



Exploring AI Content

What is AI?

- Artificial Intelligence (AI) refers to the simulation of human intelligence in machines that are programmed to think, learn, and make decisions.
- AI enables computers and software to perform tasks like humans such as problem-solving, recognising patterns, understanding language, and making predictions.
- AI also learns from experience and user input.



Types of AI

- There are different types of AI, they are different based upon capabilities and learning approaches
- These include:
 - Narrow AI
 - General AI
 - Super AI
 - Machine Learning (ML)
 - Deep Learning (DL)
 - Natural Language Processing (NLP)
 - Computer Vision
 - Robotics



Each type is different and can be read on pg.50 of the Digital Skills Training Manual

How can AI Help?

AI can help with learning features and be a tool that helps users. Examples of this include:

- **Personalised Learning** – AI-driven platforms adjust content based on student progress, learning style, and performance.
 - Examples of programs that use Adaptive learning platforms include Knewton, Duolingo, and AI tutors.
- **AI-Powered Study Assistants** – AI tools help summarise notes, generate flashcards, and organise study schedules.
 - Examples of programs that use AI powered Study Assistants include Quizlet, Grammarly, AI-based summarisation tools.

This is just a few of the many Practical Examples, refer to pg. 51 of the Digital Skills Training Manual

Ethical Use of AI

- As AI becomes increasingly integrated into education, it is essential to address its ethical implications to ensure fair, responsible, and secure use.
- Ethical concerns include data privacy, bias prevention, and maintaining the integrity of educational work.



Data Privacy

With AI coming into play, we need to be careful with our Data and what information is out there. Why does it matter? We need to consider the following:

- Educational institutions collect and store vast amounts of sensitive data about
- students and teachers, including:
 - Personal information (name, age, address, academic records).
 - Performance data (grades, attendance, behavioural reports).
 - Learning analytics (AI-driven insights on student progress).
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- When AI-powered tools process this data, there is a risk of misuse, data breaches, and unauthorised access.

Challenges and Risk of Data Privacy

- With the rise of AI there is an increase in the challenges and risk of our Data Privacy.
- We have become so used to certain parts of our information being taken away that we forgot what takes our privacy away. These include:
 - Unclear Data Ownership - data taken by schools, companies, etc
 - Data Breaches – information leaked from companies and institutes with poor online and digital security.
 - Third-Party AI Tools services – Data and items stored on the cloud
 - Surveillance & Tracking – Cameras on devices as well as CCTV.

Best Practices for Data Privacy

- Look into and comply with data protection laws.
- AI-powered platforms should use encryption and secure authentication to protect user data.
- Users should be informed about how AI collects and uses their data.
- AI tools should implement data anonymisation, ensuring no personally identifiable information is stored.



AI Bias Prevention

- AI learns from historical data and information written by people, which can sometimes contain biases that lead to discriminatory outcomes.
- AI needs to learn and establish a fair treatment for all regardless of a person's race, gender, disability, or socioeconomic status.
- As society becomes more aware of how AI works and the possibility for bias, organisations have uncovered numerous high-profile examples of bias in AI in a wide range of use cases including in:
 - Healthcare
 - Job application systems
 - Online advertising
 - Image generation
 - Predictive policing tools

Challenges and Risks of AI Bias

- AI can be trained with biased data which can unintentionally favour certain groups over others.
- Not using a range of diverse data can cause a lack of representation and may not support people from different backgrounds
- Automatic decision making can have bias and disadvantage people based upon the AI's assumptions.



