

# CHATGPT and AI in Education

# ChatGPT and AI in Education

**Maranne Purnell**

Head of Library

[Purnell.Maranne@trinity.wa.edu.au](mailto:Purnell.Maranne@trinity.wa.edu.au)



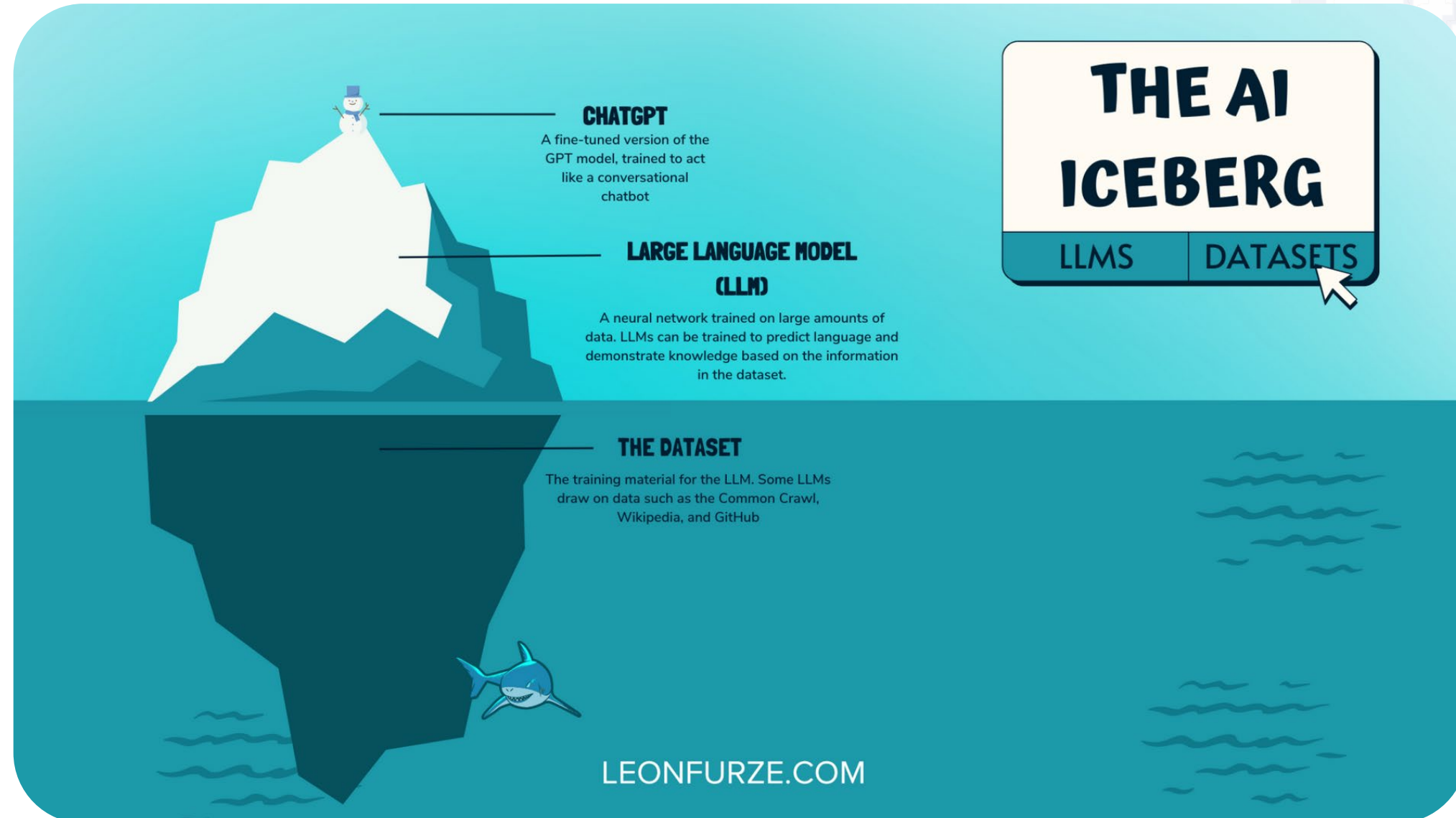
**Shaq Herath**

Director of ICT

[Herath.Shaq@trinity.wa.edu.au](mailto:Herath.Shaq@trinity.wa.edu.au)



# ChatGPT and AI in Education





- Teachers and students use of technology
- Understanding the ethical implications and strategies for safe and secure use of AI
- Potential impacts of AI in education
- Preparing our community and providing guidance
- Q&A

