2026

Assessment Redesign Framework

GenAI:N3

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This resource is also available online at
https://arf.genain3.ie/

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Introduction

Since the launch of ChatGPT in November 2022 and subsequent surge in Generative Artificial Intelligence (GenAI) technology, the education sector has been impacted significantly, with efforts to develop policies, strategies, and guidelines to support staff and students in navigating the changing landscape. While these technologies offer great potential for enhancing learning experiences, they also pose significant challenges to academic integrity. Assessment methods such as essays, unsupervised open-book or remote exams, and online quizzes, are increasingly vulnerable, as students can access AI tools to produce content that appears to be original but is not their own work.

Although AI detection tools have emerged, their reliability remains limited, and they cannot serve as definitive evidence of academic misconduct. The focus therefore shifts from detection to prevention, with emphasis on authentic learning experiences. This presents an urgent need for higher education institutions to reconsider their assessment strategies to uphold academic standards and ensure that assessments accurately reflect students' knowledge and skills.

This framework supports educators in redesigning assessments to ensure they remain valid, fair, transparent, and aligned with learning outcomes in an AI-enhanced educational landscape.

The Evolving Policy Context

Assessment redesign is not solely a pedagogical issue but also a governance, quality, and ethical responsibility. National and international bodies now emphasise that assessment practices must remain robust when AI is increasingly accessible.

Key developments include national guidance encouraging AI literacy, transparency, and equitable access; UNESCO's Recommendation on the Ethics of AI, which emphasises human oversight, inclusion, and accountability; and the evolving EU AI Act, which highlights education as a high-impact context requiring transparency and risk mitigation.

These developments reinforce the central argument of this framework: assessment must be redesigned structurally, rather than focusing on detection.

Objectives

The goal of assessment redesign is to develop robust, fair, valid, and educationally meaningful approaches that ensure students can demonstrate genuine learning, understanding, and capability. Rather than focusing solely on preventing misuse of AI tools, assessment should be designed to make learning visible and to reflect how knowledge and skills are applied in authentic contexts.

By incorporating a diverse range of assessment types, balancing formative and summative approaches, and thoughtfully distributing high- and low-stakes tasks, educators can create a more resilient and integrity-informed assessment environment. Greater emphasis on process, reasoning, and development over time supports deeper learning and reduces reliance on single, product-focused submissions.

In practice, redesigning assessment presents challenges, including time constraints, large class sizes, and evolving institutional expectations. Nonetheless, careful consideration of where and how GenAI use aligns with educational purpose is essential. Some assessments may appropriately integrate AI to develop student AI literacy and future-ready skills, while others may require independent demonstration of foundational knowledge or professional competence.

Ultimately, the central guiding principle remains the alignment of assessment with programme and module learning outcomes. Assessment decisions — including format, level of supervision, and expectations around AI use — should be driven by what learners are expected to know, understand, and be able to do.

Scope

This framework supports educators and programme teams in rethinking assessment design in the context of GenAI. It focuses on ensuring that assessment remains valid, fair, and aligned with learning outcomes while also supporting the development of responsible and effective AI engagement.

Specifically, the framework supports educators to:

- **Consider the purpose of each assessment** and determine whether GenAI use supports or undermines the intended learning outcomes, and how expectations should be clearly communicated to learners
- **Identify assessment types that may be particularly vulnerable** to inappropriate AI use and prioritise these for structural redesign rather than relying solely on detection
- **Explore assessment approaches in collaboration with discipline-area colleagues**, sharing strategies to strengthen authenticity, visibility of learning processes, and alignment with professional practice
- **Consider where and how GenAI can be meaningfully integrated into assessment**, supporting the development of student AI literacy and future-ready competencies
- **Ensure coherence across modules and stages**, contributing to a balanced programme-level assessment strategy that includes both AI-restricted and AI-integrated tasks

