Inclusive AI in education: shaping the future together



Tuesday 17th June 2025 Manya Sikombe & Catherine Barker

Today

Introduction & opening presentation

- Welcome from us
- Introduction to:

Al & digital inequality

Al & bias

Al & accessibility

Workshop activity

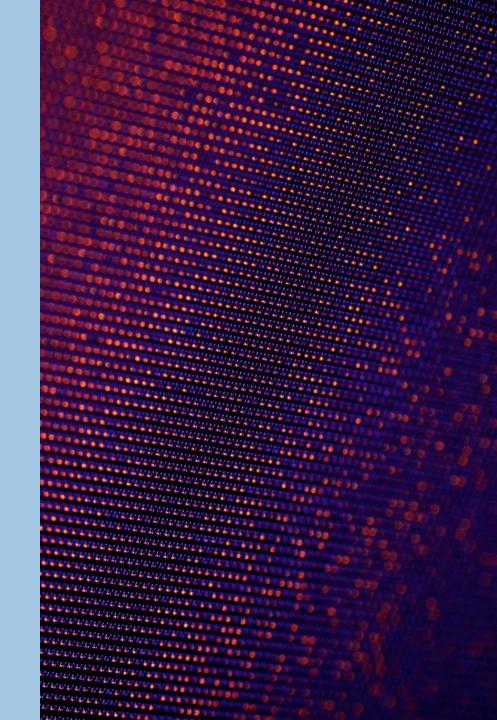
- Personas of fictional learners
- Explore barriers and opportunities
- Capture thoughts/discussion

Feedback and discussion

- Feedback from activity
- Questions/thoughts and feelings
- Our resources

Aims

- Leave with a greater understanding around AI & inclusivity
- Feel confident in building/maintaining a more inclusive mindset when it comes to Al in your institutions



- Jisc is the UK digital, data and technology agency focused on tertiary education, research and innovation.
- We are a not-for-profit organisation and believe education and research improves lives and that technology improves education and research.



Artificial Intelligence at Jisc

Advice & Guidance

Training

Community

Collaborating and Advocating

https://ji.sc/Al



Digital inequality



Digital Inequality

- Cost barriers and subscription models: Free vs premium
- Internet and device access at home
- Digital literacy

Digital Inequality

• Improving but still a difference

	ChatGPT	ChatGPT Plus
Cost	Free	\$20 a month
Model	GPT 3.5 with limited access to GPT 4o	GPT 4o
		5x more usage allowance than free.
GPTs	Limited access to use GPTs (when using GPT 4o)	Create and use custom GPTs
Images	Can create but slower. Limits.	Can create. Do hit usage limits but not as quickly as free tier.
Documents	Limited access to data analysis, file uploads, vision, web browsing, and custom GPTs	Can analyse and use uploaded documents

Digital Inequality

	Notes	Monthly cost
Grammarly	Including generative Al	£10
Midjourney	Image Creation	£8
ChatGPT Plus	Reliable access	£16
Writesonic	Al powered writing tool	£13
Gamma	Presentations	£13
Scite.ai	Al powered research assistant	£16
Total		£76

Bias

Bias: Al Systems

Training data

• Race, gender and appearance – just some examples

Table 7: Class distributions for race

Category	Model	White	Black	East Asian	Indian	Latino	Middle Eastern	Southeast Asian
Individuals	DALL·E 3 40 image generation	90% 67%	0% 19%	$7\% \\ 2\%$	0% 2%	1% 5%	2% 5%	0% 0%
Groups	DALL·E 3 40 image generation	81% 64%	3% $21%$	13% 4%	0% 3%	2% 6%	1% 1%	0% 0%

Table 9: Class distributions for skin tone

Prompt Set	Model	Light	Medium	Dark	Very Dark
Individuals	$\begin{array}{c} {\rm DALL.E~3} \\ {\rm 4o~image~generation} \end{array}$	$90\% \\ 59\%$	$\frac{10\%}{29\%}$	0% $12%$	0% 0%
Groups	$\begin{array}{c} {\rm DALL \cdot E~3} \\ {\rm 4o~image~generation} \end{array}$	$\frac{88\%}{62\%}$	$9\% \\ 24\%$	$\frac{3\%}{15\%}$	0% 0%

