

# The Use of Generative AI in UK Higher Education: Perspectives from Institutions, Educators, and Students

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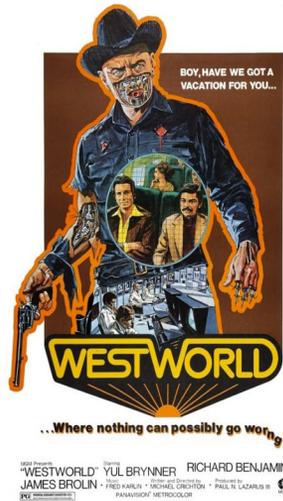
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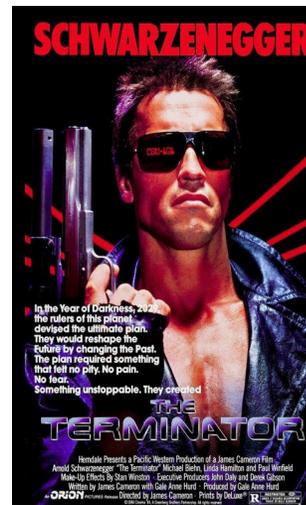
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“The rise of powerful AI will be either the best or the worst thing ever to happen to humanity. We do not yet know which.”

Stephen Hawking (2016)



1973



1984



1999



2014



2015

# From a Chaotic Start to the Ethical and Responsible Use of GenAI in HE

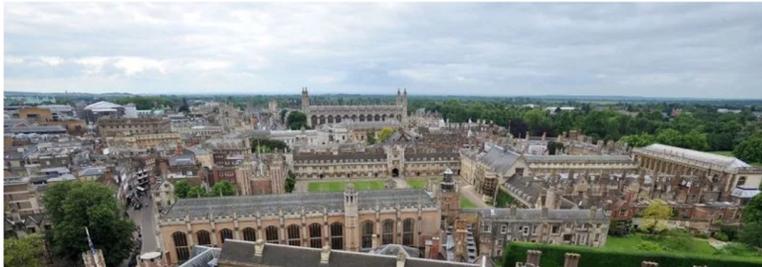
News ▶ Cambridge News ▶ Cambridge University

## Cambridge University among elite universities to ban ChatGPT due to plagiarism fears

Eight Russell Group universities have banned students from using the technology in academic work

NEWS By [Tom Burnett](#) Content Editor  
13:20, 1 MAR 2023 | UPDATED 13:24, 1 MAR 2023

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New principles on...

## New principles on use of AI in education

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04 July 2023

A new set of principles has been created to help universities ensure students and staff are 'AI literate' so they can capitalise on the opportunities technological breakthroughs provide for teaching and learning.

The statement, published today (4 July) and backed by the 24 Vice Chancellors of the Russell Group, will shape institution and course-level work to support the ethical and responsible use of generative AI, new technology and software like ChatGPT.

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# A Race Against AI Development: Policy and Guideline

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## International Level

- United Nations (2024): Artificial Intelligence in Education
- UNESCO (2024): AI Competency Frameworks for Teachers and Students
- European Union (2024): The EU Artificial Intelligence Act

## Higher Education Institution Level

- University GenAI Guidelines
- Faculty-Level Guidelines
- Numerous Working Groups and Consultations

A top-down approach to developing policy and guidelines, coupled with a bottom-up approach to adoption.

# My Personal Journey with GenAI

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- Communicating in a second language in UK academia is challenging
- Academic writing demands complex structure and formal vocabulary
- Discovered tools like Wordtune, DeepL, and Otter for writing support
- Became an early adopter of GenAI before ChatGPT's launch

# My Research Journey with GenAI

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- Recognized both potential and limitations of GenAI through reflective use.
- Published a tech review on Wordtune AI (Zhao, 2022).
- Collaborated with Edtech companies (e.g., AI21 Labs, Grammarly).
- Researched user experiences and attitudes toward GenAI tools.

