

Notes and guidance: Artificial intelligence (AI) guidance

GCSE Design and Technology (8552) NEA component

This support document provides information and advice regarding the valid and unacceptable use of artificial intelligence (AI). It includes the steps to take if you suspect AI misuse.

Introduction

AI tools are becoming more developed in their capabilities and prevalent within operating systems and software, so it is important to consider the use of these tools in the context of this component.

This guidance should be read alongside JCQ's [AI Use in Assessments: Your role in protecting the integrity of qualifications](#) and our [GCSE Design and Technology specification](#).

AI may support the process of designing and making, but the ideas, decisions and critical thinking must remain the learner's own. AI tools may assist with research, visualisation and communication, but must not replace the independent thought, design decisions and critical evaluation on which marks are awarded. Where AI has been used, there must be clear evidence that the learner has led the work and evaluated the outputs. Learners may not receive direct credit for the AI content itself.

Key expectations

- Marks must only be awarded for the **learner's own original work**.
- Learners must not submit work that is copied, paraphrased, or heavily derived from any other source, including AI-generated content, without appropriate development and referencing.
- Teachers and learners must sign candidate record forms confirming the authenticity of submitted work.

Valid use of AI in GCSE Design and Technology NEA

Artificial intelligence may be legitimately used by learners within this component, for example to:

- conduct preliminary research/research into the work of others
- provide renders of sketches, drawings and CAD models to use as a basis for discussion with the client/possible users as a means of obtaining more useful and detailed feedback.
- use a school-approved chatbot to act as a client if there is difficulty in obtaining one
- render a sketch, drawing or model in a range of materials or aesthetic styles in such a way where the learner has control of the variables and is able to make an informed choice

There are a number of AI tools relevant to this subject, for example:

General AI assistants

These tools can support research, generate text, answer questions and assist with written communication within the NEA:

- [Microsoft Copilot](#): a large language model integrated into Microsoft 365, available to learners aged 13 and over via school institutional accounts; can support research, drafting text, summarising information and acting as a client or user in the absence of one
- [Google Gemini](#): Google's AI assistant, available to learners via school Google Workspace accounts; can support research, text generation and critical questioning of design decisions.

Image generation and visual design tools

These tools support the production, development and communication of design ideas:

- [Canva](#): a design platform with integrated AI image generation and editing tools; can be used to create presentation boards, develop visual communication and generate design imagery from text or uploaded sketches
- [Adobe Firefly](#): Adobe's AI image generation tool, embedded within Adobe Express and Photoshop where school licences apply; can generate and edit images, apply style transfers and produce high-quality visual outputs from learner-produced drawings
- [OpenArt](#): an AI image generation platform that can produce images from sketches or text prompts; particularly useful for fashion design, surface pattern and product visualisation.

Sketch-to-render and 3D visualisation tools

These tools support the development of design proposals from hand-drawn or CAD starting points.

- [New Arc](#): converts hand-drawn sketches into photorealistic renders and 3D visualisations; supports iterative design development and client presentation
- [MyArchitect](#): supports AI-assisted rendering and visualisation from CAD and 3D modelling software including SketchUp, Revit and Onshape; most relevant to product design and built environment contexts.

Electronics and programming tools

- [Circuit Designer](#): an AI-assisted design environment for embedded and IoT electronics projects; supports circuit design, simulation and prototyping for Arduino, ESP32 and Raspberry Pi, and is relevant to the electronic and mechanical systems strand of the specification.

It is important to select the correct tool for the task.

Where learners use AI, they must acknowledge its use and show clearly how they have used it in order that teachers can acknowledge this use, check it is valid use and recognise it when applying the assessment criteria during marking and moderation.

The lists of suppliers of AI-related products are for information purposes only and do not constitute an endorsement by AQA. It is the responsibility of each centre or individual to investigate and verify any suppliers they use, including any terms and conditions which govern the sale or use of the supplier's products. The lists provided are not exhaustive.

Learners' work should not be used to train any AI models without express permission, and it is essential that when using AI in some of the ways mentioned, centres have clear policies in place that cover intellectual property.

Learners should never upload private information about themselves or others, and it is essential that centres have a clear policy that covers GDPR.

