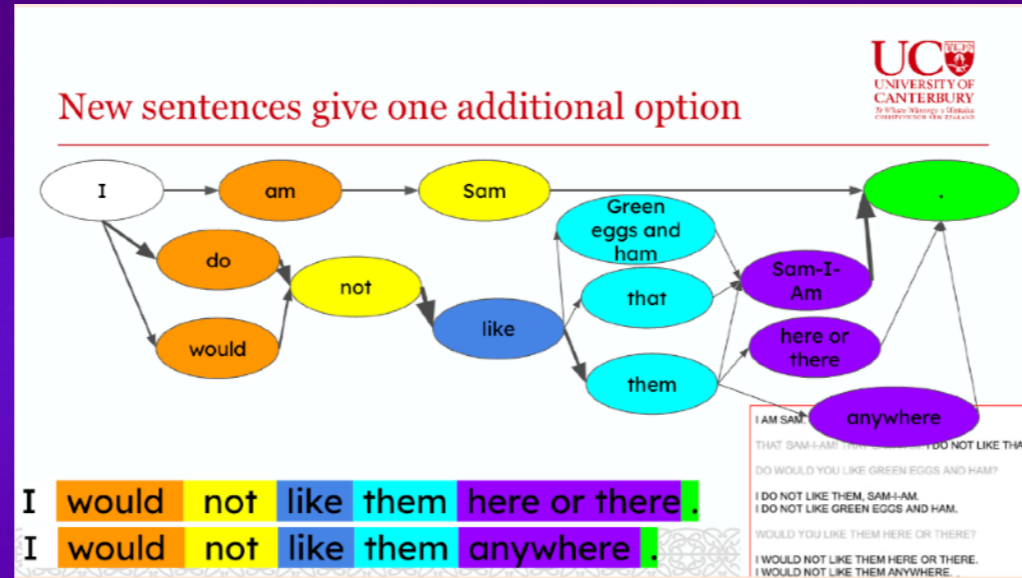
Quick, Draw! provides real-time feedback as you draw. Students can see how good the neural network is at recognising their drawings. It also makes its data set publicly available, meaning that other researchers can use the data to train their own neural networks.

<https://studio.code.org/s/oceans>



An interactive game teaching young children about machine learning (ML). It teaches children about how AI is trained through pattern recognition. It explores the importance of correct training and the biases that can be introduced in training.

Slideset Video Example



How LLMs are trained (unplugged)

This unplugged demonstration gives a simple example of how LLMs work, highlighting the role of probability using a Dr Seuss story



Instead of using Google images or similar, I asked Chat GPT to create a localised reminder image for this presentation.

Use it to get you **started**

Regenerate with refinement prompts

Revise it several times

your words and specific context

Run it thru **Grammarly**

A classic example was a University that sent out a “heartfelt” message of sympathy following a student death on campus - that had as the tagline, generated by ChatGPT

Example - Thornburg 2

Based on the uploaded image
generate an image of children
playing in a sandpit...



Example - Reworking

Based on the style and format of the uploaded image generate an image of children playing in a sandpit in a bush or forest



Localised Prompt

Generate a wide aspect ratio graphic of a close-up coffee cup with an out-of-focus background on a beautiful beach. In a distinct layer over the background in bold, write the words "The Best Coffee In Aitutaki," ensuring it's spelled correctly, and those are the only words.



Note - Still has a hallucination, so often it is best to generate an image in Chat GPT and then put your own text layer in separately yourself.
Another way to do it is use the text ideas GPT suggested, redo the prompt without asking for text, then make your own text using this one as a design model



Karawhiua

Create a Five-Slide Scenario

Either on-line or on paper

Your prompt needs to define:

Exact nature of the topic

Audience you are pitching to

1 main point and 1 sub point for each slide

An engaging opening slide + a summative final one

An engaging image for each slide in a style fitting
with the topic and style of the deck