# The Use of GenAI in HE

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- GenAI can reduce cognitive barriers, boost efficiency, and support equity for marginalized learners.
- Concerns include inaccuracy, bias, overreliance, academic misconduct, environmental impact, and new digital divides.
- Policies are often top-down and lack evidence grounded in diverse learner experiences (e.g., language barriers, learning difficulties, and varying levels of prior knowledge).
- Limited support for teachers and students to explore pedagogical innovation with GenAI.
- Lack of trust among key stakeholders remains a significant barrier.

Showcasing the Use of GenAI by Diverse and Disabled  
Learners:  
Insights from Recent Publications

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# Study 1: An Interview based study

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## A summer project (2023)

Interviews of 43 Postgraduate Taught (PGT) and Postgraduate Research (PGR) students

- How students are using GenAI tools
- Their perceptions of the benefits and problems with AI use
- Their perceptions of the ethical concerns around GenAI in Education

# Diverse views towards Generative AI

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## Top concerns:

- Academic Integrity
- Automation of thinking
- Inaccuracy and hallucinations
- Bias
- Overreliance on technology
- Reduced learning opportunities
- Digital divide

## Top benefits:

- Levelling the playing field (e.g., language barriers, disabilities)
- Assisting studying and writing
- Helping with difficult subjects (e.g., STEM)
- Enhanced work and efficiency
- Enhanced employability
- Making learning more entertaining

# Study 2: a cross-national study

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**Data collection completed:** UK (n=241), China (n=208), Mexico (n=425), Jordan (n=544), Saudi Arabia (n=396) with focus groups

**Data collection in-progress:** US, Italy, Sweden

- Accessibility of GenAI
- Common usage of GenAI tools
- How GenAI is utilized for writing academic assignments
- Identified concerns
- Recommendations

# Survey results from China (Hong Kong and Macau) and the UK

Characteristic		China	UK
Sex	Female	161	130
	Male	43	86
	Other	4	22
Academic Level	Undergraduate	195	156
	Postgraduate	13	85
Major	Humanity	193	24
	Science & Engineering	2	128
	Social Science	12	80
	Others	1	9

- Unequal access to GenAI tools (e.g., ERNIE Bot and WPS AI vs ChatGPT, Grammarly Go)
- Shared eagerness to embrace GenAI;
- Shared concerns about GenAI;
- Differing attitude about who should be responsible for guaranteeing effective use of GenAI.

# Early Insights from Focus Groups with Students and Staff in Saudi Arabia

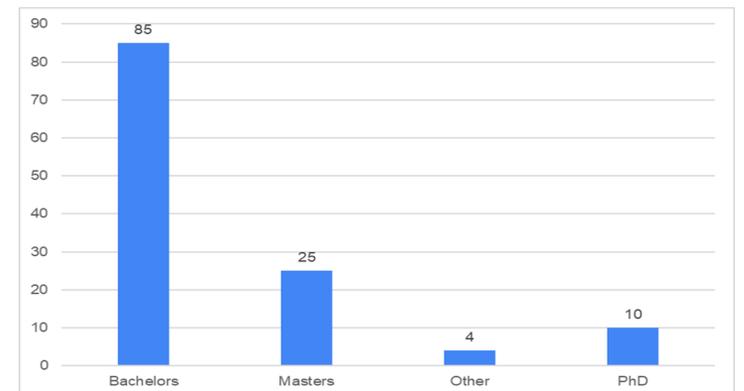
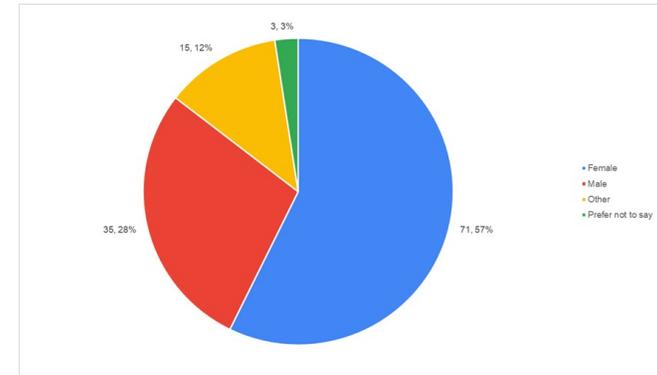
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- Mutual distrust between students and teachers regarding AI use
- ChatGPT most used; DeepSeek gaining traction (speed, political alignment)
- Preference for flexible or non guidelines over strict AI policies
- GenAI skills give academic and workplace advantage
- Individual benefits outweigh concerns (e.g., privacy, environment)
- Digital divide growing between AI-literate and less-experienced students