Referencing AI use

Where AI tools are used, learners must clearly reference:

- **the AI tool used**, including version and access link
 - for example: ChatGPT 3.5, <https://openai.com/blog/chatgpt/>, generated on 25/01/2026 (if the AI tool does not provide such details, learners should ensure that they independently verify the AI-generated content and reference the sources used to do this)
- **prompts or search terms entered** to generate content
- **annotated screenshots** showing use of the tool and outputs generated
- **settings or parameters used** within the tool to achieve specific results
- **a written explanation** of how AI content was adapted, refined, and integrated into their own work.

Teachers should support learners to embed these references within their NEA work and on the [Candidate Record Form](#) (where applicable).

Unacceptable use of AI in GCSE Design and Technology NEA

The final submission must be the product of the learners' own independent work and independent thought.

AI misuse is where a learner has used one or more AI tools but has not appropriately acknowledged this use and/or has submitted work for assessment when it is not their own.

Some examples are:

- using AI to generate a range of design ideas for a brief with no input or critical analysis of the outputs, even if the AI use is referenced the designs cannot count as initial design ideas as they were not created by the learner
- a final design that has clearly been reached by directly copying a design generated by AI. This would require the same consideration by the teacher as when a learner is inspired by an existing design vs directly copies an existing design
- converting from sketch to presentation quality image without acknowledging the use of AI or stating the application used
- producing code for a microcontroller, such as a PIC or Arduino, using an AI application without stating the source and showing the information used to produce the applications output
- copying or paraphrasing sections of AI-generated content so that the work submitted for assessment is no longer the learner's own
- using AI to produce analysis, or specification points and presenting this as their own effort. Using AI to produce sketches or drawings that are then claimed to be done by the learner.
- failing to acknowledge use of AI tools when they have been used as a source of information
- incomplete or poor acknowledgement of AI tool use

Reducing the risk of AI misuse

The following suggestions could be applied by centres to reduce the risk of AI misuse:

- ensuring that any information or instructions provided to AI applications appears alongside an AI production outcome, so that is clear that AI has been used, its purpose and the degree of improvement / progress that has been made possible by the use of AI
- set reasonable deadlines for submission of work and provide regular reminders
- examine and retain intermediate stages of the work to ensure the work represents a natural continuation of earlier stages
- allocate time for portions of preparatory stages and final work to be completed in class under direct supervision
- consider a short verbal discussion with the learner about their work to ascertain that they understand it and that it reflects their own independent work
- investigate in the case of a learner producing work which is different to their usual output.

Reporting malpractice

The JCQ *AI Use in Assessments* guidance discusses the potential indicators of AI misuse and lists some AI detection tools which can be used to assess if AI has been used in the production of a learner's work.

If your suspicions are confirmed and the learner has not signed the declaration of authentication, your centre doesn't need to report the incident to AQA. You should follow the steps detailed in your centre's internal malpractice/plagiarism policy.

Teachers must not accept work which is not the learner's own. Ultimately the Head of Centre has the responsibility for ensuring that learners do not submit inauthentic work.

If AI misuse is detected or suspected by the centre and the declaration of authentication has been signed, the case must be reported to AQA following the process detailed on the [malpractice page](#) of our website.

Marking considerations

Holistic assessment approach

When awarding marks:

- teachers should evaluate whether the learner has **demonstrated their own investigative, design, development, making, analysis and evaluation skills**
- AI use must not replace or undermine assessment objectives relating to independent thought, development of ideas, and application of skills
- where evidence is heavily derived from AI-generated content with minimal personal development, marks must reflect the lack of independent achievement.

Updated declaration requirements

The NEA candidate record form has been updated to include a declaration on AI use. Both teachers and learners must sign to confirm:

- the work submitted is the learner's own
- all AI tools used have been referenced appropriately.

Teachers' use of AI during marking

AI tools must not be used as the **sole method of marking** learner work. Teachers' professional judgement, based on observation of skills and understanding, remains essential to ensure fair, valid assessment decisions.

Further support

For subject-specific queries, teachers should contact our Design and Technology subject team at dandt@aqa.org.uk for clarification and support.

Joint Council for Qualifications (JCQ)

- [*AI Use in Assessments: Your role in protecting the integrity of qualifications*](#)
- [AI Use in assessments](#) blog includes:
 - a poster for learners
 - information sheet for teachers
 - presentations on preventing AI use for teachers and senior leaders.
- [Guidance on plagiarism](#).
- [Instructions for the conduct of non-examination assessments and coursework](#).

AQA

The [malpractice page](#) of our website covers the prevention and reporting of malpractice to us.