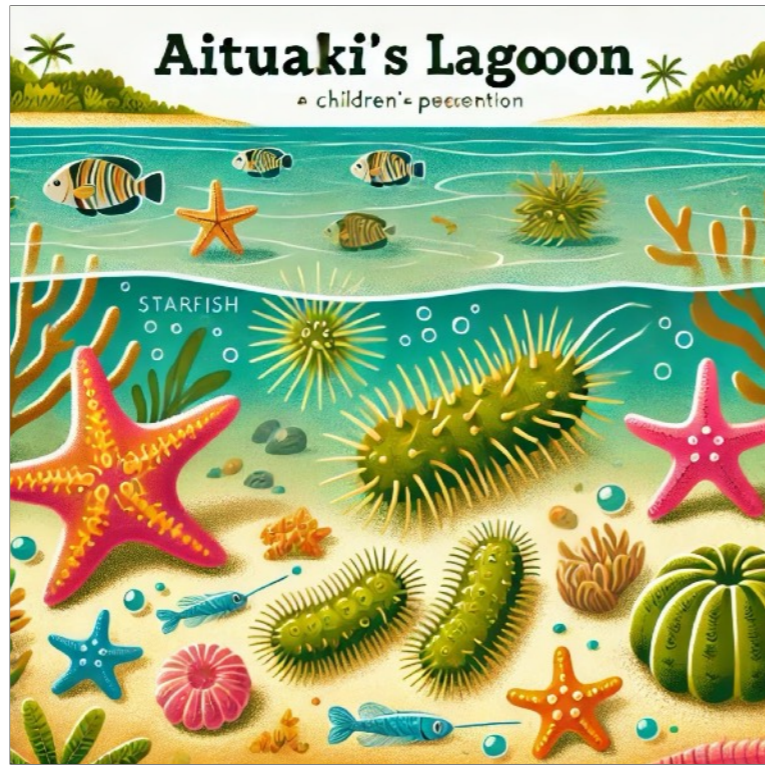
Create a five slide deck on lagoon life in Aitutaki. It's pitched at visitors to the island - at a 10 year old level. Provide one main point and one sub point for each slide. Provide an engaging opening slide and a summative final one. Generate an engaging image for each slide in a style fitting with the topic and style of this deck.



Notice that Chat GPT often mixes up the spelling of words in images. Sometimes it gives a person three arms and other 'hallucinations'.

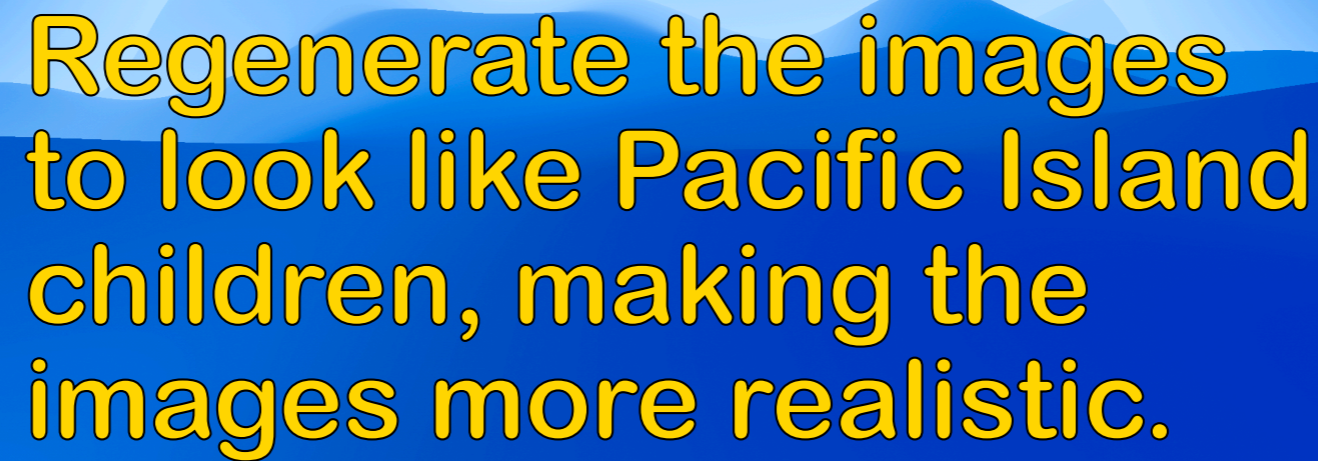






Final slide illustration





Regenerate the images
to look like Pacific Island
children, making the
images more realistic.

Regenerate the images to look like Pacific Island children, making the images more realistic.



Discover the vibrant and diverse life in Aitutaki's lagoon.

Get ready to explore the clear waters and the creatures that call it home.



Aitutaki's lagoon is home to many bright and beautiful corals.

Corals are not plants; they're living animals that provide shelter for many marine species.

How do corals support a healthy lagoon environment?

How do we know corals are healthy or not healthy?



Over 100
species of fish
live in the
lagoon.

Look for parrotfish,
clownfish, and the
unique Moorish idol.

What is the most unusual fish you have discovered in the lagoon?

Which fish are most abundant - why are these the ones we should catch if out fishing?



The lagoon also hosts a variety of invertebrates like starfish and sea cucumbers.

These creatures play a vital role in keeping the lagoon's ecosystem healthy.

How do starfish and sea cucumbers keep the lagoon ecosystem healthy.
What keeps them in balance? What can be done to support that balance?



