



## GENERATIVE AI IN EDUCATION FRAMEWORK

### Introduction

Generative Artificial Intelligence (GAI) refers to AI systems capable of generating new content in response to input data. Generative AI is a sub-set of AI; where AI focuses on problem-solving, data analysis and predictions, Generative AI uses algorithms to generate content based on vast datasets, generating text, images, music and code from prompts.

AI Tools are transforming not just education but the workplace and will form a key component of both going forward; our graduates will be entering a world where Generative AI is the norm. AI is already embedded into everyday tools and services such as spreadsheets, email, and web search which can make it difficult to distinguish when Gen AI is used part of academic work.

However, whilst it is important to recognise that AI can pose risks in areas such as academic misconduct, it also has the potential to provide significant benefits. As an institution our approach to AI is to be risk-aware not risk averse, and to educate ourselves about the opportunities and risks that Gen AI presents to discover how we can deliver future-facing real-world learning experiences, enhance student employability skills and support inclusivity, widening access and participation.

Whilst we need to explore the opportunities AI brings, we also need to ensure that staff and students are supported to use it responsibly and safely. This framework sets the expectation that we embed appropriate use of generative AI into our teaching, learning and assessment practices, to enable pedagogic innovation and to support inclusive education. In doing so, we should always prioritise human-centred creativity to support ethical use and maintain academic integrity. This means moving beyond using AI to provide access to information and summarising responses and towards developing inquiry-based learning, reflective practice and critical thinking skills.

### 1. Purpose

1.1 This framework is intended to ensure that AI in education is used responsibly, ethically, and equitably within Keele. It aims to support the integration of Generative AI in education and development and embedding of foundational AI literacies across staff and students, ensuring that both staff and students are AI-literate and able to use AI in an ethically responsible way.

Based on the [Generative AI principles](#), the framework outlines approaches to the use of Generative AI in Education and aims to ensure a more consistent approach of AI implementation in teaching, learning and assessment. By promoting AI literacy, upholding academic integrity, we aim to foster a learning environment that leverages the full potential of AI while maintaining fairness and academic standards.

1.2 The framework should be used in conjunction with other relevant guidance including the [Assessment and Feedback Code of Practice](#), the [Keele Learning Principles](#) and the [Inclusive Education Framework](#). Use of Generative AI in teaching, learning and assessment must comply with associated University Codes of Practice, Guidance, Policies and Procedures, a list of which are provided at the end of this document.

1.3 This framework will evolve as the use of AI in education develops. Keele is committed to regular review and updates to keep pace with technological advancements and ensure best practices are followed.

## **2. Scope**

This framework is based on six [high-level principles](#) that guide Keele's approach to Generative AI. These principles have been informed by the five principles agreed by the [Russell Group](#) in 2023 to enable universities ensure students and staff are 'AI literate'.

The six principles are:

- Staff and Students will be supported to become more AI Literate
- Students will be supported to use Gen AI tools ethically and appropriately in their learning
- Staff will be supported to adapt their teaching learning and assessment methods to incorporate ethical use of Gen AI
- Staff and students will have fair access to Gen AI tools and resources needed for teaching and learning
- Academic integrity will be upheld in all assessments and associated policies will be reviewed regularly as generative AI tools develop
- Best practice will be shared across and beyond the institution as technology and the application of technology in education develops.

## **3. Framework**

### **3.1 Staff and Students will be supported to become more AI Literate**

3.1.1 Generative AI literacy is essential for students and staff to fully engage with and understand the benefits and challenges of generative AI tools. Being AI-literate means having the requisite knowledge, skills and capabilities to explore and critically evaluate AI-

generated outputs. Staff are expected to have the necessary foundational level knowledge and skills to use generative AI tools effectively and responsibly as appropriate for their discipline, including understanding what AI technology is and how AI models are trained. The [AI Competency Framework](#) sets out expectations on foundational skills and knowledge for staff.

