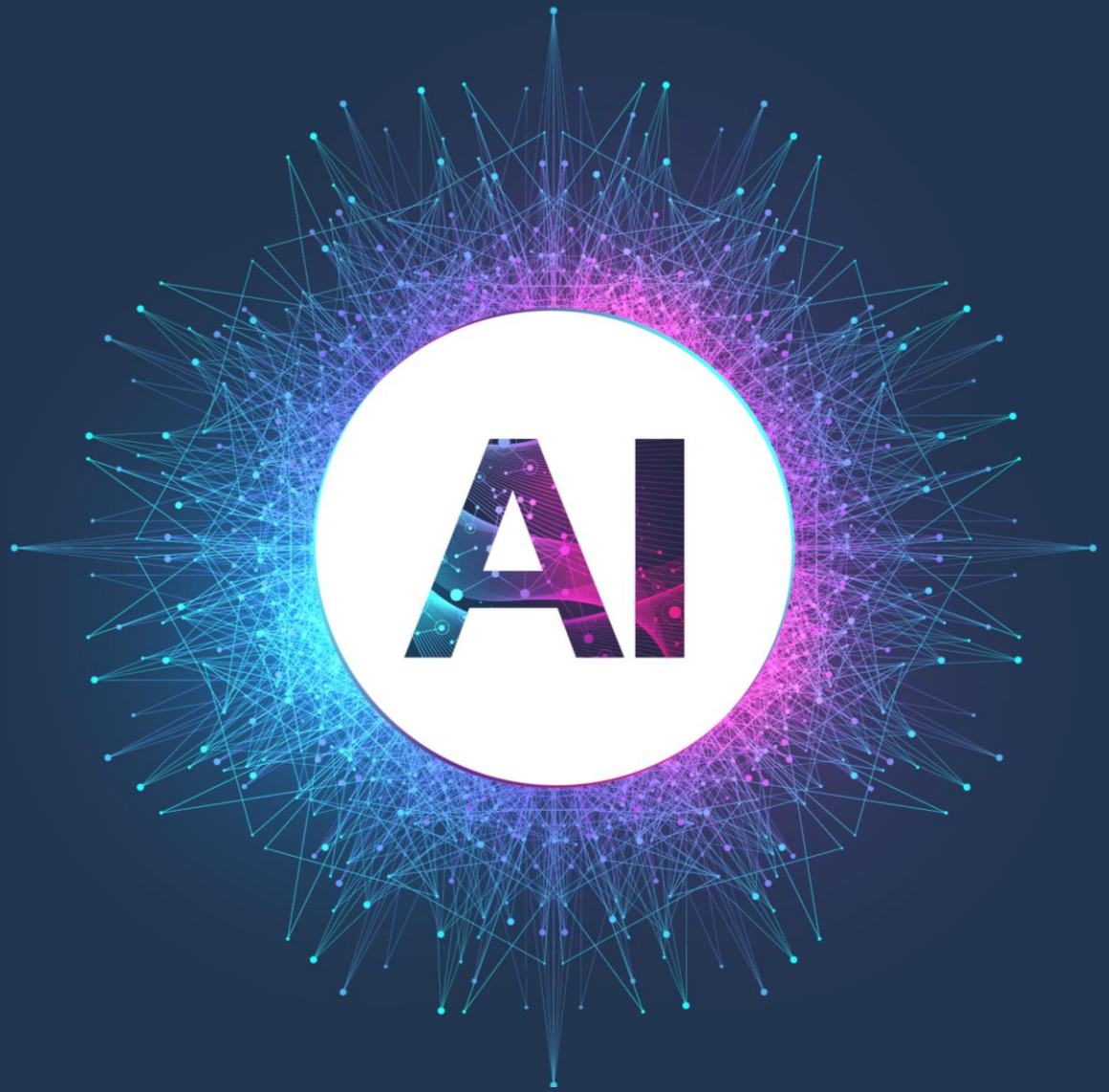
AI Building Blocks Series

AI Ethics

Dr Aidan Deery
Digital Learning Designer – CED



QUEEN'S UNIVERSITY BELFAST

AI Building Blocks Series

AI Foundations	13 Feb, 11am	Aidan Deery
AI Ethics	20 Feb, 11am	Aidan Deery
AI for Everyday Tasks	27 Feb, 11am	Una Lynch
AI and Accessibility	06 Mar, 11am	Sarah Stewart
AI for Teaching and Learning	13 Mar, 11am	Kirsty Gillen
Pedagogy Over Tech 7 Steps for Active Learning with AI	20 Mar, 11am	Patrick Phillips
AI for Research	27 Mar, 11am	Vilinda Ross, Aidan Deery

Live Sessions: Sign up here

Recorded Sessions: Catch up here

R-A-I-S-E

Our guidance is based on the RAISE Principles:

Responsible Use, AI Best practice, Integrity, Support, and Equitable Access.