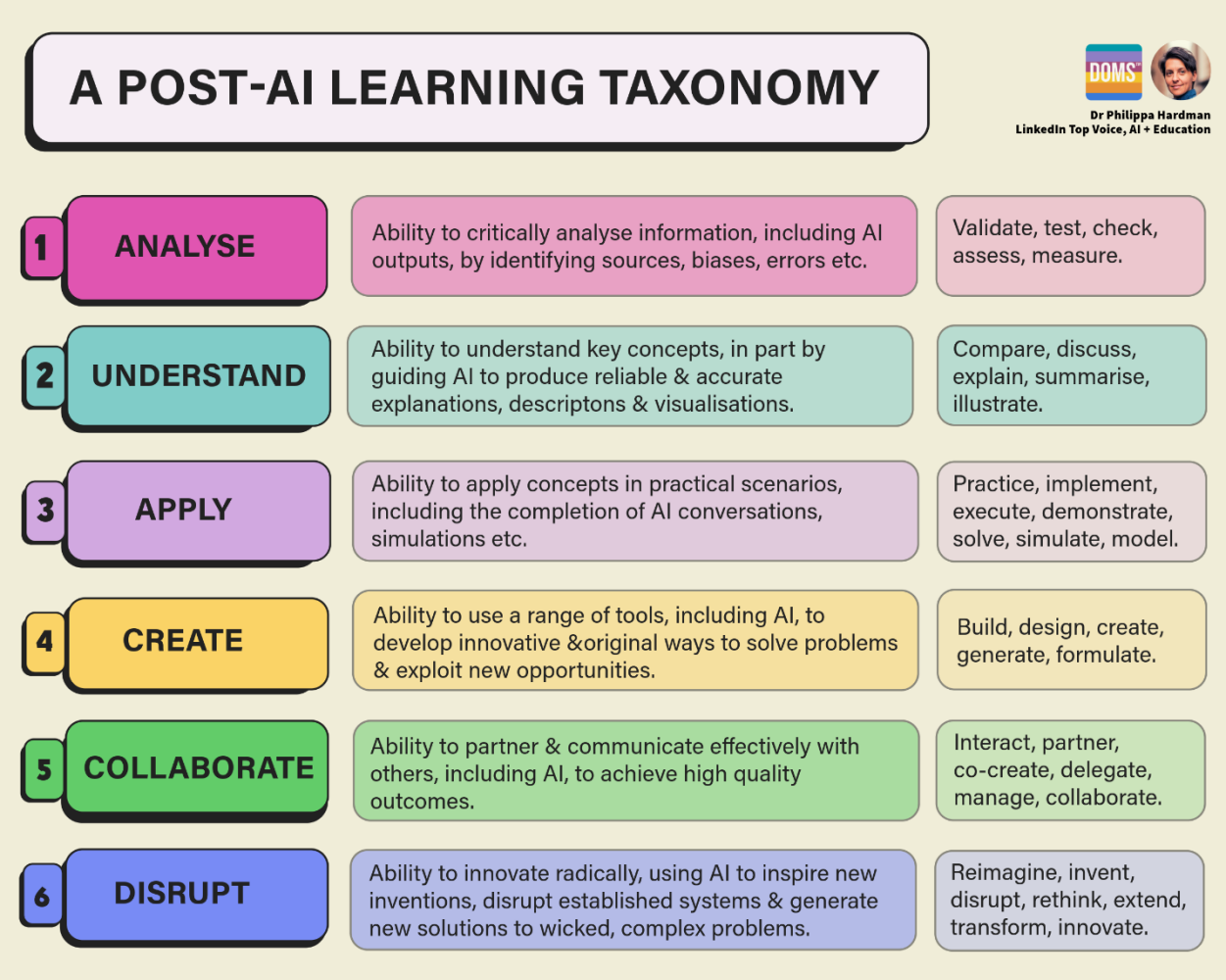
This framework does not prescribe a single solution, but offers principles and strategies that can be adapted to disciplinary contexts, institutional policies, and evolving technological and regulatory environments.

Reconsidering the Purpose of Assessment

In an educational landscape where AI has become so embedded, reconsidering the purpose of assessment becomes imperative to foster a more meaningful and authentic learning experience. Assessments that emphasise rote memorisation and the reproduction of knowledge, are increasingly susceptible to manipulation through AI tools. Instead, the focus should shift towards assessing **higher-order thinking skills**, such as critical analysis, creativity, problem-solving, and the ability to synthesise and apply knowledge in novel contexts.

By prioritising these competencies, assessments can better reflect real-world applications and prepare students for the complexities of the modern workforce. This shift also encourages deeper engagement with the material, promoting a learning environment where students are evaluated not just on what they know, but on how they think and adapt. Consequently, the redefined purpose of assessment should aim to cultivate lifelong learners equipped with the skills to navigate and innovate in an AI-driven world.

Phillippa Hardman suggests the following alternative to established models such as Bloom's Taxonomy, to focus on skills that AI "enhances rather than replaces":



Phillippa Hardman's Post-AI Learning Taxonomy diagram
Source: https://drphilippahardman.substack.com/p/a-post-ai-learning-taxonomy

Core Principles of Assessment Redesign

Assessment redesign should be guided by a clear set of educational principles that safeguard academic standards while supporting meaningful learning.

Assessment should prioritise:

Validity — ensuring that assessment tasks genuinely measure the knowledge, skills, and competencies they are intended to assess, even in contexts where AI tools are widely available.

Fairness and equity — recognising differences in access to technology, levels of AI literacy, language background, and learning needs, and designing assessment that does not disadvantage particular groups of students.

Transparency — clearly communicating expectations around the purpose of assessment, criteria for success, and the extent to which AI use is permitted or restricted.

Accessibility and inclusion — aligning assessment design with Universal Design for Learning (UDL) principles and offering diverse ways for students to demonstrate their learning.

Alignment with learning outcomes — ensuring that decisions about assessment format, level of supervision, and AI use are driven by what students are expected to know, understand, and be able to do.

In practice, this means placing greater emphasis on:

- Higher-order thinking skills, including analysis, evaluation, synthesis, and creation
- Authentic application of knowledge in realistic or discipline-relevant contexts
- Demonstration of reasoning processes, not just final products

Educators should critically consider whether the use of GenAI in a given assessment supports or undermines the intended learning outcomes. Where AI use is appropriate, expectations should be explicit and supported through the development of student AI literacy. Where independent performance is required, this should be clearly justified and communicated.

Together, these principles ensure that assessment redesign remains pedagogically grounded, ethically informed, and responsive to the realities of learning in a world where AI continues to become increasingly prevalent.

AI Literacy

Assessment redesign and AI literacy are intrinsically linked. As GenAI becomes embedded in learning, work, and everyday life, students need more than technical familiarity with tools — they need the capacity to engage with AI critically, ethically, and effectively. Assessment therefore plays a key role not only in measuring disciplinary knowledge, but in developing students' ability to navigate AI environments responsibly.