3.1.2 It is important to understand the difference between AI and Generative AI. Prompting skills are very important in Generative AI (GenAI); that is the ability to craft effective inputs (prompts) that guide GenAI models to produce desired outputs and ultimately determine the quality and relevance of the AI's output. As a minimum, the expectation of all staff responsible for delivery of teaching and learning is to ensure they are proficient in critical prompting skills and to test the pedagogical implications of prompts prior to any use in teaching delivery or assessment design. Provision should be made to support students in crafting effective prompts and refining AI content to improve their final output. The [Assessment and Feedback Code of Practice](#) sets out expectations for use of AI in Assessment.

3.1.3 Use of AI in education should always be underpinned by a human-centred approach highlighting the importance of human agency and focused on strengthening human capabilities, for example developing human employability skills (creativity, decision-making, empathy, problem-solving, communication and collaboration) when interacting with Generative AI and through exploration of real-world AI applications. The AI enhanced [ABC Learning Design framework](#) is intended to support staff when designing AI enhanced learning activities.

### **3.2 Students will be supported to use AI tools ethically and appropriate in their learning**

3.2.1 Staff have a responsibility to ensure that students are supported to use generative AI tools ethically and responsibly, with an understanding of academic integrity as outlined in the [Academic Misconduct Code of Practice](#) and the implications of AI-generated content particularly regarding their discipline.

3.2.2 Staff should encourage exploration of ethical issues related to AI, such as bias, deepfakes, copyright infringement, data security and privacy, with a focus on AI-augmented human creativity. Students should be supported to understand the ethical use of generative AI tools, that enhance the learning experience, not replace their own work.

3.2.3 Staff should ensure students are provided with guidance on the ethical use of generative AI through signposting students to the Gen AI [academic skills guidance](#). It is recommended to undertake a specific learning activity on ethics in module delivery, for example covering the responsible use of AI tools, awareness of biases, and the potential for misuse.

3.2.4 Staff should remind students that they must disclose when AI tools have been used in their work, that they require proper citation and refer them to the Academic Misconduct Code of Practice

3.2.5 Staff should be careful to manage “cognitive offloading” through a balance of AI and non-AI activities. Cognitive offloading in this context is where studies show that students

using AI assistants may perform better than those with traditional assistance (such as paper-based handouts) while they rely on AI, but that they learn less and perform less well when the AI is removed.

### **3.3 Staff will be supported to adapt their teaching learning and assessment methods to incorporate ethical use of Gen AI**

3.3.1 Active Learning is one of our [Curriculum Expectations](#) and we should explore how AI can support active learning and collaboration either during synchronous sessions, in person or online or as part of asynchronous activities, for example to support group work, inquiry-based learning, discussion or formative feedback.

3.3.2 Integration of AI tools should involve appropriate scaffolding, providing students with activities and resources that help them understand the capabilities and limitations of AI and ensuring students can practice necessary skills. Identify key opportunities to introduce or discuss AI concepts and applications, using case studies and examples to illustrate them.

3.3.3 [Assessment methods](#) should be reviewed to ensure that they remain fair, transparent, and resistant to the misuse of AI. Staff should consider how AI can provide opportunities for more authentic assessment types, to enable personalisation and to potentially reduce over-assessing. AI tools and outputs must be tested before assessment design to understand their capabilities and limitations.

3.3.4 AI provides a significant opportunity to develop and enhance critical evaluation skills in students, for example, evaluating AI-generated output(s) based on accuracy, relevance, credibility, and potential bias. AI models are only as good as the data they are trained on; if the training data is biased, the output will likely reflect that bias; the output may not be relevant to the prompt, may contain errors and may draw on unreliable or out of date sources. Responsible use means critically evaluating AI in this way and ensures AI outputs are managed effectively and responsibly. A starting point would be to identify key skills required relating to the use of AI in a subject specific context and to foster critical evaluation of AI outputs.