# Use of GenAI in schools

## Number of Teachers Using

- On average 24 per cent and up to 72 per cent of primary teachers
- On average 34.5 per cent and up to 80 per cent of middle school teachers
- On average 39 per cent and up to 80 per cent of secondary teachers

## TOP 10 A-ASSISTED TEACHER TASKS

1. Lesson plans or learning design
2. Learning resources
3. Ideas for curriculum unit outlines
4. Discussion questions
5. Rubrics for assessing student work
6. Questions for Q&A sessions
7. Summaries of articles
8. Student assessment tasks eg quizzes, essay topics
9. Articles for the school newsletter or school website
10. Differentiated learning tasks

## TOP 3 BENEFITS OF GENERATIVE AI TOOLS FOR TEACHERS' WORK

1. Saves time
2. Helps to create a draft to get started
3. Supports the development of ideas

## TOP 10 A-ASSISTED STUDENT TASKS

1. Support student research
2. Generate ideas for creative projects
3. Offer feedback to improve written text
4. Draft or check coding
5. Find definitions of concepts that are more relevant or accessible
6. Check mathematical calculations
7. Generate presentation slides
8. Generate illustrations
9. Generate music
10. Generate animations

## POSITIVE IMPACTS OF GENERATIVE AI OBSERVED IN STUDENT WORK

- Improvements in drafting, creative inputs, brainstorming in creative work, generating ideas
- Assistance for students in research Improvements in the calibre of students' work.
- Greater understanding of concepts
- Gains for students with literacy difficulties
- Improvement in student engagement

Australian Heads of Independent Schools Australia (AHISA) - <https://fst.net.au/government-news/use-of-generative-ai-in-australian-schools-challenges-national-system/>

# AI at Trinity

## AI @ TC

Generative AI: Algorithms that create a variety of content types including text, images and sound e.g. ChatGPT.

