The rise of artificial intelligence software and potential risks for academic integrity: A QAA briefing paper for higher education providers

Introduction

This briefing is for QAA Members and other sector providers who are concerned about the challenges that artificial intelligence (AI) software tools bring in relation to the academic standards of awards and the integrity of assessment.

In this briefing note we outline what these software tools are and their potential implications for academic standards, as well as suggesting a selection of practices providers can adopt to support academic integrity. In addition, we signpost a range of further QAA and external resources that offer support for providers.

We recognise there are potential benefits of using Large Language Models (LLMs) for learning, teaching and assessment, and we will engage in discussions about those elsewhere. This briefing is focused on the current challenges for academic integrity.

What are AI software tools?

LLMs such as GPT3 have been trained with vast databases to write coherent text in a particular style according to the instructions given by the user. The LLMs can be accessed through tools such as ChatGPT. These innovative tools have already found wide application in many workplaces but for higher education providers it presents a particular challenge for academic integrity if students choose to present the output of LLMs as their own work.

What are the potential implications for academic standards?

Assessments generated by the software tools used by LLMs may take the form of coursework such as essays and dissertations, but also projects, presentations, computer source code and other forms of assessment that require text-based responses. The same request can be made multiple times and different outputs will be generated each time. Due to the way LLMs generate textual responses, work created in this way can be difficult to identify and cannot be picked up by more traditional plagiarism detection tools.

What actions can providers take to support the integrity of existing assessments, protect standards and inform future practice?

- **Communication with students** - engage early with students to provide information about the capabilities and limitations of AI software tools (such as inappropriate forms of citation and referencing and implicit bias) and how indiscriminate use may not only harm the quality of their education, but also undermine confidence in the qualification they are working towards.

- **Student declaration** - update any existing student declarations that accompany submissions for assessment so students certify that it is their own work, all sources are correctly attributed and the contribution of any assistive technologies is fully acknowledged.

- **Policies and practices** - reflect on whether your current policies and practices that cover academic misconduct for students submitting assessed work can be adjusted and updated to include submissions produced by LLMs.

- **Assessment design** - engage with students and staff on the benefits of authentic and innovative forms of assessment that will not rely on investing in software to detect text generated by LLMs and other AI sources. This represents an opportunity to partner with students and build trust in assessment processes that are co-created, iterative and supportive of critical thinking.

- **Detection tools** - be cautious in your use of tools that claim to detect text generated by AI and advise staff of the institutional position. The output from these tools is unverified and there is evidence that some text generated by AI evades detection. In addition, students may not have given permission to upload their work to these tools or agreed how their data will be stored.

What practices can providers use to promote academic integrity?

- **Emphasise student learning** - support students to understand they will miss out on developing key skills such as critical thinking, evaluating evidence and academic writing if they rely on the uncritical use of AI tools, and extend existing institutional digital literacy strategies to encompass AI literacy.

- **Communicate the value of integrity** - discuss with students how the advancement of knowledge has relied on integrity in both research and academic practice and that progress is undermined by academic misconduct. This will help them understand the values that underpin their discipline and make it clear about what constitutes academic misconduct and why it has consequences.

- **Identify networks of support** - develop internal networks of academic integrity support to involve students, given the majority of students are strongly opposed to cheating including the use of AI and essay mills - both for ethical reasons and because they see such malpractice as a threat to the value of their own qualifications.

- **Recognise the responsibility of all** - reaffirm that maintaining academic integrity in an institutional context requires a ‘whole community’ approach that means that everybody - staff and students alike - has responsibilities.

- **Highlight updates** - give students regular updates on policy developments so they know what is happening and what is expected of them.

- **Signpost sources of support** - provide clear signposting of the individuals and services within the institution who are available to help and support students in understanding good academic practice. This information should also be available to personal tutors.

- **Engage with advice and guidance** - make use of available guidance, such as that provided by QAA.

Additional resources

QAA resources to support academic integrity and assessment design

A roundup of resources and activities relating to assessment - Innovation in assessment and feedback - the QAA way (office.com).

QAA's suite of resources on academic integrity, including the latest Contracting to Cheat guidance, Quality Compass on academic integrity from a student perspective and a range of further resources on academic integrity available for QAA Members.

QAA Members can also access resources including briefing and presentations on digital assessment security.

A Collaborative Enhancement Project led by Oxford Brookes University offers a wealth of inclusive and accessible resources on academic integrity for use by students and staff.

QAA's COVID-19 guidance includes material that continues to have relevance on securing academic standards.

External resources

These links are included to aid readers, QAA is not responsible for their content:

https://criticalai.org/2023/01/17/critical-ai-adapting-college-writing-for-the-age-of-large-language-models-such-as-chatgpt-some-next-steps-for-educators

https://theconversation.com/chatgpt-students-could-use-ai-to-cheat-but-its-a-chance-to-rethink-assessment-altogether-198019

https://thomaslancaster.co.uk/blog/faking-reflection-with-chatgpt

Opportunities to discuss the use of AI

QAA's ENQUIRE symposium on 8 March will have a session exploring the use of AI software for educators and students. QAA Members can register via our event booking site.

QAA will be engaging in conversations about AI software in our upcoming Student Strategic Advisory Committee meeting in February and our Academic Integrity Network meeting in March.

The European Network for Academic Integrity annual conference is also taking place in the UK in July 2023.

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This document is published in QAA's capacity as a membership organisation.

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