

Generative Artificial Intelligence: a quick guide for learning, teaching and assessment

Introduction

- 1 This document replaces the Appendix on Artificial Intelligence included with Birkbeck's <u>Academic Integrity and Misconduct Policy</u>. The policy itself remains the same for academic year 2023-24. The guidance included in the appendix is updated to make it clearer and to take account of more information about generative artificial intelligence (AI) now available over the past year since the launch of the free chatbot, ChatGPT.
- 2 The possibilities for AI to support student learning are great. The purpose of this note is to clarify, in response to students' requests and to those from our Students' Union, what might or might not be acceptable use. As the technology itself is developing, this guidance remains focused on principles and intentions rather than saying whether students should, or should not, use any particular one among the many AI tools and applications that are coming onto the market.
- 3 It is important for students to note that **our approach has not changed in this guidance**: our policy remains that you should **not** use AI tools to **generate** an essay or other assessment and then **submit this as entirely your own work**.
- 4 We will continue to provide updates about the use of generative AI over the course of the academic year and ensure that students are notified of these through Moodle.

What is Generative Artificial Intelligence?

- ⁵ 'Artificial Intelligence' (AI) refers to the ability of machines to perform tasks that typically require human intelligence, such as learning, reasoning, problem-solving, perception, and natural language processing. Machine learning is a subset of AI that involves the development of algorithms and statistical models that enable computers to learn from data, without being explicitly programmed. The goal of machine learning is to develop models that can make predictions or take actions based on input data. Machine learning algorithms can be applied to a wide range of problems such as image recognition, natural language processing, predictive analytics, and decision making.
- 6 Generative Artificial Intelligence tools are based on large language models (LLMs) such as ChatGPT and have been trained with vast databases to write coherent text in a particular style according to the instructions (prompts) given by the user. These LLMs are accessed through interfaces such as ChatGPT and Google Bard which have already found wide application in multiple workplaces and are increasingly being integrated into word-processing and other software tools, and will soon be as ubiquitous as predictive text and grammar-checking software. In March 2023, OpenAI released GPT-4 which has a larger database, faster speed and improved performance across a range of measures, including factual accuracy, compared to GPT-3. (This information is from the Quality Assurance Agency's January 2023 guide.)
- 7 Some examples of these tools are listed below. Please note this is a neutral list to show what tools use artificial intelligence, not a judgment about the value or risks of these tools.
 - conversion and translation tools, such as Google Translate, DeepL and Dragon;
 - paraphrasers and grammar checkers, such as Grammarly, Quillbot and ChatGPT.



- essay bots and text generators such as Quillbot, ChatGPT, Perplexity.ai and Chimp Rewriter.
- artefact generators such as Github Co-pilot, Dal-e-2 and Melobites.com
- computational knowledge engine used to perform calculations, analyse data sets, and provide insights into complex problems, such as Wolfram Alpha.
- 8 Birkbeck is committed to ethical and responsible use of generative AI. This includes upholding our academic integrity (for staff and students). Birkbeck seeks to prepare its staff and students to work in an increasingly AI-enabled world.

Strengths and limitations

- 9 Resources like ChatGPT can be valuable tools to assist learning and teaching. There are limitations. <u>OpenAl provides further information about the limitations of generative Al in its resources for students and educators</u>.
- 10 Some of the principal limitations of ChatGPT are outlined below. (These are based on the <u>University of Melbourne's guidance</u> as a concise summary).
 - It is not creative in a human sense.
 - It is not self-aware.
 - It summarises information without always providing accurate references to sources or citations. When it does provide references, it sometimes cites fabricated sources that do not actually exist.
 - It cannot judge when information is correct or not.
 - It does not possess critical thinking skills.
 - It has been trained using online content which only existed prior to 2022.
 - It has biases inherent from its programmers and users.
 - It cannot hold copyright or be assigned intellectual property.
 - It is not able to make ethical decisions or value judgments.
 - It is prone to 'hallucinations', meaning that it sometimes fabricates facts and makes errors in reasoning.
- 11 There are examples of the limitations of this. Unattributed online material has been used to 'train' the system, so this might affect intellectual property rights. The UK Russell Group of Universities draw attention to an <u>article from Time magazine</u> reporting that the training mechanism for AI tools including exploiting precarious workers in the global south who were paid a very low rate to sift out traumatic and toxic content from the site. AI-powered tools are not humans: they lack understanding and insight so their text might seem entirely plausible but can be inaccurate and poorly argued. They also replicate the biases of the texts on which they were trained, reinforcing the marginalisation of minority groups in existing scholarship.
- 12 In completing summative assessments (ones designed to assess students' learning at the *end* of a block of study), the use of AI-powered tools has the potential to infringe on academic integrity and academic misconduct may occur. (Please note, 'academic misconduct' is also referred to as an 'assessment offence'. Historically it was described as 'unfair practice' but this is now out of date terminology and staff should update any student materials still using this language).