**RED = NO**

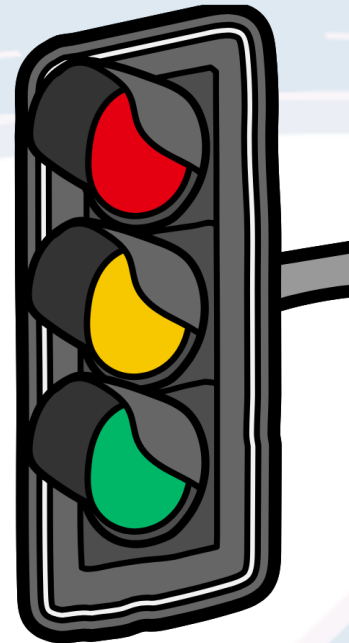
Do not use AI in your assignment

**YELLOW = MAYBE**

Some generative AI is OK  
Check with your teacher

**GREEN = YES**

Generative AI is encouraged

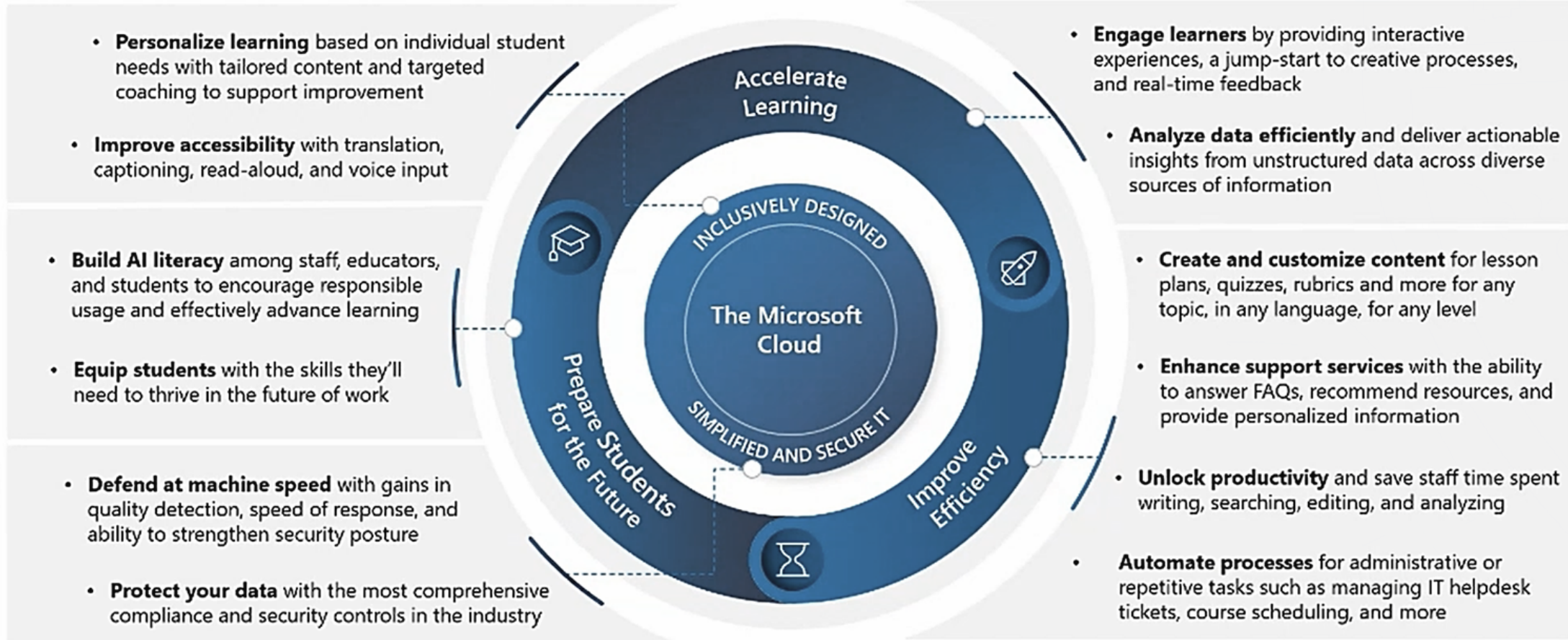


## LLM and AI models students access



A collage of AI models. At the top, three dark blue cards are arranged horizontally. The first card is for "Bing Chat", described as "Your AI-powered copilot for the web" and "Free". The second is for "Bing Chat Enterprise", described as "AI-powered chat for work with commercial data protection". The third is for "Microsoft 365 Copilot", described as "A whole new way to work". Below these cards is a large white box containing the "ChatGPT" logo (a green square with a white interlocking knot) and the text "ChatGPT". Surrounding the logo are various colorful icons representing AI capabilities: a lightbulb in a cloud, a code editor window, a document with a pencil, a computer monitor with charts, a blog post icon, an envelope with an @ symbol, and a speech bubble with a question mark. At the bottom of the collage is a hand holding a smartphone displaying the "Bard" logo (a colorful 'G' followed by the word "Bard") against a blue background with the word "Google" in a light blue font.

# Opportunities for AI in Education



# What are K-12 education systems doing with Generative AI?

- **SA Dept for Education** – DFE trialing a private instance of OpenAI (ChatGPT) on Azure for teachers, staff and students
- **City of New York** to release private instance of ChatGPT on Azure to 400k users (teachers and students).
- **Many Departments of Education and Catholic Diocese** are in discussions with Microsoft on setting up Azure Open AI.
- Some **Independent Schools** have their own secure and private instance of OpenAI to explore possibilities for teaching and learning.
- **Several universities** around Australia are currently working with Azure OpenAI for use by academics and researchers.
- **UAE** Ministry of Education is using Azure OpenAI to develop virtual learning assistants for students
- **TAIWAN** Ministry of Education is using Azure OpenAI to improve English language conversational skills in learners