# Survey results from disabled students in the UK

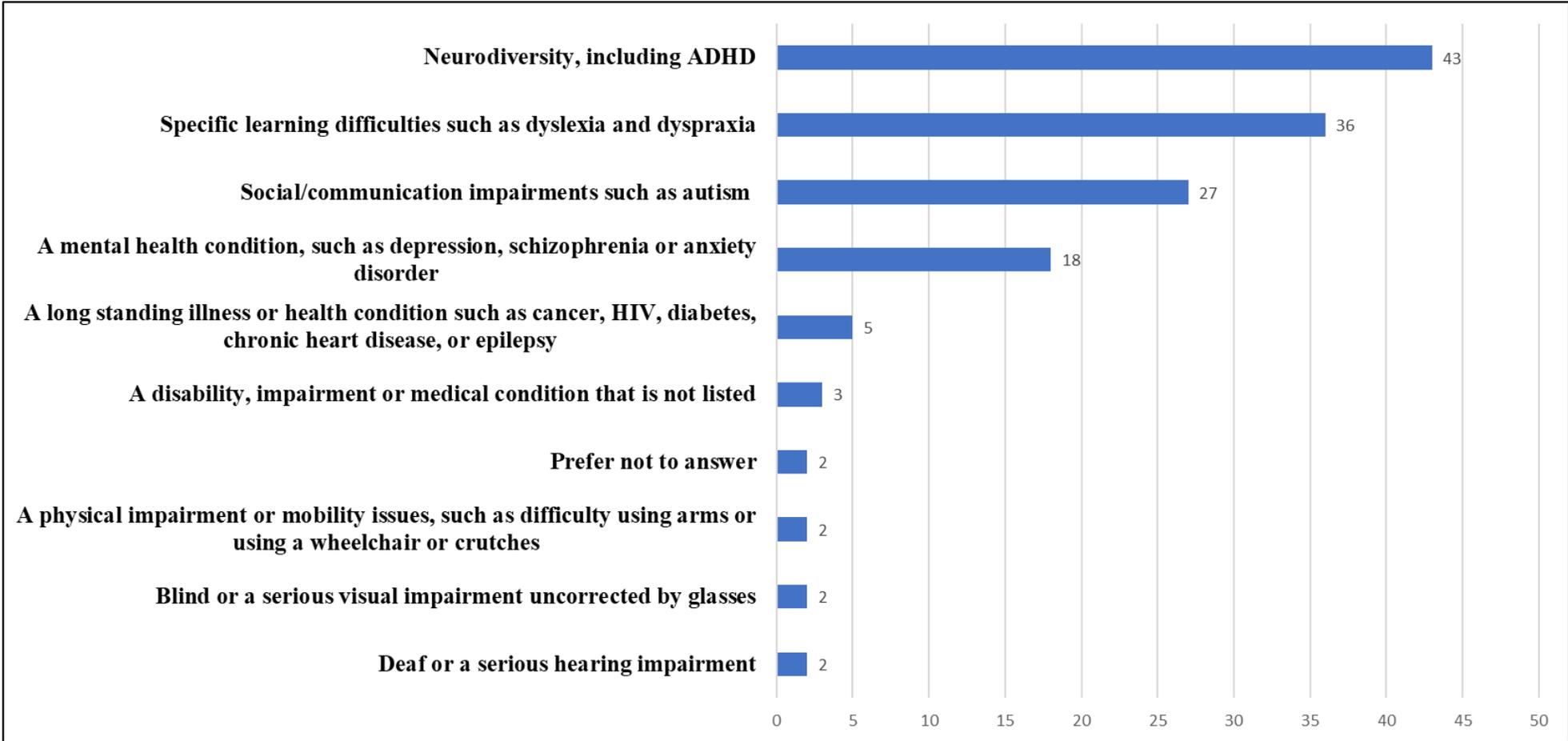
## A student survey of disabled students (N=124)

- Disabilities
- Generative AI services in use
- How Generative AI is used for writing academic assignments
- Beliefs and concerns about AI
- Support that students want



Zhao, X., Cox, A., & Chen, X. (2025). The use of generative AI by students with disabilities in higher education. *The Internet and Higher Education*, 66, 101014.