Key Guides

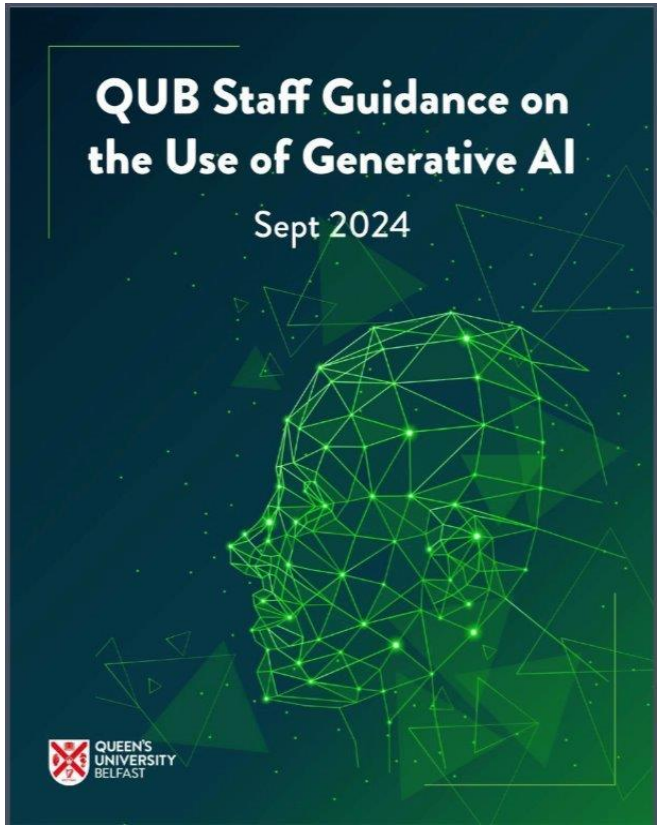
- QUB Position on AI
- RAISE Principles: QUB Staff Guidance on the use of Generative AI
- Trailblazers Guide: AI as Your Partner

AI and Assessment

- Guidance on the use of AI in Assessment: 24-25
- Use of Gen AI in Dissertation Projects
- Use of AI Detection Tools
- AI Assessment Self-help Guide

Video

Watch our short video for advice on what to look out for when starting to use Generative AI: Click here



What is your biggest concern about the use of AI?

AI Ethics – Hopes and Fears

Identifying Challenges

Proposing Mitigations

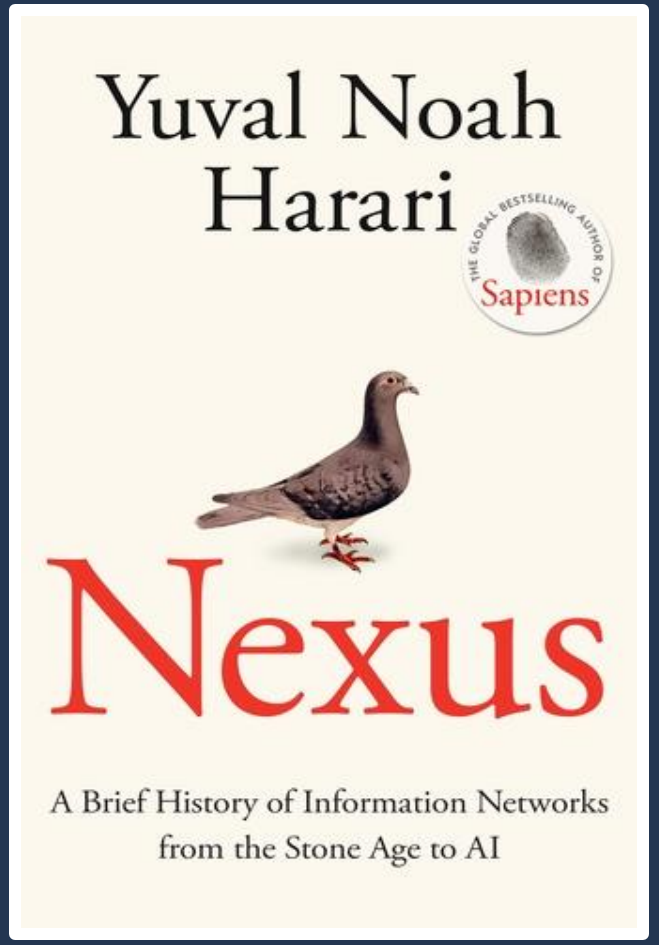
AI is not inherently good or bad. Like cell phones and social media, artificial intelligence is just a tool. It's an instrument for getting you from A to B. Its goodness or badness depends solely on how it's used.