Keeping
Aitutaki's lagoon
beautiful is
important.

We can help by not
touching the corals
and picking up trash.

Why is keeping our lagoon beautiful important?

What other ways can the lagoon be supported - kept healthy and beautiful?

What will you do?

Example Task

Prompt

Provide a design layout for a website for Araura School in Aitutaki

Homepage

Title: Welcome to Araura School

Header: School logo, Navigation menu

Home, About Us, Programs, News, Contact

Hero Section: High-quality image of the school and students,
welcoming message

Introduction: Brief description of the school's mission and vision

Call to Action: Button for "Learn More"

These slides could be given to each group, and the children could develop slides according to the headings, subheadings, etc., that collectively form your new website.

Programmes Page

Title: Our Programs

Header: Breadcrumb navigation - Home > Programs

Sections:

Early Childhood Education: Overview and photos

Primary Education: Curriculum details and photos

Cultural Programs: Description of cultural exchange
initiatives and community projects

News Page

Title: School News

Header: Breadcrumb navigation - Home > News

Sections:

Latest Updates: News articles and updates from the school

Events: Calendar of upcoming events
and past event highlights

Contact Page

Title:	Contact Us
Header:	Breadcrumb navigation - Home > Contact
Sections:	
Contact Form:	Name, email, message fields
School Address:	Physical address with a map
Social Media Links:	Icons linked to Facebook and other social media profiles

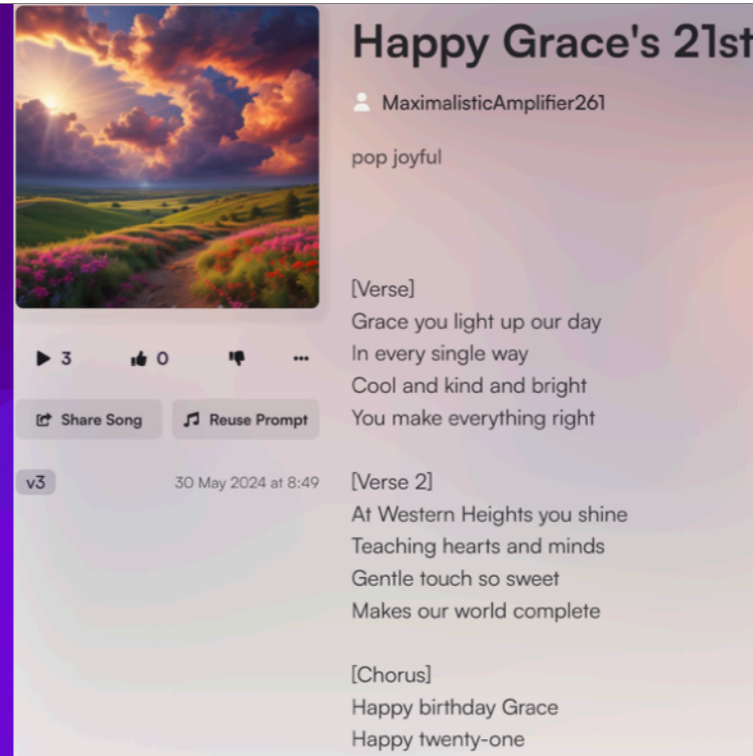


Suno is a music creation app - it comes with 500 free credits to start with.

Each month, you get a new allocation. If you don't want to wait, \$10 a month gets you unlimited credits.

Example

A happy, funky 21st birthday song for Grace, a cool, kind and gentle friend and teacher to our children at Western Heights School



Happy Grace's 21st
MaximalisticAmplifier261
pop joyful

[Verse]
Grace you light up our day
In every single way
Cool and kind and bright
You make everything right

[Verse 2]
At Western Heights you shine
Teaching hearts and minds
Gentle touch so sweet
Makes our world complete

[Chorus]
Happy birthday Grace
Happy twenty-one

I'll give you some examples and then set you up to try your own.







Karawhiua

<https://suno.com/>

Choose a topic, music genre and style

Extension Options:

Modify lyrics, extend duration, regenerate

Enter your own lyrics or describe a song and click Generate Lyrics...

Make Random Lyrics 0/3000

Enter style of music

energetic pop edm
disco female singer 0/120

Enter a title

Create

Some style prompts to try...

Uplifting atmospheric worship ballad with ethereal vocals and sweeping orchestral arrangements

Chillwave electronic, ambient textures, reverb-heavy vocals, and a dreamy synth backdrop

Epic cinematic scores, sweeping orchestral movements, heroic themes, and stirring emotional peaks

Indie, jangly, beachy vibes, carefree vocals, and upbeat, sunny melodies

Input the topic (or custom lyrics) and the style or genre. You aren't allowed to input the names of artists or bands (such as Elvis or Coldplay), but you can name a style that fits with the artist's signature style.