AI literacy includes the ability to:

- Critically evaluate AI outputs, recognising inaccuracies, bias, hallucinations, and limitations
- Understand how and when AI can be appropriately used, and when independent thinking or professional judgement is required
- Use AI ethically and transparently, including disclosure of use and respect for academic integrity and data privacy
- Integrate AI as a support for thinking, problem-solving, and creativity — not as a substitute for learning or intellectual effort
- Recognise the role of the human in the learning process — including judgement, creativity, responsibility, and ethical awareness
- Understand how AI may influence thinking, behaviour, and decision-making

At programme level, teams should determine:

- Where AI literacy is an explicit learning outcome
- Where AI literacy contributes to broader graduate attributes such as critical thinking, digital competence, ethical awareness, and lifelong learning
- Where foundational disciplinary knowledge, professional standards, or core competencies must be demonstrated independently of AI support

Assessment design should therefore include a deliberate mix of:

- **AI-supported tasks:** where students are expected to engage with AI tools critically and responsibly as part of the learning process
- **AI-restricted tasks:** where independent demonstration of knowledge, understanding, or professional capability is required

In both cases, students should receive explicit guidance and opportunities to reflect on their use of AI. Reflection on decision-making, evaluation of AI outputs, and consideration of ethical implications are key components of developing mature AI literacy.

Assessment redesign is therefore not only about preventing misuse, but about educating students to become informed, critical, and responsible participants in this rapidly changing technological world.

Risk Assessment

Assessments that involve the creation of an artefact as the main or only task typically pose a higher level of risk. Similarly, assessments that have little oversight such as unsupervised online assessments also pose a high level of risk. At the opposite end of the scale are fully supervised or proctored exams which have a lower risk level, however this approach can impact on authentic assessment design and contribute to an environment of mistrust rather than a culture of integrity depending on the context and use.

The following table lists a range of typical assessment types used in higher education institutions. It ranks them in order of risk level, identifies the risk, and suggests steps to mitigate against this.

Assessment Type	Level of Risk	Risks Posed by GenAI	Mitigation Steps
Essays and Written Assignments	High	AI can generate high-quality written content that may not be easily detected as non-original.	Require multiple drafts and incorporate peer reviews. Employ oral defences or follow-up questions to verify understanding.
Unsupervised Open-Book or Remote Exams	High	Students might use AI to complete their exams, leading to misrepresentation of their own knowledge.	Implement time constraints that limit the ability to use AI. Use a combination of unsupervised open-book and in-person assessments. Randomise questions and personalise them to individual students.
Online Quizzes	Medium	AI can assist in answering questions, especially multiple-choice ones, if they are available online.	Use question banks to randomise questions for each student. Employ proctoring software that monitors students during the quiz. Incorporate questions that require critical thinking and personalised responses.
Research Papers	Medium	AI can generate or heavily assist in creating research papers, making it hard to detect authentic student work.	Require detailed methodology sections and data analysis that are difficult for AI to fabricate. Conduct oral presentations of research findings. Require pre-final drafts and incorporate peer reviews.
Lab Reports	Medium	AI can help generate content for lab reports, including data interpretation and discussion sections.	Require students to submit raw data and detailed lab notes. Incorporate in-lab assessments and practical exams. Conduct regular checks and comparisons with past student work for consistency.
Creative Work	Medium	AI can help produce content for many creative disciplines including music, graphic design, visual art, and poetry.	Require submission of notes and drafts or sketches to ensure preparation. Use oral presentations and Q&A sessions to verify individualised approach. Conduct comparisons with past student work for consistency.

Problem Sets	Low	While AI can solve problems, students still need to understand the process and concepts.	Include a mix of automated and hand-written problem-solving components. Regularly update problem sets to avoid repetition. Use oral exams to verify understanding of the solved problems.
Group Projects	Low	AI can assist in parts of the project, but collaboration and presentation skills are difficult to fake.	Assess individual contributions through peer evaluations and reflections. Incorporate regular check-ins and progress reports. Require live presentations and Q&A sessions.
Oral Presentations	Low	AI cannot assist directly during live presentations, but can aid in preparation.	Focus assessment on delivery, understanding, and ability to answer questions. Use varied formats like impromptu topics or interactive Q&A sessions. Require submission of notes and drafts to ensure preparation.

In addition to the mitigation steps suggested above, a variety of assessment media such as journals, e-portfolios, vlogs or blogs can be selected to accompany larger pieces of work or as stand-alone assessments. This requirement can be useful to ensure individualised elements based on personal experiences or observations of specific classroom activities, while also encouraging visibility of the learning process. Activities involving critical thinking, decision-making, and reflection are more difficult, but still possible, for GenAI to simulate. Reflective writing is particularly impactful as it is highly personal and requires the student to document their thoughts, challenges, and growth throughout their learning journey.

AI Detection: Limits, Risks, and Appropriate Use

A range of AI detection tools have been developed in response to the increasing availability of GenAI. However, current evidence indicates that these tools produce both false positives and false negatives and cannot reliably determine authorship or intent. As a result, they are not suitable for use as primary or definitive evidence of academic misconduct.

There are also significant equity and fairness concerns associated with AI detection. Research suggests that such tools may disproportionately affect multilingual writers and students whose writing does not align with dominant linguistic norms. Over-reliance on detection therefore risks undermining principles of fairness, transparency, and due process.

Within this framework, AI detection tools are understood as having, at most, a limited and contextual role. They may be used as:

- Conversation starters to prompt discussion with students
- One indicator among many when reviewing assessment submissions
- A means of supporting educational dialogue rather than enforcing punitive measures

They should not be used as:

- Sole or decisive evidence in academic misconduct cases
- A substitute for robust assessment design
- A proxy for evaluating learning or understanding

Effective academic integrity practice in an AI-enhanced environment depends primarily on structural assessment redesign. Assessments that make learning processes visible — through staged tasks, reflective elements, oral components, and evidence of decision-making — reduce reliance on detection technologies and strengthen the validity of assessment judgements.

Ultimately, designing assessments where learning is visible, attributable, and aligned with intended learning outcomes offers a more reliable and educationally sound response than attempting to detect AI use after the fact.