Dr Bruce Weinstein

Whether AI Is Good Or Bad Depends On This One Thing

Artificial intelligence represents a transformative shift in human history by being the first technology capable of making autonomous decisions.

Yuval Noah Harari
Nexus: A Brief History of Information Networks from the Stone Age to AI



"AI is probably the most important thing humanity has ever worked on"

Sundar Pichai, Google CEO

Prof Stephen Hawking (2014)

"The development of full artificial intelligence could spell the end of the human race"

"AI will probably most likely lead to the end of the world...

but in the meantime, there'll be great companies"

Sam Altman, OpenAI CEO

Focusing on existential or hypothetical risks detracts from the current, actual risks.

Sasha Luccioni

AI Is Dangerous, but Not for the Reasons You Think | Sasha Luccioni | TED

Global AI ethics has converged on a set of five principles (Jobin et al, 2019):

- Non-maleficence
- Responsibility or Accountability
- Transparency and Explainability
- Justice and Fairness
- Respect for Human Rights, such as Privacy and Security.

Jobin et al. (2019): The global landscape of AI ethics guidelines

Statement on Inclusive and Sustainable Artificial Intelligence for People and the Planet
(Statement from AI Action Summit, Paris - Feb 2025)

‘Mainlined into UK’s veins’: Labour announces huge public rollout of AI

Why Starmer and Reeves are pinning their hopes on AI to drive growth in UK

Academic Integrity

(In)accuracy

Bias

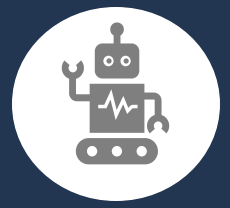
Data Security/Privacy

Environmental Cost

Misuse

Misinformation

Impact on Creativity

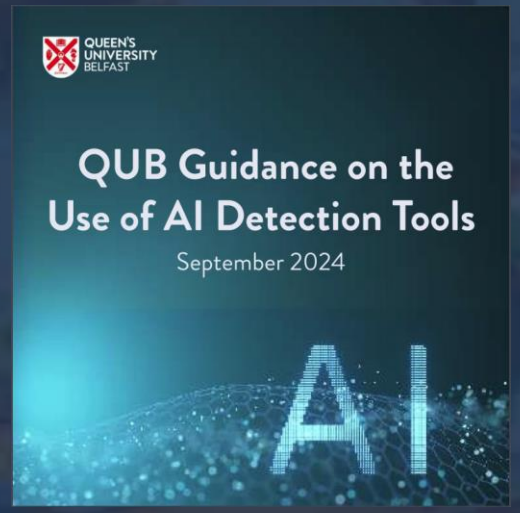


Future Jobs

Academic Integrity

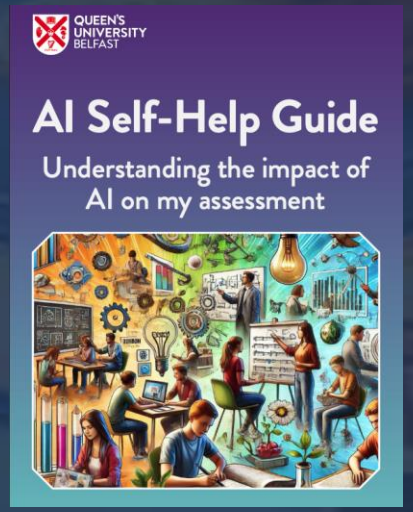
How can (or should) I detect the use of AI?