Me Wānanga Tātou

Prompt Tutor

You can use GPTs to create GPTs, like Tutor Blueprint, which will help you create a prompt that will act as a tutor on a subject of your choice.

Tutor Blueprint



AI Tutor Blueprint

By community builder A

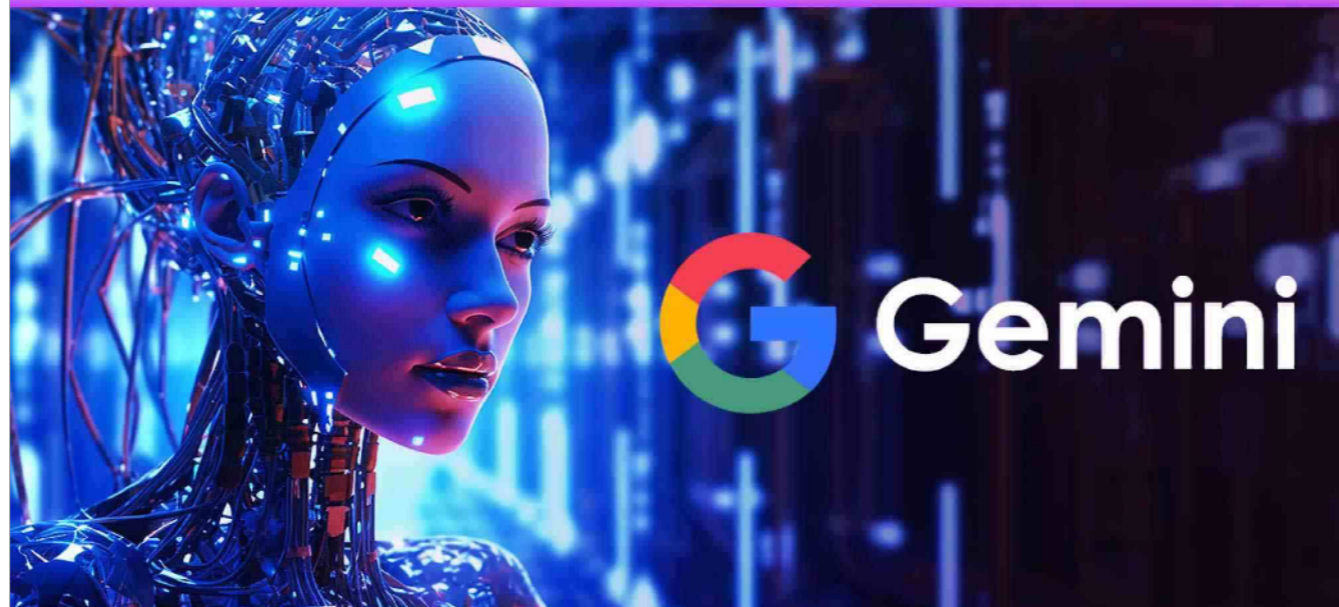
AI Instructional Designer helps you pass on your expertise

Can you help me create a tutoring prompt?

<https://chatgpt.com/g/g-UnO5np1uO-ai-tutor-blueprint>

Finally today I am going to tell you about prompt tutor. The key to getting the best result from any AI tool lies in the quality of prompt. Do note that sometimes LESS is more. ✓ ✓ ✓

Sees Video



Als can work directly with videos, keeping an entire video in memory at once. I can give Gemini a 30 minute video of a museum walkthrough and ask it to tell me what happens when, and which moments might appeal to kids. A complex task for humans takes less than a minute for AI
- working with video will have big implications.

Works with Documents



AI can summarise, analyse, and improve your work. Some AIs now connect directly to your documents - Microsoft Copilot, Office, Gemini, Google Docs. The best for this is Claude 3.5 Sonnet.

Claude took a legal document and found an issue that neither side's lawyers had identified but that everyone agreed was important after Claude pointed it out.

Tomorrow



GPT-4o is natively multimodal, which means it can “see” and “hear” and “speak” in an integrated way with almost no delays. The omni in the model's name means it blends all of these modes together. It can see what you are doing, react to it, respond to interruptions, use realistic voice tones, create images with precise control, and more - all seamlessly. Basically, GPT-4o is a chatbot that can interact naturally with the world around it.



If an AI that seems to reason like a human being, can see and interact and plan like a human being, then it can have influence in the human world. This is where AI labs are leading us: to a near future of AI as coworker, friend, and ubiquitous presence. I don't think anyone, including OpenAI, has a full sense of all of the implications of this shift, and what it will mean for all of us.

Kia Ora Koutou