Postgraduate Programmes

While postgraduate work is often more closely supervised, the above may be adapted and applied where appropriate. Oral examinations, and presentations followed by Q&A sessions are common place for many taught postgraduate programmes; however, the frequency of these could be increased throughout pinch points in the research journey such as: idea generation; literature review; methods; chapter discussions; and so on. Similarly for PhD work, an increased number of oral presentations to peers and staff could be considered.

The requirement of a reflective journal documenting the thought process throughout the research journey is valuable both from a learning perspective and also to support the integrity of the work.

For taught postgraduate programmes, active learning such as collaboration with peers through group project work can lower the risk of AI misuse. Where possible, working with industry for problem solving and co-creating is a robust approach as the industry partner can also engage and check for understanding.

Facilitating a workshop on GenAI and research at an early stage in the postgraduate programme could contribute towards creating a culture of transparency and integrity. Stimulating discussions around academic integrity and accepted usage can ensure clarity and mitigate against misuse.

The implications of assessment redesign as suggested above require more time investment particularly for large cohorts. This needs to be considered in terms of the resourcing of assessments at postgraduate level, and may involve the prioritisation of core modules.

Integration of GenAI into Assessment Processes

The incorporation of GenAI into the assessment process can enhance the learning experience and contribute towards establishing more engaging and authentic practices. However, it is also important to determine whether the integration of GenAI into your assessment is appropriate. The Artificial Intelligence in Education (AIED) Framework developed by the International College of Management in Sydney, recommends consideration of the following factors when deciding whether to allow or restrict AI usage for assessment:

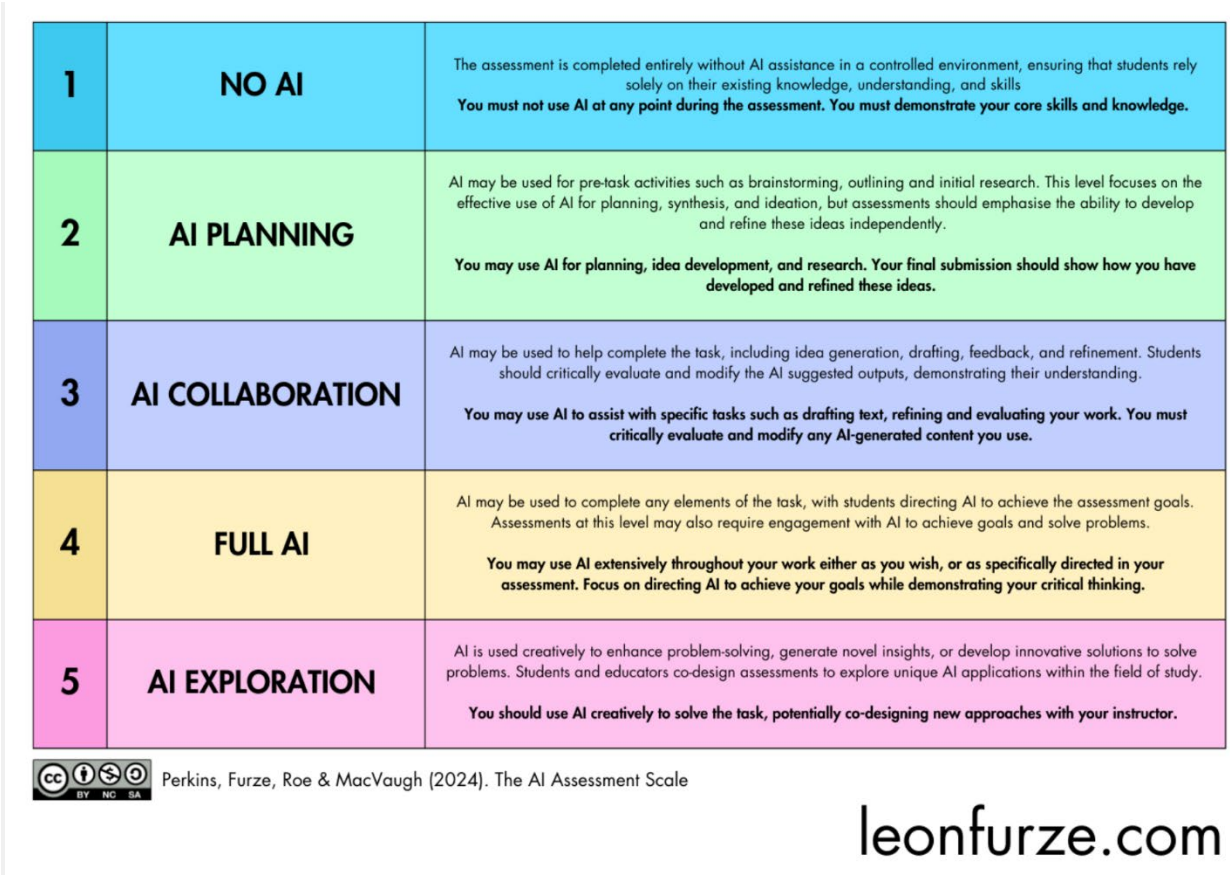
Educational reasoning: If students are asked to demonstrate their understanding, critical thinking skills, or ability to apply knowledge independently, relying heavily on AI could undermine the intended learning outcomes.

The nature of the task: If the task aims to assess a student's writing proficiency, using GenAI to produce the written content would make this impossible. In contrast, if the task is focused on exploring AI capabilities or understanding its applications, the use of GenAI may be appropriate and aligned with the learning objectives.

The function of the task: If a student's mastery of specific concepts or their ability to solve complex problems are being assessed, relying on AI could potentially hinder the accurate evaluation of their skills and knowledge.