3.3.5 Students must be advised on how AI can be used in assessments, and this must be clearly stated, as outlined in the [Assessment and Feedback Code of Practice](#)

3.3.6 AI can enhance and diversify learning and teaching to make it more inclusive. We should consider how appropriate use of AI supports the expectations set out in the [Inclusive Education Framework](#) in the design of teaching and learning activities and learning resources. We should ensure that assessments using AI remain inclusive and do not alienate students who have legitimate concerns, whether they are philosophical, ethical, environmental or cultural. Where AI is used it must be to support learning, not as a replacement for it.

3.3.7 AI resources can be used to enhance and demonstrate the value of formative approaches to assessment, the process of learning as well as outcomes. When developing assessments, staff are encouraged to consider activities that explore opportunities and challenges of AI, e.g. discussions on ethical implications, societal and environmental impact;

activities encouraging students to identify potential biases in AI outputs and assess the credibility and reliability of online sources and the role of intellectual property (IP).

### **3.4 Staff and students will have fair access to Gen AI tools and resources needed for teaching and learning**

3.4.1 Staff should ensure equitable access to generative AI tools and resources for all students regardless of background, location, or personal financial situation; ensuring all staff and students have the necessary resources for teaching and learning and removing potential barriers such as economic disadvantage or digital accessibility, to ensure inclusivity in AI adoption. For this reason, it is recommended that staff use institutional Gen AI tools, for example Microsoft Copilot, that comply with GDPR and relevant privacy regulations.

3.4.2 Staff must communicate to students the AI tools and platforms that are available to them and ensure that inclusive approaches are followed, such as students with diverse needs (e.g., disabilities or those from low-income backgrounds) have access to AI tools and assistive technologies.

3.4.3 Staff should make students aware that AI is already integrated into the key tools used by the university; for example, Microsoft Office 365 deploys AI in email and PowerPoint and AI is embedded into the KLE along with other third-party tools that the university uses for teaching and learning. Microsoft Copilot is the institutional tool available free to staff and students as part of the MS Office 365 suite. Use of other AI tools must consider accessibility and equitable access along with GDPR and data privacy.

### **3.5 Academic integrity will be upheld in all assessments and associated policies will be reviewed regularly as generative AI tools develop**

3.5.1 Assessment methods should be reviewed regularly to ensure that they continue to adapt to the growing presence and capabilities of generative AI tools, to reduce vulnerabilities to AI misuse while promoting authentic learning.

3.5.2 AI-driven content must be treated with transparency, ensuring that students are not penalised for using AI responsibly.

### **3.6 Best practice will be shared across and beyond the institution as technology and the application of technology in education develops.**

3.6.1 Our ethos is to support a culture of collaboration and innovation and to develop scholarship in AI. We will communicate best practice in AI in teaching and learning across the institution, disseminating internal case studies via the intranet and through workshops and guidance. Staff will be supported through the launch of a new self-enrol [AI for Educators](#) course on Blackboard Ultra, AI Exploration days and workshops on Critical AI Literacy including assessment, active learning and ethical use.

3.6.2 Staff should ensure there are regular feedback loops from students to inform ongoing improvements in AI adoption in teaching and learning and assessment.

3.6.3 Through engaging with sector wide institutions and academic networks we will learn from others' experience in order to stay ahead of AI trends in education and update our resources and academic development training accordingly.

## **4. Related Policies and Procedures**

### **4.1 Related Policies**

[Captured Content](#)

[IT Acceptable Use](#)

[Data Classification and Handling Policy](#)

[Information Security Policy](#)

### **4.2 Relevant Codes of Practice**

[Assessment and Feedback Code of Practice](#)

[Inclusive Education Framework](#)

### **4.3 Relevant Guidance**

[Keele AI Principles in Education](#)

[Use of Gen AI in Higher Education](#)

[Keele Learning Principles](#)

[Student Guidance on Academic Integrity](#)

[Gen AI Guidance for Students](#)

## **5. Support and Resources (KIITE)**

[AI for Educators course on Blackboard Ultra](#)

[AI \(Learning Innovation Technology\) Teams Channel](#)

AI Resource Hub (Sharepoint)