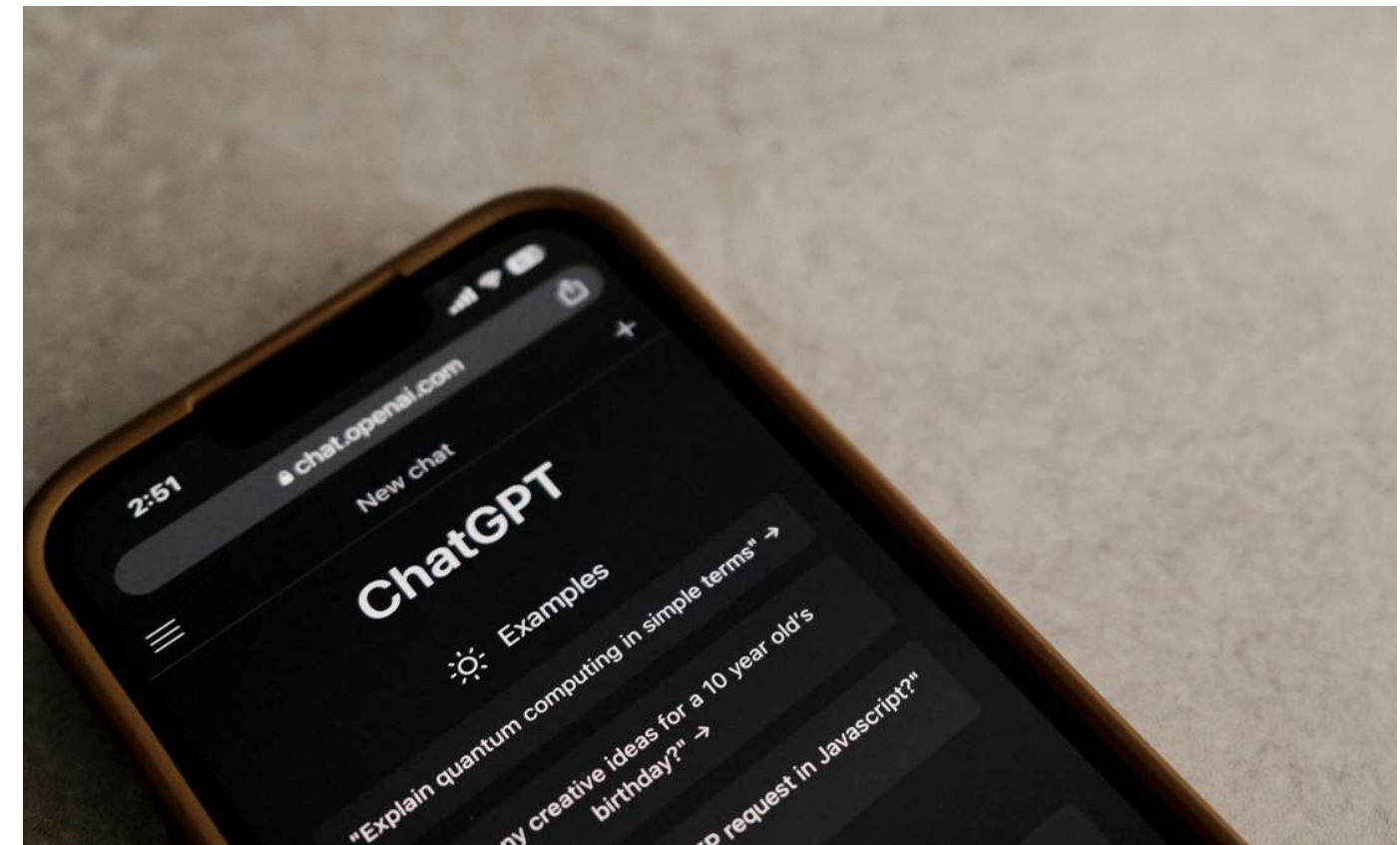
Best Practice for Bias prevention

- When using AI such as ChatGPT, make sure to use a range of diverse datasets and include a range of results and work from a number of students with different backgrounds.
- Make sure you test the AI to make sure it meets your criteria and check for any biases which you may need to change out by telling it to.
- Do not solely rely on AI for critical decision making and make sure you are encourage challenging the review is bias is found.



Integrity of Education Work with AI

- AI tools like ChatGPT, Grammarly, and automated essay generators can assist students with writing, research, and analysis.
- However, if misused, they may lead to plagiarism, academic dishonesty, and a decline in critical thinking skills.



Challenges & Risks of Integrity with AI

Plagiarism & AI-generated content may become a problem as student may use the AI to complete assessment without actually understanding the content or what is written.

If used too often, students may be over reliant on AI and not be able to solve or think for themselves when it comes to critical thinking tasks.

Misinformation can sneak in as AI-generated content may not always be accurate and student who do not read and check their information may unknowingly submit incorrect information.

Best Practices for Maintaining Integrity with AI

- Teach the students and educators how to use AI ethically and understand what it is useful for and the limitations it has.
- Use AI-generated content detectors to check for originality when it comes to the students work.
- Balance the use of AI and Human effort, making sure to encourage students to use it as an aid to their work, not a replacement.
- Have AI policies set in place that set clear guidelines on when and how students should use AI when it comes to school work.

Being compliant with data protection laws

- Be aware that as you use AI tools it may handle sensitive student and institutional data, making data security and privacy protection a top priority.
- Being compliant and understanding the local and international data protection laws ensures that personal information remains safe.
- Be aware that the AI systems storing the data will become targets for hackers, so make sure you are aware of their cybersecurity practices.

AI use in Microsoft Office

- Microsoft office has AI tools which can help you, this includes external tools which can be added in using the add-ins tool.
- AI in office helps with predicting what you are going to write, helping you with designs, charts, tables and much more.
- Make sure to read our guide about the use of these tools, as well as how to turn on these features when using documents starting at pg. 57



Google Looker Studio

- Looker Studio enables real-time data updates and interactive filtering, making it ideal for tracking school performance and strategic planning.
- The data sources it can use are:
 - Google sheets
 - Excel Files
 - Google analytics
 - SQL Databases



ChatGPT and similar AI

- ChatGPT is an AI that assists with writing, research and much more.
- You need to make sure you have an internet connection to use the program.
- Make sure to create an account that can store your data and other information you have given the AI.
- Refer to pg. 73 of our booklet to continue learning about ChatGPT



Any Questions?