The following scale developed by Leon Furze outlines the varying levels of GenAI integration possible in the assessment process. The different levels may be adopted depending on a range of factors including: the discipline; the nature of the assessment; the purpose of the assessment; and the intended learning outcomes.

Leon Furze AI Assessment Scale



Leon Furze AI Assessment Scale diagram showing levels of GenAI integration
Source: https://leonfurze.com/2023/12/18/the-ai-assessment-scale-version-1/

This is further simplified by Liu and Bridgeman (2023) at the University of Sydney where two clear assessment tracks are identified:

Track 1 (secured): AI use is typically not permitted unless the ethical use of an AI tool is purposefully being assessed. The focus is on 'assessment of learning'. These assessments are supervised, and unauthorised use of AI is considered a breach of academic integrity.

Track 2 (open): Responsible use of AI is encouraged. These assessments are less supervised, promoting engagement with AI and preparing students for an AI-integrated society. Acceptable AI-usage is clearly detailed in the Assessment Briefs and any unauthorised use of AI outside of this is considered a breach of academic integrity.

The incorporation of both tracks is viewed as a positive step in creating a balanced assessment environment where foundational knowledge, and critical thinking skills remain relevant, while also focusing on authentic assessments requiring creativity, application of knowledge, and higher order skills. It is suggested that most assessments should fall into Track 2 as we prepare our learners for future careers in an increasingly AI-enhanced landscape.

More recently, discussions have emerged around the enforceability of such models and a distinction is emerging between discursive control (rules and warnings) and structural

redesign (changing the mechanics of assessment). Structural redesign provides more sustainable integrity solutions. (Corbin, Dawson, Liu, 2025)

Approach	Focus	Limitation / Opportunity
Discursive control	Rules, warnings, AI bans	Relies on student compliance
Structural redesign	Changing the mechanics of assessment	Builds validity into the task itself

Focusing on the Process

Process-based assessments emphasise how learners arrive at conclusions, not just final products. This type of assessment is particularly valuable in preparing students for complex, real-world challenges where the journey is just as important as the destination.

Requiring evidence of the learning process can provide deeper insight into the level of understanding, reasoning processes, and ability to apply knowledge. It also makes learning visible and reduces reliance on surveillance approaches. This is good assessment practice beyond the context of GenAI, but it is also entirely relevant within this challenging space.

The learning process can be revealed through a variety of means including reflective journals, drafts or sketches, staged assessments, and iterative feedback cycles. Students are more likely to produce original work that reflects their own understanding and effort, as the process is unique to each individual. Other benefits include:

- increased opportunities for peer learning, collaboration, and teacher-student interaction
- development of self awareness of their own strengths and weaknesses
- enhanced student engagement and deep learning
- development of critical thinking and problem solving skills
- reduced pressure on a final outcome
- promotion of a culture of transparency and integrity

Process-focused assessment also provides an alternative to surveillance-based integrity approaches. By making learning visible through drafts, checkpoints, oral interactions, and reflective commentary, educators create evidence of authentic engagement without depending on unreliable AI detection tools.

Agentic AI and Assessment: Emerging Challenges and Design Considerations

Recent developments in GenAI point towards increasingly agentic systems - AI tools that can plan, act, iterate, and make decisions across multiple steps with limited human input. Unlike earlier generative tools that respond to discrete prompts, agentic AI systems can autonomously break tasks into sub-goals, retrieve and synthesise information, generate outputs, revise those outputs, and execute workflows on a user's behalf.

These developments raise new considerations for assessment design. As AI systems become more capable of managing extended cognitive processes, the boundary between assisted work and outsourced thinking becomes increasingly blurred.

Emerging Challenges for Assessment

Agentic AI introduces a number of challenges that extend beyond those associated with earlier generative tools:

- **Diminished visibility of student thinking**, where planning, decision-making, and iteration are performed by the AI rather than the learner
- **Further erosion of traditional authorship assumptions**, particularly in assessments that involve extended projects, research, or problem-solving workflows
- **Increased difficulty distinguishing contribution**, where students may oversee or curate AI-driven processes without engaging meaningfully with the underlying learning
- **Acceleration of task completion**, potentially undermining assessment designs that rely on time, effort, or procedural complexity as proxies for learning

These challenges reinforce the limitations of detection-based approaches and highlight the need for assessment designs that prioritise human judgement, intentionality, and reflection.

Assessment Design Responses and Mitigations

Rather than attempting to prohibit or police agentic AI use, effective mitigation lies in structural assessment redesign that clarifies where human learning must be demonstrated.

Key design responses include:

1. Emphasising Human Decision-Making and Justification

Assessment tasks should require students to explain, justify, and critique decisions made throughout the learning process, including decisions about whether and how AI tools were used. This shifts assessment from output generation to evaluation, judgement, and accountability.

2. Designing for Process Transparency

Multi-stage, process-oriented assessments — including planning documents, annotated drafts, reflective commentaries, and oral explanations — make it more difficult for agentic systems to fully substitute for student engagement. These approaches foreground how outcomes were reached, not just what was produced.

3. Integrating Critical Reflection on AI Agency

Where AI tools are permitted, assessments can explicitly ask students to reflect on the role of AI in their work, including:

- What tasks were delegated to AI
- What limitations or errors were identified
- Where human judgement overrode AI-generated suggestions

This supports AI literacy by encouraging students to critically interrogate AI agency rather than defer to it.

4. Prioritising Tasks Requiring Situated Human Context

Assessments that draw on lived experience, disciplinary interpretation, ethical reasoning, professional judgement, or contextual constraints remain less amenable to full automation. Embedding such elements helps preserve the distinct role of the learner.