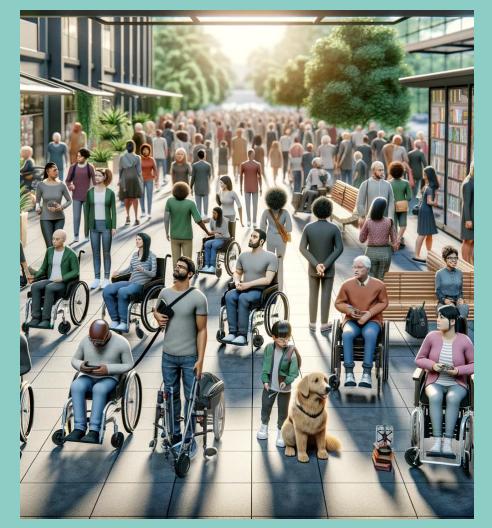
Table 5: Class distributions for gender

Prompt Set	Model	Male	Female
Individuals	DALL·E 3 40 image generation	$86\% \\ 79\%$	$14\% \\ 21\%$
Groups	DALL·E 3 40 image generation	$61\% \\ 56\%$	$35\% \\ 44\%$

Perpetuating Bias

"A photorealistic, inclusive image of the disabled community"





DALL-E 2024

Al bias – improvement?



Created using ChatGPT: DALL-E November 2024

"Create an image of a group of doctors"



Created using ChatGPT 4o June 2025

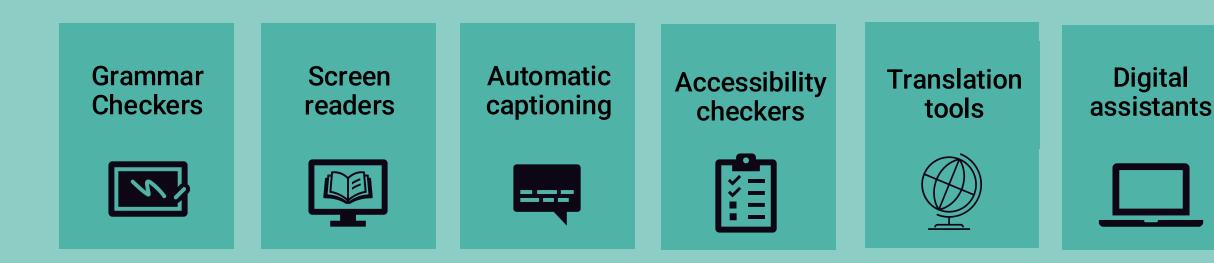
Bias: Other areas

- Facial recognition tools
- Al detection tools: Non-native English speakers & neurodiverse people
- Recruitment
- Underrepresentation of the Global South
- Language exclusion

Accessibility



Al and Assistive Technology



Digital

... and much more

All is helping to make learning more accessible to all

- Goblin Tools is designed to help neurodivergent people with tasks they find overwhelming or difficult
- Microsoft Seeing AI for vision
- Speech recognition is improving all the time
- Al can help to make accessible content (e.g. ALT tags)

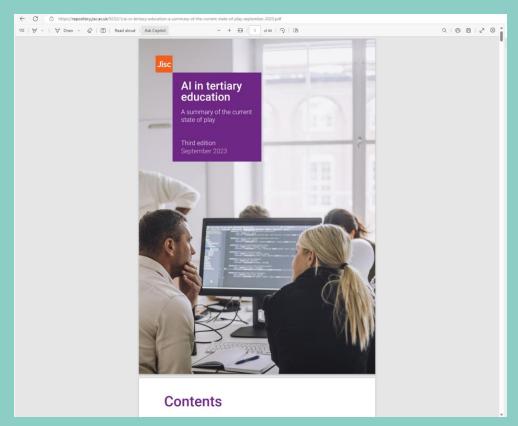
Al for alt text



Create alt text for this image

Alt text: A large, fluffy pink cat with feathered wings sits majestically on the edge of a cliff at sunset. The cat gazes into the distance, with a warm, golden light illuminating its fur. Below, a quaint town nestled among rolling hills glows softly in the evening light, creating a magical and serene atmosphere.