Use a 'Broad Detection System'



go.qub.ac.uk/AI-Detection

Consider the impact of AI on assessment



go.qub.ac.uk/AI-Self-Help

Jisc: Designing assessment in an AI enabled world

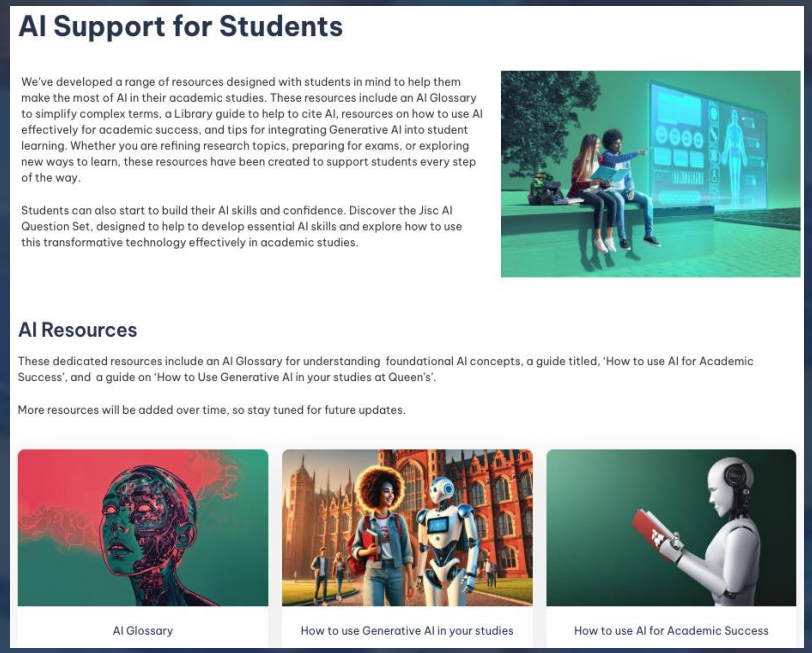
Consider the 'process'

How do you meaningfully capture how the assessment was completed?

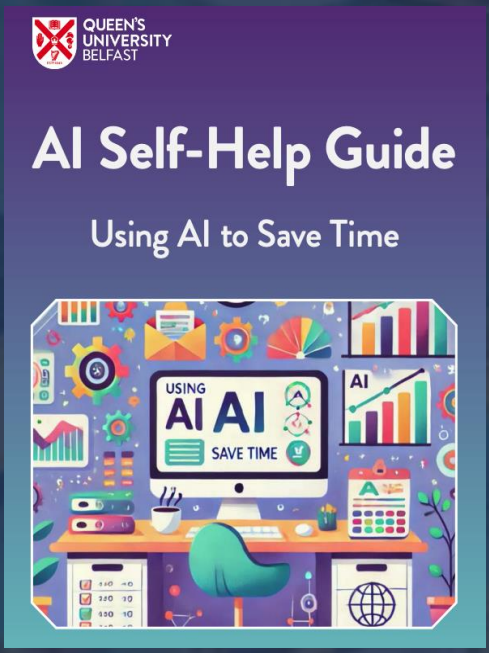
Academic Integrity

How can (or should) I detect the use of AI?

Promote AI as a collaborator for staff/students



go.qub.ac.uk/AI-Student-Support



Self Help: Using AI to Save Time

Academic Integrity

Referencing AI

APA Example

Citation order:

- Author of AI program
- Year of the program version used (in round brackets)
- Name of AI (as the title, in italics)
- Version, if applicable (in round brackets)
- Description of program (for context, in square brackets)
- Publisher, if different from the author
- URL, if applicable

libguides.qub.ac.uk/AILibrary

Dalhousie University: Citing AI

How do I declare the use of AI?

Declaring the use of AI

AI Declaration Statement example - include the following information to acknowledge use of AI tools:

- AI tool (e.g. Copilot, ChatGPT, Claude, Gemini)
- Description of how you used the tool (e.g. edited/corrected/translated/planned/brainstormed)
- Prompt(s) used (if applicable)
- Part, section or page of the paper / assessment
- Date(s)
- Transcript of conversation (if applicable)

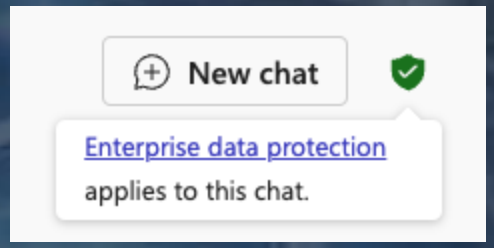
University of Queensland: AI tools for assignments

Data Security and Privacy

How can I protect my data when using AI?