5. Maintaining Deliberate AI-Restricted Assessment Spaces

As agentic capabilities increase, it becomes increasingly important to retain some assessment contexts where independent human performance is required. These spaces allow educators to verify foundational knowledge, disciplinary understanding, and professional competence without AI mediation.

Implications for AI Literacy

The emergence of agentic AI reinforces the need to broaden definitions of AI literacy. Beyond evaluating outputs, students must also learn to:

- Recognise when AI systems are assuming decision-making roles
- Understand the risks of cognitive offloading and over-reliance
- Reflect on responsibility, agency, and authorship in AI-mediated work
- Appreciate the continued value of human judgement, creativity, and ethical reasoning

Assessment therefore plays a crucial role in helping students develop discernment, not just technical proficiency.

Looking Ahead

Agentic AI represents a further shift in the educational landscape, but it does not invalidate the principles of good assessment. On the contrary, it reinforces the importance of validity, transparency, process visibility, and alignment with learning outcomes.

By designing assessments that make human thinking explicit, require reflection on AI use, and prioritise judgement over generation, educators can respond proactively to emerging AI capabilities while maintaining academic standards and educational purpose.

Earlier GenAI	Emerging Agentic AI	Assessment Design Implication
Responds to single prompts	Plans, sequences, and executes multi-step tasks	Assessment must reveal decision-making, not just outputs
Produces discrete artefacts (text, code, images)	Manages extended workflows and iterations	Greater emphasis on process transparency
Supports idea generation or drafting	Delegates planning, synthesis, and revision	Risk of outsourced thinking increases
Learner initiates and directs each step	AI can act semi-autonomously	Need to foreground human agency and judgement
AI use visible in isolated moments	AI involvement may be embedded and opaque	Require explicit reflection on AI role and use
Authorship already blurred	Authorship further destabilised	Clarify expectations around responsibility and accountability
Time/effort still loosely correlated with learning	Tasks completed rapidly with minimal engagement	Avoid using effort or complexity as proxies for learning
Detection tools already unreliable	Detection becomes increasingly ineffective	Shift fully toward structural redesign
AI literacy focused on evaluating outputs	AI literacy must include recognising AI agency	Assessment should develop discernment, not dependence

Assessment Design Strategies

Effective assessment design in the age of GenAI should support the development of AI literacy while ensuring that students can still demonstrate independent knowledge, disciplinary understanding, and professional competence. Assessment tasks should therefore be structured to make student thinking, decision-making, and learning development visible.

Strategies that support this include:

- **Multi-stage tasks** where students submit plans, drafts, checkpoints, or progress updates before a final submission, demonstrating the evolution of their thinking
- **Oral components**, such as presentations, vivas, demonstrations, or Q&A discussions, enabling students to explain, justify, and critically reflect on their work
- **Reflective elements** that require students to articulate their reasoning, learning processes, and — where relevant — how they used, evaluated, or chose not to use AI tools
- **Collaborative work** that prioritises interaction, negotiation, and shared problem-solving, supported by mechanisms for recognising individual contributions
- **Authentic, real-world problems** that demand contextual judgement, application of disciplinary knowledge, and the ability to navigate complexity rather than reproduce information

These approaches shift assessment away from reliance on a single final artefact and towards evidence of the learning process, making it more difficult to outsource thinking to AI and more likely that assessment captures genuine understanding, judgement, and growth.

A coherent assessment strategy should maintain a deliberate balance between:

- **AI-restricted tasks**, where students must demonstrate foundational knowledge, core concepts, or professional competencies independently, without AI mediation
- **AI-integrated tasks**, such as critical evaluation of outputs, ethical and transparent use, and awareness of bias and limitations

This balance ensures that assessment both safeguards essential disciplinary learning and supports the development of future-ready, critically AI-literate graduates.

Assessment Strategies for Large Cohorts

Designing valid and meaningful assessment for large student cohorts presents particular challenges, including workload, scalability, and the frequent requirement for anonymous marking. In AI-enhanced contexts, these challenges are intensified by reduced visibility of individual learning processes. However, effective assessment redesign at scale does not

require intensive individual interaction for every student. Instead, it relies on structured design choices that make learning visible while remaining feasible.

Staged and Structured Assessments

Staged assessment design allows learning to be evidenced over time without substantially increasing marking load. Early stages may be formative or completion-based rather than fully graded.

Examples include:

- Proposal or plan submission (pass/fail or checklist-based)
- Annotated outline or draft with targeted feedback prompts
- Final submission assessed against full criteria

These stages support student development, reduce over-reliance on a single artefact, and provide insight into learning processes.

Checkpoints and Low-Weight Touchpoints

Short checkpoints embedded within the assessment timeline can improve transparency and engagement at scale.

Examples include:

- Brief reflective prompts on decision-making or challenges encountered
- Short self-check questions linked to assessment criteria
- AI-use disclosure or reflection statements (where relevant)

Such checkpoints can often be reviewed quickly or sampled rather than fully graded, helping to maintain feasibility.

Peer and Self-Evaluation

Peer and self-evaluation approaches can be particularly effective in large cohorts when clearly structured and supported.

These may include:

- Peer feedback templates focused on criteria rather than grades
- Self-evaluation checklists submitted alongside final work
- Individual contribution statements in group assessments

When aligned with marking criteria, these approaches encourage responsibility for learning and provide additional evidence of engagement without adding to staff marking workload.

Designing for Scalability

Across large cohorts, small structural changes can have significant impact. Emphasising process evidence, structured staging, and learner reflection enables assessment that is:

- More resistant to inappropriate AI use
- More transparent and equitable
- More sustainable for staff

In large cohorts, clarity, structure, and intentional design are more effective than increased surveillance or individualised scrutiny.