# How GenAI are used to support students with disabilities for assessment (UK: n=124)



# Challenges faced by disabled students in written assessment

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- Understand assignment briefs and rubrics (e.g., understanding expectations, hints, prompts)
- Requiring much longer time (e.g., for reading and writing)
- Reading and proofreading/editing process
- Word choice
- Writing structure (e.g., sentence/paragraph organization)
- Tone of voice and writing styles
- A mental block, such as translating thoughts into writing, experiencing brain fog, and mind blanks
- Low motivation to write due to issues such as fatigue and stress
- Time management and low concentration level

# Common Uses by disabled students

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- **Explaining topics**

*“I use ChatGPT to do the initial step of explaining complex things that I have studied.”*

- **Identifying resources**

*“ChatGPT can be useful when finding resources [...] as in scouring the Internet for specific data or research is a tiring task, especially with ADHD.”*

- **Summarising learning materials**

*“ChatGPT is really good at making information concise. I use it for this reason, as when my depression and anxiety is bad it can be difficult to comprehend large texts; I lose focus, get mind blanks or simply don’t understand information in such large doses.”*

- **Structuring the writing process**

*“I find ChatGPT can be really useful to aid the initial structuring of long pieces of written text.”*

- **Refining written work**

*“Grammarly [...] can help me correct my writing mistakes.”*

# Support and Training Students Wish to Receive

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- General/introductory training on generative AI competency
- Clear institutional guidelines and policies on AI related academic malpractice
- Training on avoiding academic malpractice and unethical uses
- Writing prompts
- How to use generative AI to search for information
- How to fact-check or reference information from generative AI
- How to use generative AI for summarizing texts effectively
- Introduction to a wider range of tools available for students

# Support and Training Staff Wish to Receive

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- Professional development on GenAI competency
- Clear institutional guidelines and policies on acceptable AI use
- Training on how to design assessments with students using AI
- Support on how to help students use AI ethically and productively
- Opportunities to share best practices and collaborate with colleagues
- Access to tools and platforms, along with technical support
- Time, resources, and recognition or awards to support experimentation with AI in teaching

# Take Home Message

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- Many students are finding value in generative AI to address their challenges in written assessment - it could be a big plus for them!
- Students and staff share our concerns about academic integrity breaches.
- Students would like to get involved in the development of guidelines and policies and receive relevant AI competency training.
- Supporting departments, such as libraries, disability support services, and language centres, should be given more resources and empowered to take leading roles in promoting inclusive and diverse use of AI.
- AI competency frameworks are needed to guide the design of training for both students and staff.

# UNESCO AI Competency Frameworks for Teachers

Aspects	Progression		
	Acquire	Deepen	Create
1. Human-centred mindset	Human agency	Human accountability	Social responsibility
2. Ethics of AI	Ethical principles	Safe and responsible use	Co-creating ethical rules
3. AI foundations and applications	Basic AI techniques and applications	Application skills	Creating with AI
4. AI pedagogy	AI-assisted teaching	AI-pedagogy integration	AI-enhanced pedagogical transformation
5. AI for professional development	AI enabling lifelong professional learning	AI to enhance organizational learning	AI to support professional transformation

# UNESCO AI Competency Frameworks for Students

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Competency aspects	Progression levels		
	Understand	Apply	Create
• Human-centred mindset	• Human agency	• Human accountability	• Citizenship in the era of AI
• Ethics of AI	• Embodied ethics	• Safe and responsible use	• Ethics by design
• AI techniques and applications	• AI foundations	• Application skills	• Creating AI tools
• AI system design	• Problem scoping	• Architecture design	• Iteration and feedback loops



# Next Steps

## Supporting the Development of UNESCO AI Competency Framework for HE

- **Conducting teacher and student surveys**
- **Engaging in expert consultancy to inform the framework's design and relevance across global contexts**

# Relevant references

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