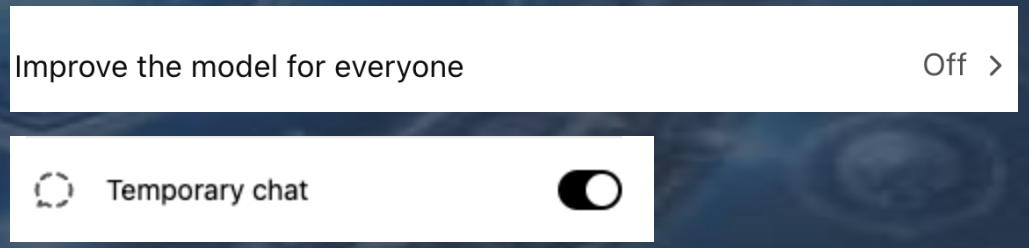
Use Copilot Chat

- Sign in with QUB credentials
- Includes Enterprise Data Protection



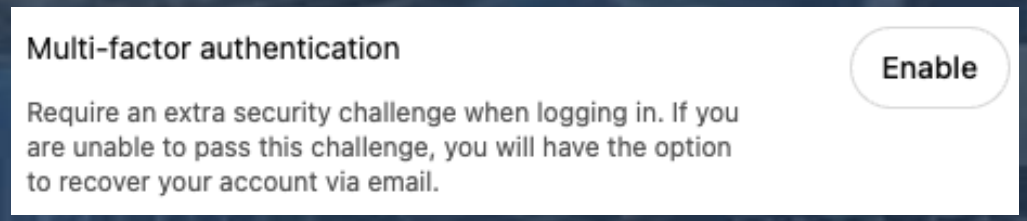
Identify Data Settings

- ChatGPT – Settings > Data Controls
- Use Temporary Chat if required



Use MFA

- Multi-Factor Authentication
- ChatGPT - Settings > Security



Data Security and Privacy

What should *not* be shared with AI Tools?

Do not share any sensitive data

Do not share any copyrighted material

AI and the Library: Uploading content to LLMs

(In)accuracy

How can I trust AI-generated outputs?

Use AI
Understand the nature of AI-generated outputs

Emphasise Critical Thinking
Understand the nature of AI-generated outputs

Trust your expertise
Use a subject you're are familiar with to test ouputs

Verify Outputs
Check accuracy of outputs
Ask for evidence

Bias

Are AI-generated outputs biased?

"*The opaque nature of AI training datasets means that biases in the data can reinforce societal inequalities without clear accountability.*"

ChatGPT

Training Data Bias
Algorithmic Bias
User-input Bias

Use AI
Understand the nature of AI-generated outputs

Enhance your prompts
Clear prompts help mitigate bias

AI Debate
Ask the AI to debate its own answer

Ask for evidence
Request a source for info

Misuse

Misinformation

How can AI-generated content be misused?

- Online misinformation
- Deep fakes
- AI scams

Develop a critical understanding of how AI can generate online content.

Detection tools:

- Sensity: Deep Fake Detector
- TinEye: Reverse Image Search
- GPTZero: AI Text Detector

Environmental Concerns

Should I worry about energy use?

Training and running AI systems places additional burden on energy consumption.

1 Chatbot query = Powering a lightbulb for 20 mins / 10x Google Search
University of Wisconsin-Madison

Generating 1 AI image = Fully charging your smartphone
MIT Technology Review

Consider the bigger picture of energy use

AI Energy Score: new tool to measure energy efficiency of AI models

Avoid Excessive image/video generation *(or run local models to generate content)*

Track your emissions
codecarbon.io

Offset Carbon
Carbon Offset Calculator

Impact on Creativity

How will AI impact creativity?

- Creative work is used to train AI
- Creative jobs are at risk from AI-generated artwork

Spawning AI - Have I been trained?
Check if your creative work has been used to train AI

Co-creativity?

- AI Hub Case Studies: AI in Music Education and Research
- AI Hub Blog: AI and the Death of Humanity - Lessons for Educators
- Holding the Line: A Study of Writers' Attitudes on Co-creativity with AI
- Integrating Generative AI into the Creative Process - LinkedIn Learning

Future Jobs

How do I prepare for the future of work?

Develop knowledge of impact of AI in your own area

Encourage use and knowledge of AI in your teams / schools / courses

Prepare for AI-enhanced workplaces by exploring beneficial AI use cases

- Responsible Use
- AI Best practice
- Integrity
- Support
- Equitable Access

Questions?

Feedback Form

Please take a couple of minutes to tell us your thoughts on the session, and AI support at Queen's:

forms.office.com/e/pqf5g8jh9Z

AI Building Blocks Series