### **FAQs**

# Do you have any examples of how Al is being used as a reasonable adjustment for students with disabilities?

It's best to speak to our Disability Librarian, Teresa Pedroso (disability.librarian@bodleian.ox.ac.uk), who can advise further.

However, the Plagiarism page on the University's website (<a href="https://www.ox.ac.uk/students/academic/guidance/skills/plagiarism">https://www.ox.ac.uk/students/academic/guidance/skills/plagiarism</a>) does give some examples. It mentions voice recognition software for transcriptions, and spelling and grammar checkers.

# Do you know if Al tools like ChatGPT save the research data or texts we send to them?

This depends on the AI tool and the level of access you have to it (e.g. a paid licence vs. the free version).

It's wise to read the privacy policy that each AI developer has, as this will outline the data they obtain from users and what they do with it.

For ChatGPT, its developer, OpenAI, enables data collection for LLM training by default. You can switch off your data being used in this way by following this procedure: Click the icon at the top right of your screen -> Go to "Settings" -> "Data Controls" -> "Improve the model for everyone" -> Toggle off.

If you have an Enterprise or a ChatGPT Edu licence, the possibility of OpenAl using your data for training is automatically disabled, and they state that "[these] workspace chats aren't used to train our models".

Generally, it's a good practice to avoid entering research data or confidential material into AI tools like ChatGPT.

#### How does Al affect education?

This is a very broad question, but we'd say that AI has affected education positively and negatively. Some examples are listed below.

#### **Positives:**

- 24/7 Availability Apart from when AI tools have downtime, learners can access them around the clock, not just inside classes, so they can get real-time feedback when they want
- Customised learning ChatGPT, for example, can adapt materials you give it to suit your desired pace and difficulty level, and explain concepts outside of classes

 Translation – Enables learners to access materials in their native language

#### **Negatives:**

- Equity and access Not all learners have equal access to Al tools, which creates an unfair divide
- Hallucinations GenAl tools like ChatGPT can present falsehoods as facts, which means some non-credible information is being presented to users
- Overreliance Depending on AI at the exclusion of other ways to learn may impact critical thinking and problem-solving skills, not to mention a student's creativity

# How do I recognise if my students have used AI to write their assignments?

At the moment, there's no software that can accurately and reliably detect Alwritten material.

There are plagiarism detectors with AI detection features such as Turnitin. These claim to have high accuracy in detecting AI content, but they may flag human-written text as AI-generated, especially if the writing is formulaic. They may also fail to recognise heavily-edited or sophisticated AI-generated work.

If you're carrying out teaching at the University, you may want to contact the Centre for Teaching and Learning (<a href="mailto:contact@ctl.ox.ac.uk">contact@ctl.ox.ac.uk</a>) for extra support on AI and assignments.

## If I'm using AI to just generate ideas or to organise my thoughts, do I still need to reference it?

There is no widely-agreed standard for how to reference AI<sup>1</sup>, including the use of it for generating ideas or organising thoughts.

Attendees in previous iSkills sessions on AI have pronounced that GenAI should never need to be referenced, as you should always find a primary source to confirm what it says. Other attendees have noted that in their local guidance, any use of AI – including for idea generation or organising ideas – must be declared.

Please consult with colleagues or relevant teaching staff for help on using AI in this manner.

<sup>&</sup>lt;sup>1</sup> In today's session, we present CiteThemRight's approach for referencing GenAI content in the Harvard style, but even this approach is only suggested and has limitations.

# Is it allowed to use AI to proofread my research paper before I submit it for publication?

Academic journals and publishers should have guidance on the use of AI in submissions. You must consult with the relevant parties reviewing your research paper, and if in doubt, contact them for clarification.

## What if I use AI to improve my writing or paraphrase what I've written? Do I need to reference AI then?

If AI use is minimal (e.g. grammar checks, synonyms, or minor edits similar to what a spell-checker would do), referencing it may not be required, although, as always, consult local guidance and staff.

If you're using AI to heavily alter what you've written, presenting it as solely your work may pose an academic integrity issue. We cannot advise on your individual case, but consider using AI to critique your writing and suggest improvements rather than substantially refining it.

### What is the environmental impact of AI?

Much is still unknown about the environmental impact of AI, and most AI tools beyond ChatGPT have not been adequately studied.

The majority of large-scale AI deployments are housed in data centres. These are big facilities with often thousands of computer servers. As GenAI tools like ChatGPT need to be permanently accessible to users, the servers need to be constantly running, which requires a continuous supply of energy and water to cool the equipment.

Many statistics for the knock-on effect to the environment have been presented by the media, but these are not usually presented alongside the resources it takes to maintain the other technologies we use every day, or how wasteful humans can be performing the same tasks as AI.

Tomlinson *et al.* (2024)<sup>2</sup> compared the impact of AI to the impact of humans when they were performing two tasks: illustration and writing. They found that, for these two activities at least, AI has a substantially lower carbon footprint than humans engaged in the same task. Note, however, that this study focused only on the GenAI tools ChatGPT, BLOOM, DALL-E 2, and Midjourney.

<sup>&</sup>lt;sup>2</sup> Tomlinson, B., Black, R. W., Patterson, D. J., and Torrance, A.W. (2024) *The carbon emissions of writing and illustrating are lower for AI than for humans*. In *Scientific Reports 14, 3732*. <a href="https://doi.org/10.1038/s41598-024-54271-x">https://doi.org/10.1038/s41598-024-54271-x</a>

### **Supplementary Materials**

### iSkills – Using AI to Find, Analyse, and Share Information Sources

We advise that if you're interested in the environmental impact of AI, you should seek information from reputable academic sources rather than traditional media. This is a contentious topic that can't be explained with a short answer.

### **Guidance for Oxford Researchers on Using Al**

Per the University's Publication and Authorship guidance (<a href="https://researchsupport.admin.ox.ac.uk/governance/integrity/publication">https://researchsupport.admin.ox.ac.uk/governance/integrity/publication</a>), Al tools and LLMs do not fulfil the criteria to be listed as authors or co-authors of a research output, since they can't take responsibility for the content and integrity of the output. It's therefore not acceptable to include any Al or LLM (such as ChatGPT) as an author or co-author of a research output.

Any use of AI in developing a research output, including, for example, the collection, analysis, and interpretation of data, should be cited in the methods or acknowledgements sections (or similar) as appropriate.

University researchers should also refer to the AI policy of any publisher to which they plan to submit.

Furthermore, the grey area between using AI to write "original" content vs. proofreading rests with the researcher. You must assess what constitutes originality in line with the principles of research integrity (see "What Is Research Integrity" page from the UK Research Integrity Office: <a href="https://ukrio.org/research-integrity/">https://ukrio.org/research-integrity/</a>).

Lastly, in addition to the University's Publication and Authorship guidance, it may be useful for you to consult the Authorship and Al Tools guidance from the Committee on Publication Ethics (COPE) that can be found here: <a href="https://publicationethics.org/guidance/cope-position/authorship-and-ai-tools">https://publicationethics.org/guidance/cope-position/authorship-and-ai-tools</a>