# Microsoft's AI Principles



Fairness



Reliability  
& Safety



Privacy &  
Security



Inclusiveness



Transparency



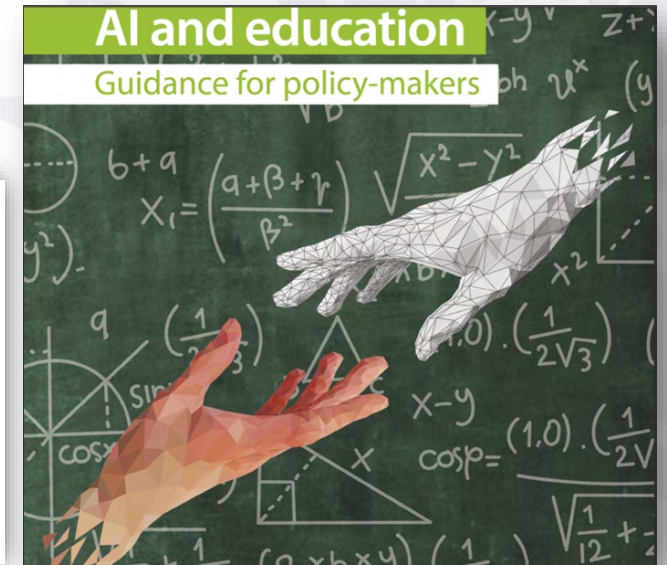
Accountability

# Ethical Considerations

- Student Privacy/ Age limits + Access
- Student Wellbeing
- Information Bias

if the algorithms

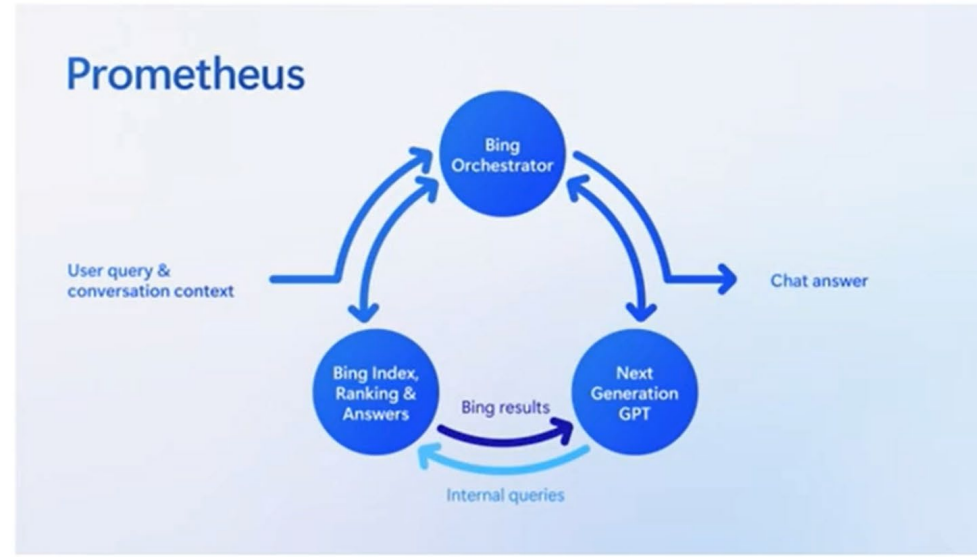
are trained on data which contains human bias then of course the algorithms will learn it, but furthermore they are likely to amplify it. This is a huge problem, especially if people assume that algorithms are impartial. (Douglas, 2017)



UNESCO 2021

# The *new* Bing

- A next-generation OpenAI model that is more powerful than ChatGPT and customized for search. (GPT-4 as of March 15<sup>th</sup>)
- Microsoft Prometheus model that can generate natural language responses and summaries.
- An AI model applied to the core Bing search ranking engine, which improved the relevance and accuracy of search results.
- A new user experience that allows you to interact with search, browser and chat in a seamless way.



## Built in Safeguards:

- Content moderation
- Anti-hallucination
- IP violations





Data is the fuel  
that powers AI

# How do we prepare our community

## Advice

### Advice to schools who have not commenced an AI journey yet

Begin by immersing yourself in reading and attending webinars and learning everything you can about AI. This will provide a deeper understanding, hope, confidence, and a potential pathway to engage with AI. Connect with others outside your immediate circle and engage with those who are already involved in AI initiatives. See the opportunities rather than solely focusing on the challenges and actively support early adopters as valuable learning resources.

Allow staff to experiment and then learn from their experiences, fostering a culture of continuous learning and collaboration within your school.

Engage your community, including staff, students and parents. Encourage open discussions where fears can be shared, while demonstrating your passion as an educator and instilling confidence that we can embrace the future.

Conduct a mapping exercise that identifies the best and worst potential outcomes. Address the worst-case scenarios by problem-solving and finding solutions. By acknowledging and mitigating fears, we can remove barriers and unlock the potential for even more amazing things to happen.