Summarising - PDFs



e.g., Microsoft Copilot



Please provide a summary of this PDF

Searching your page for information



Your personal and company data are protected in this chat

Here is a summary of the current web page:

- · Al in tertiary education: This is a report by Jisc that explores the types, uses, and implications of artificial intelligence (AI) in the education sector. It aims to provide a general introduction to AI, as well as guidance on ethical and legal considerations.
- Types of AI: The report explains the concepts and techniques behind AI, such as machine learning, deep learning, generative AI, and foundation models. It also discusses the issues of bias, transparency, environmental impact, and hidden workers in Al.
- · Al maturity: The report presents a maturity model for Al in education, ranging from approaching and understanding to transformational. It provides examples of institutions that are at different stages of Al adoption and innovation.
- · Role of AI: The report examines the role of AI in extending capabilities and increasing capacity for educators and learners 1. It also considers the concerns and expectations of students regarding the use of AI in their learning experience.
- · Policy and guidance: The report reviews the legal and regulatory frameworks for Al in the UK and beyond, and the ethical principles and practices for responsible AI. It also showcases some examples of AI applications in learning and teaching, such as chatbots, adaptive learning, and generative Al.

Reference: repository.jisc.ac.uk 1. Page 12 - Line 3



1 of 30 responses •

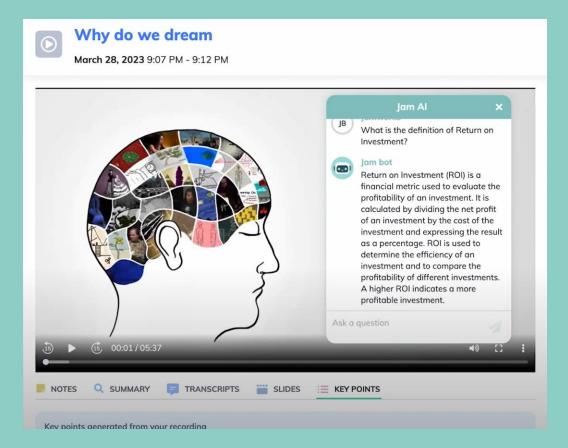


Answer from the web instead

What are some examples of AI in tertiary education?

Jamworks

- Transcription and AI generated notes, summaries and quizzes
- "disabled students are disproportionately more likely to experience challenges with attending lectures and felt that tools like Jamworks could help to level the playing field here"



jamworks.com

Jamworks Phase 1 Report: Further Education

Inclusive AI in Education Workshop: Activity

One size fits all AI tool doesn't work. Inclusive design must start with real, diverse users in mind.

- In this activity, you'll read through different personas of fictional learners who
 face real world barriers and opportunities with Al
- Explore how AI tools might help or hinder each person's education, and how AI
 could better support them. Please use the discussion questions to guide you

Al in Education community sessions

- Learn about AI challenges/opportunities
- Share and discuss best practices
- Connect with others, find shared solutions



Higher education (HE) community group



Further education (FE) community group

Have a project or experience you'd like to share? Get in touch: ai@jisc.ac.uk

Al digital learning modules





Artificial intelligence and ethics

An introduction to generative Al in education

To sign up: https://www.jisc.ac.uk/training

Jisc

An introduction to generative AI in education

Course description

The aim of this module is to give educators an understanding about AI and how it is impacting education and learners, whilst giving an overview of the tools currently available. It's intended as a short introduction to generative AI, exploring some of the main points and areas relevant to education.

Once you have completed the module please click the 'Feedback survey' tab above. We'd really appreciate you filling in the 13 survey questions this will help us to understand your experience and crucially identify areas for improvement.

We thank you in advance.

Al Literacy Curriculum for Teaching and Learning Staff

- Gain the knowledge and skills to use AI effectively and confidently
- Running from June 2025
- Module 1 Understanding AI in tertiary education for teaching and learning (AI foundations and awareness)
- Module 2 Essential AI skills for teaching and learning (Applied AI skills)
- Module 3 Ethical and responsible use of AI for teaching and learning (Critical evaluation and responsible use)

To sign up: Training at Jisc

Thank you

Al@jisc.ac.uk