Design Challenge	Assessment Strategy	Purpose / Benefit
Limited visibility of learning processes	Staged assessments (proposal, draft, final submission)	Makes learning development visible over time; reduces reliance on a single artefact
High marking workload	Completion-based early stages (checklists / pass–fail)	Supports process without significantly increasing marking time
Large numbers prevent individual interaction	Low-weight checkpoints (short reflections, decision prompts)	Provides insight into thinking and engagement at scale
Risk of generic or AI-generated submissions	Targeted reflective prompts (reasoning, challenges, AI use)	Encourages metacognition and personalised responses
Difficulty evidencing individual contribution	Self-evaluation statements	Supports accountability and reflection without additional grading
Group work in large cohorts	Structured peer evaluation templates	Surfaces contribution and collaboration skills
Scalability concerns	Sampling approaches (selective review or oral clarification)	Maintains integrity signals without full cohort interaction

Quality Assurance and Programme-Level Alignment

Assessment redesign in response to GenAI cannot be addressed solely at the level of individual modules. To ensure fairness, coherence, and academic standards, assessment strategy must be considered holistically at programme level and embedded within existing quality assurance processes.

1. Programme-Level Assessment Mapping

Programme teams should review assessment patterns across all stages to ensure a balanced and purposeful mix of assessment types. This includes:

- A combination of AI-restricted assessments (where independent knowledge, foundational skills, or professional competencies must be demonstrated without AI support)
- AI-integrated assessments (where responsible use of AI is aligned with learning outcomes and mirrors authentic professional practice)
- Increasing emphasis on process-based and staged assessments that make learning visible over time

This mapping helps avoid:

- Over-reliance on a single vulnerable format (e.g., multiple long essays)
- Inconsistent expectations around AI use between modules
- Unintended clustering of high-stakes, high-risk assessments

Programme-level planning ensures that students experience a coherent assessment journey, rather than a collection of disconnected module-level decisions.

2. Alignment with Learning Outcomes and Graduate Attributes

Assessment redesign must remain in alignment with programme learning outcomes and graduate attributes, including emerging expectations around AI literacy.

Programme teams should consider:

- Where AI literacy is an explicit programme outcome
- Where AI literacy supports broader attributes such as critical thinking, ethical reasoning, and digital competence
- Where certain competencies (e.g., clinical judgment, foundational theory, professional standards) must be demonstrated without AI mediation

This ensures that decisions about AI use in assessment are pedagogically driven, rather than reactive or technology-led.

3. Consistency, Transparency, and Student Experience

From a quality perspective, students should encounter clear and consistent messaging about AI use across their programme.

This includes:

- Shared programme-level language for describing levels of permitted AI use
- Clear explanation of the rationale for AI-restricted vs AI-integrated tasks
- Opportunities for students to develop the skills needed to engage ethically and effectively with AI before being assessed on them

Inconsistent practices between modules can create confusion, inequity, and perceptions of unfairness. Programme-level coordination supports a transparent and supportive assessment culture.

4. Embedding Assessment Redesign into Quality Processes

Assessment redesign should be incorporated into existing quality assurance and enhancement structures, such as:

- Programme review and revalidation processes
- Annual monitoring and reporting
- External examiner discussions on assessment standards and authenticity
- Curriculum design and approval workflows

Rather than being treated as an emergency or temporary measure, AI-responsive assessment should be recognised as part of ongoing curriculum enhancement in a changing technological landscape.

5. Supporting Staff Through Structured Programme Approaches

Programme-level coordination also reduces the burden on individual lecturers by:

- Encouraging shared design approaches
- Facilitating cross-module collaboration
- Enabling collective decisions about where AI-restricted assessment is most appropriate
- Sharing effective practices in process-focused and authentic assessment

This creates a more sustainable model of change and helps ensure that assessment redesign enhances learning, rather than simply increasing staff workload.