Anna Dickinson – Principal / Jonathan Mascorella – Dir. Of Innovation (Loreto Kirribilli – Sydney)

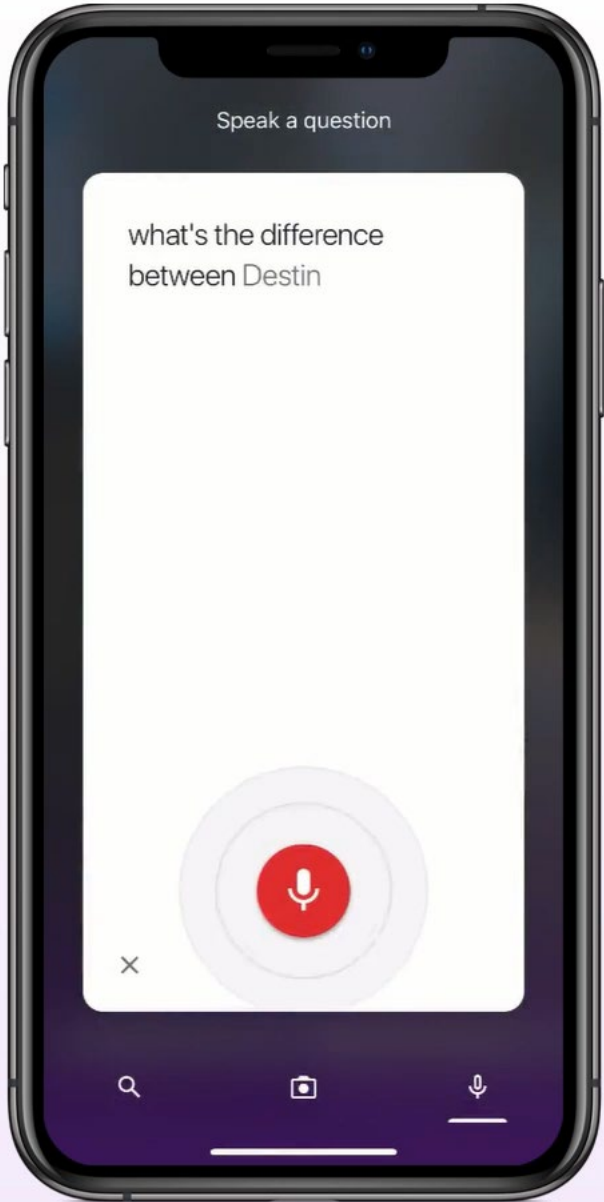
Source : Submission to Parliamentary Inquiry on use of generative AI in Education

# Demonstration

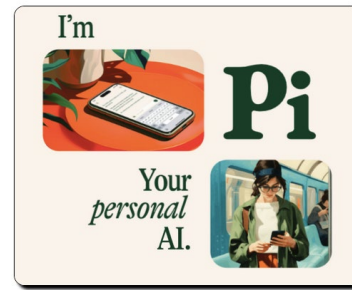
- Chat GPT
- Microsoft CoPilot/Bing
- Gemini



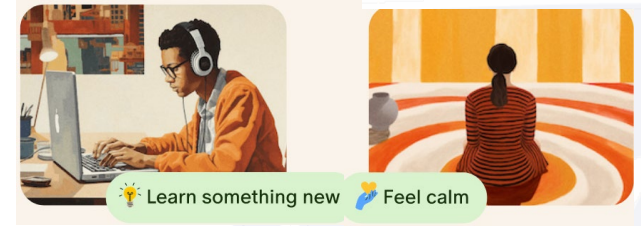
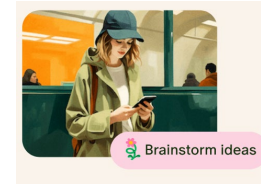
# Some Tools



Socratic is an educational tool designed to assist students in getting unstuck on homework problems and learning concepts more effectively across various subjects, including Science, Math, Literature, and Social Studies. Utilizing Google AI for text and speech recognition, it provides visual explanations and surfaces relevant learning resources, making it particularly useful for students who need additional help understanding topics or for those who seek alternative explanations to what is taught in the classroom. People might want to use Socratic for its ability to clarify difficult concepts, provide step-by-step assistance, and offer a more personalized learning experience that is endorsed by both students and teachers for its effectiveness.



Pi, your personal AI, is an advanced artificial intelligence tool designed to assist users with a wide range of tasks, such as answering questions, providing information, generating creative content, and automating repetitive tasks. It can be used for educational purposes, productivity enhancement, entertainment, and personal assistance. People might want to use Pi for its convenience in quickly accessing a vast pool of knowledge, its ability to streamline their workflow, and its potential for sparking creativity by generating ideas and solutions that users may not have considered. Whether for professional or personal use, Pi serves as a versatile and time-saving companion in various aspects of daily life.



From Matt Wolfe:

## Future Tools

Sorting Through ALL The Latest AI News and Tools and delivering Only What You Need To Know Directly To Your Inbox!

## What will you do ?

We need the students familiar with it. We have obligation for it. But we must show them the do's and don't.



Q&A

