Developing artificial intelligence capabilities

Guidance for schools

Recent advances in artificial intelligence, specifically generative AI, have raised awareness for students, parents/carers, and schools alike. This guidance document provides some information you may wish to consider when teaching and assessing and how it relates to ensuring you promote academic integrity.

Understanding the capabilities and the utility of artificial intelligence (AI) helps prepare students with the 21st century skills needed to become discerning global citizens. Understanding the limitations of appropriate use in schools helps students approach their academic responsibilities in an honest, moral and ethical way.

Schools outline the appropriate use of AI in their school assessment policy guided by Section 8 of the *QCE and QCIA policy and procedures handbook*.

Ethical scholarship and generative AI

Recent advancements in generative AI have stimulated conversations about academic integrity and the importance of authenticating assessable work. Academic work must be approached in an honest, moral and ethical way for standards to be effective. Schools, teachers, parents/carers and others who support students in their learning — including the QCAA — are responsible for promoting and maintaining academic integrity.

To promote academic integrity, Queensland schools should develop and communicate clear guidelines and expectations to manage the teaching, learning and assessment process.

Schools should provide guidelines that promote academic integrity and ethical scholarship by:

- building awareness of, and adherence to, academic integrity

- communicating expectations with the school community to create a shared understanding of, and commitment to, ethical scholarship

- communicating the opportunities and limitations of using generative AI in assessment and the conditions for the appropriate use of AI

- explicitly teaching the knowledge and skills students need to develop and submit their own work for assessment, including referencing sources

- teaching students to value the creation of their own authentic work

- strengthening assessment and implementing a range of authentication strategies. AI detection tools are inconsistent and should be used with caution and discernment

QCAA Academic integrity courses

Schools are encouraged to use the student and teacher courses to promote ethical scholarship and provide opportunities for students to further develop understanding of academic integrity and the skills required to submit their own work. Schools may implement the course in a way that suits their local context. For example, schools could:

- include course completion as part of the SET plan process

- provide students with the opportunity to complete the course early in the senior phase of schooling
- set the course as a homework activity
- develop school processes to support sound academic practice
- provide opportunities for teachers to deliver the course in one or more lessons
- use the content to create a similar course to suit their school or class context
- have students revisit the course at various intervals during senior schooling.

Note that course completion is recorded in student learning accounts and a report is available in Student Management to support school administration procedures.

Privacy and accuracy considerations

It is vital that schools communicate the risks of using AI to personal data, privacy and intellectual property in their guidelines for learning, teaching and assessment.

Users need to:

- be aware of the limitations that are intrinsic to generative AI. Findings may be asserted authoritatively but source information and/or the contextualisation of the information may be incorrect. Users need to verify the information's accuracy
- understand the limitations imposed by AI system designers, which include ethically defined boundaries on what information it can provide
- know that if they provide content (e.g. a photograph or a prompt), this information may be sold to a third party or retained by the service, potentially to build a user profile
- understand the terms and conditions that govern the use of generative AI services
- use AI tools in agreement with school assessment and academic integrity policies and procedures.

Useful terms

Artificial intelligence (AI): A general term used to refer to computer systems that appear to behave intelligently and perform human-like tasks.

Chatbot: A conversational interface that carries on a dialogue with a user by means of a predetermined script generated from high-probability responses.

Chat-based generative pre-trained transformer (ChatGPT): A natural language processing tool that can generate responses to questions from a predetermined large amount of material available on the internet.

Deep learning (DL): A part of the field of AI and an emerging area of machine learning (ML). It involves neural networks and complex computational calculations that help machines find patterns to assist in making automated decisions and produce results that mimic human behavioural patterns.

Generative AI: An AI that uses deep learning to synthesise products (e.g. responses, images, music) based on user prompts and an existing set of generative data.

Large language model (LLM): An equation that, based on a large amount of data, provides a response by guessing the most likely next word by mimicking the data it was trained to use.

Machine learning (ML): The ability of a machine or algorithm to identify rules and patterns in data without a human specifying those rules and patterns. These algorithms build their own model for decision-making and can perpetuate biases based on the data on which they are trained. ML is a subset of AI.

Natural language processing (NLP): Uses an understanding of the structure, grammar and meaning in words to help computers 'understand' and 'comprehend' language.

More information

If you would like more information about academic integrity and assessment in the QCE system, please visit the QCAA website.

For more information about academic integrity and schools, please refer to the *QCE and QCIA policy and procedures handbook* v4.0 on the QCAA website.

Alternatively, email qau@qcaa.qld.edu.au.

Developing artificial intelligence   **Queensland Curriculum & Assessment Authority**
Guidance for schools   May 2023
Page **3** of 3