

SAIGE Level 3 Award in AI for Post-16 Educators

An overview of
Learning Resources
available to SAIGE Centres



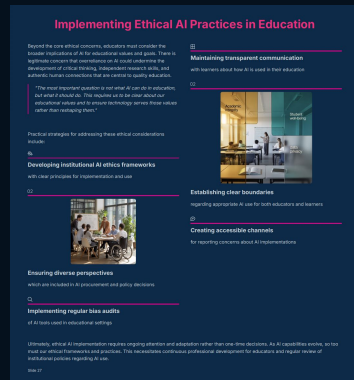
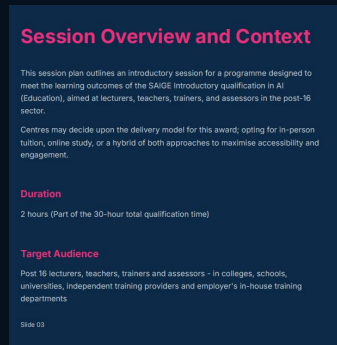
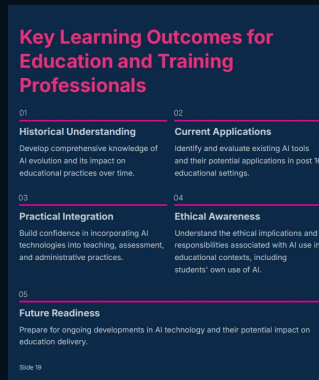


A snapshot of the resource

Introduction to AI in Education

This resource serves as an exemplar introductory teaching session for educators and trainers in the post-16 sector. It's designed to provide foundational knowledge and can be used as a teaching aide, delivered directly to learners, or for a facilitator's own professional development.

- **Key Topics:** The session covers the history of AI, key concepts in education, practical applications in the classroom, and the ethical implications of AI use, including bias and plagiarism.
- **Flexible Delivery:** It's designed for various delivery models, including face-to-face, online, and hybrid approaches.
- **Learning Outcomes:** The goal is to build a historical understanding of AI, identify current applications, and develop confidence in incorporating AI into teaching practices while maintaining ethical awareness.



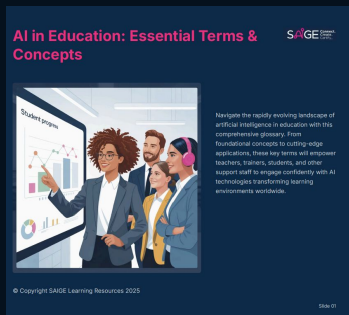


Glossary of Essential Terms

This document is a comprehensive glossary designed to build AI literacy for anyone involved in education. It provides clear definitions of essential concepts to help educators engage confidently with AI technologies.

- **Core Concepts:** Defines fundamental terms like **Artificial Intelligence (AI)**, **Machine Learning (ML)**, and **Generative AI**, which creates new content such as text, images, or audio.
- **Ethical and Technical Terms:** Explains critical concepts like **AI Hallucinations** (when AI produces factually incorrect content) and **Algorithmic Bias** (systematic errors from biased training data). It also covers **Prompt Engineering**, the skill of crafting effective instructions for AI models.
- **Implementation Models:** Introduces terms like **Human-in-the-Loop (HITL)**, a model where human oversight is maintained to ensure accountability, and **Digital Equity**, which ensures fair access to AI tools for all learners.

A snapshot of the resource



Glossary of Key Terms 02

AI-Enhanced Learning

The use of AI tools to personalise or optimise the learning experience, such as adapting content to individual learner needs, providing real-time feedback, or identifying learners who may need support.

Large Language Model (LLM)

A type of generative AI trained on vast amounts of text data to understand and produce human-like language. Examples include GPT-4 and Claude.

Natural Language Processing (NLP)

The field of AI that enables machines to understand, interpret, and generate human language. NLP powers chatbots, translation tools, and speech-to-text software used in education.

Explainable AI (XAI)

AI systems designed to make their decision-making processes transparent and understandable to humans. This is especially important in education where fairness, accountability, and trust are essential.

Data Privacy

The right of individuals to control how their personal information is collected and used. In education, this includes how AI tools store and analyse student data.

AI Literacy

The skills and knowledge needed to understand, use, and critically evaluate AI technologies. AI literacy is increasingly recognised as essential for both teachers and learners.

Algorithmic Bias

Systematic errors in AI decision-making caused by biased training data or flawed assumptions in algorithm design. This is particularly relevant in educational systems that automate assessment or feedback.

Human-in-the-Loop (HITL)

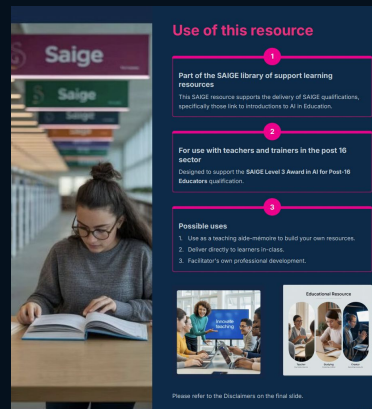
A model where human oversight is maintained in AI systems to verify, intervene, or correct decisions. This ensures responsibility and accountability in educational use.