2023/24 Guidance for students

- 13 Al-powered tools can support and assist the learning and development process in constructive ways. There are legitimate uses for Al, especially in the preparatory stages of your work, for example, in helping you summarise and analyse complex materials, extract key findings, break writer's block and highlight grammatical errors. The <u>University of Plymouth has some examples of simple tasks you might try to support your learning</u>.
- 14 Indiscriminate or inappropriate AI use does not support good learning. You are here to develop your own knowledge and critical thinking skills. At worst, use of tools to plagiarise or cheat undermines confidence in our qualifications.
- 15 You must not submit work for assessment that has been generated by a chatbot or Al tool. The only exception is if the use of Al resources have been explicitly authorised by the Module Convenor for a particular assessment, and/or included in the assessment brief. Without this authorisation, your use of generative Al is likely to be treated as academic misconduct, as with any other form of contract cheating or plagiarism, because the words and ideas generated are not your own. Remember, too, that the words and ideas generated by the chatbot or Al tool have made use of other, human authors' ideas without referencing them (because it will not realise it is not referencing them), which is plagiarism. The College's approach will never include representing the work of another, including Al-generated material as your 'own' work. If Al is included in the assessment, the module convenor will provide guidance to avoid confusion about what is or is not acceptable.
- 16 Ultimately, it is your responsibility to maintain your own academic integrity whilst using AI-powered tools. By using AI-powered tools responsibly, you can maintain the principles of academic integrity set out in this policy and avoid potential disciplinary action.

Guidance for staff

- 17 Staff in central services will develop resources and training opportunities, so that teaching staff are able to provide students with clear guidance on how to use generative AI to support their learning, research and assessments. In the meantime, we have highlighted some useful resources in the section at the end.
- 18 As the use of AI becomes increasingly prevalent in the academic world, it is important for academic staff to be mindful of its potential impact on academic integrity in assessment. There are concerns about the impact of AI-powered tools on assessment and academic integrity. Our approach is clear: students should not be using generative AI to do their work for them. If staff permit the use of AI tools in summative assessment, then the assessment brief needs to explain to students, explicitly and without ambiguity, what tools they are allowed to use, how they are allowed to use them, and how they are expected to reference them. <u>UCL Library has provided</u> <u>quidance on effective referencing</u>.
- 19 Effective assessment design is key to preventing academic misconduct and to ensuring that assessment is engaging, authentic, and creative. We will provide examples of approaches on the <u>Education Directorate Connect SharePoint</u> for staff.



- 20 Academic staff should communicate with their students about AI software tools. This could include:
 - making clear what you regard as a permissible use of AI as part of students' learning and assessment;
 - discussing what constitutes academic misconduct, its consequences and the reason for that;
 - discussing the capabilities and limitations of AI software;
 - exploring different ways AI-generated material can be acknowledged and attributed ethically and appropriately;
 - discussing how AI could lead to various forms of plagiarism and how to avoid this.
 - signposting sources of support such as Birkbeck's Learning Development Tutors and other study skills support.
- 21 Engagement and dialogue between academic staff and students is important to establish a shared understanding of the appropriate use of generative AI tools.
- 22 We have produced template letters and guidance concerning the implementation of our Academic Integrity and Misconduct Policy. If any staff involved in this process are uncertain about resources, please contact your Faculty Head of Education or Head of Operations for Education and Student Experience.

Suspected misconduct

- 23 If a summative assessment is suspected of an academic misconduct, through the inappropriate use of AI tools, it will be progressed in accordance with Birkbeck's <u>Academic Integrity and Misconduct Policy</u>.
- 24 Birkbeck is committed to upholding academic integrity and this includes the ethical use of generative AI. We encourage an open environment in which students can ask questions about specific use, discuss associated challenges and then take responsibility for the choices that they make in taking their assessments.

Updated and approved by Education Committee 23 January 2024.

Selected useful resources

Birkbeck support:

Learning development

Birkbeck Student Union <u>quick guidance to students</u>

Other agencies and universities:

Quality Assurance Agency's pages on academic integrity and on artificial intelligence.

JISC national centre resources on <u>academic integrity</u>

Turnitin guide for approaching artificial intelligence generated text in the classroom

King's College London <u>guidance on artificial intelligence usage</u>. This has some useful guidance at a general, a programme/module and an assessment level.

The University of Melbourne tips for navigating artificial intelligence.



The <u>University of Oxford guidance</u>, this is similar to the Kings College London approach and has further guidance on how generative AI can support learning as well as when to approach with caution.