Digital Equity

The principle of ensuring all learners have fair access to digital technologies and AI tools, regardless of background, ability, or socioeconomic status.

Adaptive Learning Technology

AI-powered systems that adjust learning content and pace based on individual learner performance and engagement data, supporting personalisation.



Core AI Fundamentals

Artificial Intelligence (AI)

The capability of computer systems to perform tasks that normally require human intelligence, such as recognising patterns, making decisions, or interpreting language.

Machine Learning (ML)

A branch of AI where systems improve their performance automatically through experience and data, rather than being explicitly programmed for each task.

Generative AI

A type of AI designed to produce new content such as text, images, videos, or audio based on patterns learned from existing data. Popular tools include ChatGPT (text) and DALL-E (images).

Supporting Materials and Resources

Comprehensive Support Package

The session is supported by carefully curated materials designed to enhance understanding and provide ongoing reference for participants.

- An example initial teaching session for an introduction to AI in Education for teachers
- Reference ideas for teaching activities
- AI Influencers in Ethics and in Education
- Miscellaneous further resources

Facilitator Note: All materials are designed to be adaptable to different delivery modes, whether face-to-face, online, or hybrid approaches.



A snapshot of the resource

Use of AI Detection Tools

This resource is a comprehensive guide on implementing AI-detection tools while maintaining academic integrity and fairness. It highlights that undeclared AI use in academic work can constitute plagiarism.

- **Role of Detection Tools:** The tools analyze submissions for features associated with AI-generated content, but their results are only indicative and should be used as part of a wider process.
- **Strengths:** They can act as a deterrent, support academic integrity alongside other checks, and provide a scalable solution for screening a large volume of submissions.
- **Limitations and Concerns:** The document warns of potential issues with these tools, including false positives, over-reliance by assessors, limited contextual understanding, and the risk of disproportionately flagging work from non-native English writers.

Use of AI Detection Tools

(verify authenticity of learner work)

A comprehensive guide to implementing AI-detection tools in educational settings while maintaining academic integrity and fairness for all learners.

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Slide 01

The Growing Challenge of AI in Academic Work

As the use of generative artificial intelligence (AI) increases, there is an associated risk that learners may submit work wholly or partially created by AI without acknowledgement. Some providers are now requiring learners to sign declarations, alongside submission of work, to state what AI tools they have used, what their inputs were and how this has impacted upon the outcomes of their work.

Without these sorts of declarations, such actions are likely to constitute academic malpractice and should be treated as plagiarism.

AI-detection tools can help staff identify work that may contain AI-generated content. They should be employed as part of a wider academic integrity process that incorporates institutional policies, professional judgement, and open dialogue with learners.

Undeclared AI use constitutes academic malpractice and should be treated as plagiarism.

Slide 02

Comprehensive List of AI-Detection Tools

Several commercial tools are available to help institutions detect AI-generated content in student submissions:

- Turnitin Originality - AI Content Detector**
Integrated into similarity checking workflows for educational institutions.
Website: <https://turnitin.com/turnitin/ai-content-detector>
- Winston AI**
Web-based AI detection and originality reporting software.
Website: <https://www.winstonai.com>
- BrandShield AI Detector**
Specialises in enterprise solutions for content authenticity, brand protection, and large-scale AI content identification.
Website: <https://brandshield.ai>
- QuillBot AI Detector**
Provides AI writing detection along with advanced grammar and writing feedback to improve learner writing output.
Website: <https://quillbot.ai>

Slide 03

Proper Usage Guidelines

The tools should be used with care, however and staff should normally treat AI-detection outputs as screening indicators only, never as conclusive proof. In order to treat learners fairly, this requires consideration through other evidence.

- Interview the Learner**
Conduct direct conversations to understand the student's process and knowledge.
- Compare with Earlier Work**
Analyse consistency in writing style and academic progression.
- Check Metadata**
Review document properties and creation timestamps for anomalies.
- Review Assessment Conditions**
Consider the context and environment in which the work was completed and how it aligns with any assessment criteria.

See the following sections for a detailed analysis of the strengths and weaknesses of utilising these tools.

Slide 04

Advantages of AI-Detection Tools

- Potential Deterrent Effect**
Awareness of screening may discourage inappropriate use of AI tools among students.
- Supports Academic Integrity**
Provides an additional indicator alongside plagiarism detection and other verification checks.
- Scalable Solution**
Allows large volumes of submissions to be screened quickly and efficiently across institutions.
- Supplementary Evidence**
Can help build a comprehensive case when combined with other scrutiny methods and professional judgment.

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