Further Considerations

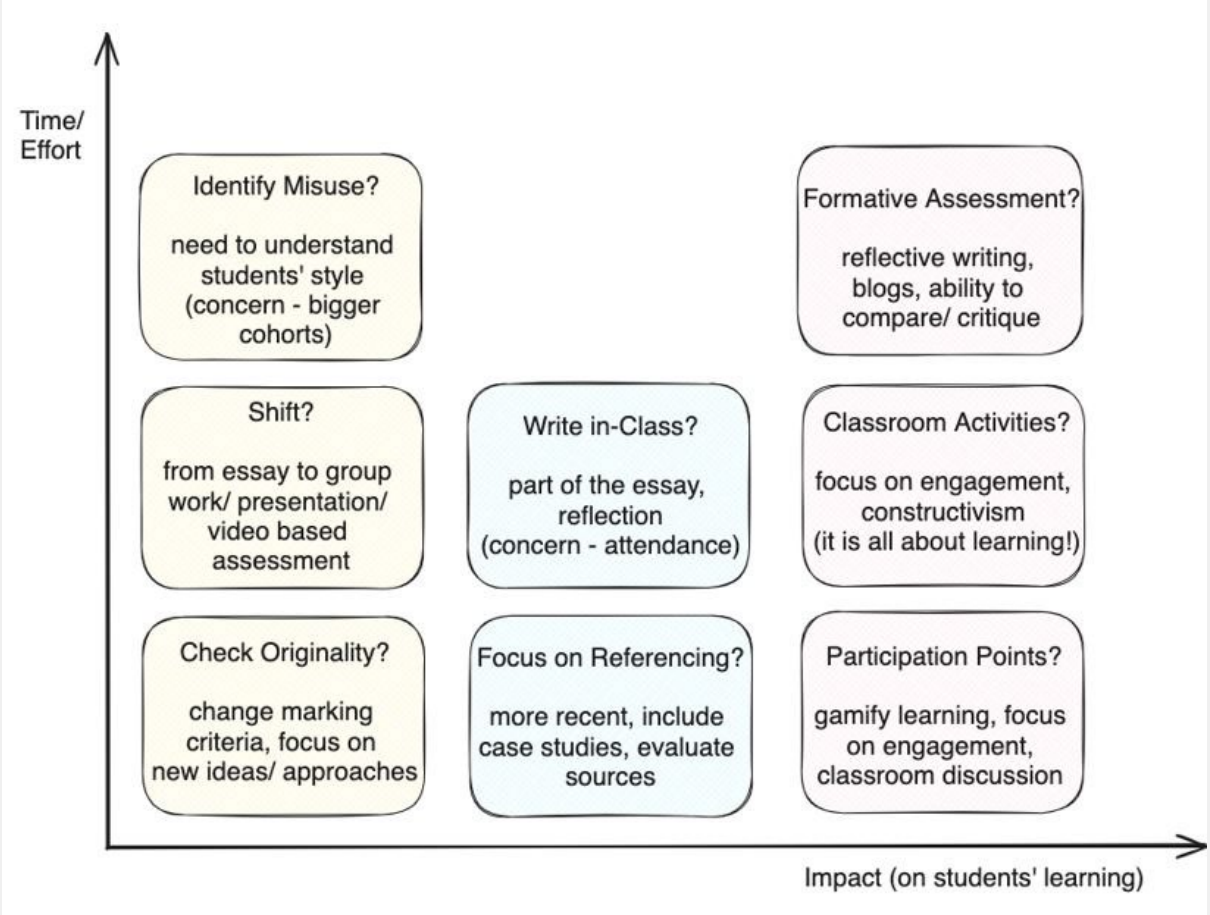
Time Investment

A valid consideration in assessment redesign is balancing the amount of time and effort educators will need to invest in this process versus the level of impact on the learning experience. Virmani and Lau address this in their SEDA blog (June 2024) and offer the following as a starting point for discussion:

Horizontal Axis (Impact): measures the degree to which an assessment format influences positive changes in student learning outcomes. Assessments that lead to greater understanding, skill development, and knowledge retention would be placed further to the right.

Vertical Axis (Time): indicates roughly how much time and effort educators would invest in modifying or redesigning a particular assessment format. Assessments that demand significant changes would be placed higher vertically.

Ideal Zone: would be high in impact yet lower in the time required for modification, and include techniques that balance efficiency with effectiveness.



Virmani and Lau Impact vs Time matrix diagram
Source: https://thesedablog.wordpress.com/2024/06/27/balancing-impact-and-time-a-strategy-for-adapting-assessments-in-the-age-of-genai/

Exploring assessment approaches that deter cheating in the first place rather than focusing on detection after the fact, can be useful in terms of saving time. However, there is no single 'perfect' solution, and the most effective approach will depend on your specific context, learning objectives, and available resources.

Institutional and Wider Supports

Sustainable assessment redesign in the age of GenAI cannot rely on individual educators working in isolation. Institutions have a responsibility to create the conditions that enable valid, fair, and future-facing assessment practices. This requires coordinated support at faculty, institutional, and sectoral levels.

At institutional level, educators should be supported through:

- Structured professional development in AI literacy, assessment redesign, and ethical AI use
- Facilitated cross-disciplinary dialogue to share practice, align approaches, and reduce duplication of effort
- Development of unified institutional guidance on AI use in learning, teaching, and assessment
- Accessible repositories of assessment exemplars and resources to support redesign efforts
- Agile curriculum processes that allow timely updating of assessment strategies in response to technological and pedagogical developments

Clear, practical AI policies and guidelines are essential, not only to define acceptable use but to promote transparency, fairness, and consistency across programmes. Institutions must also consider the provision of approved or institutionally supported AI tools, ensuring equitable access, data privacy, and ethical compliance.

Resourcing models may also need to adapt. Process-focused, staged, and interactive assessments often require different feedback patterns and time allocations, particularly in programmes with large cohorts. Without appropriate workload recognition and administrative support, the quality and sustainability of assessment redesign may be compromised.

Beyond individual institutions, engagement with the national and international conversation around assessment and AI is equally important. Sectoral initiatives such as QQI's Rethinking Assessment, the academic integrity work of NAIN, and national coordination through the National Forum for the Enhancement of Teaching and Learning in Higher Education demonstrate a growing shared commitment to evolving assessment in responsible and evidence-informed ways.

Together, these institutional and sectoral supports help shift assessment redesign from a reactive response to a technological disruption toward a strategic, collaborative enhancement of learning and teaching in an AI-influenced world.

'Postplagiarism'

"Historical definitions of plagiarism will not be rewritten because of artificial intelligence; they will be transcended"

— Sarah Eaton

As AI technology continues to develop at a rapid pace, it is important to consider what the future may look like for educators. While plagiarism traditionally refers to the copying or paraphrasing someone else's work without proper attribution, 'postplagiarism' in the context of GenAI is a term that encapsulates the new challenges to academic integrity in higher education, as AI tools become more integrated into the creation of academic work. It also signifies the need to re-evaluate and update traditional concepts of plagiarism to address the complexities introduced by the increasing prevalence of AI tools and AI generated content.

Key Aspects of Postplagiarism:

1. AI-Generated Content: Students and researchers might use AI to generate essays, reports, or other academic materials. The question arises as to whether this content should be considered original or if it constitutes a form of plagiarism, especially if the use of AI is not disclosed.

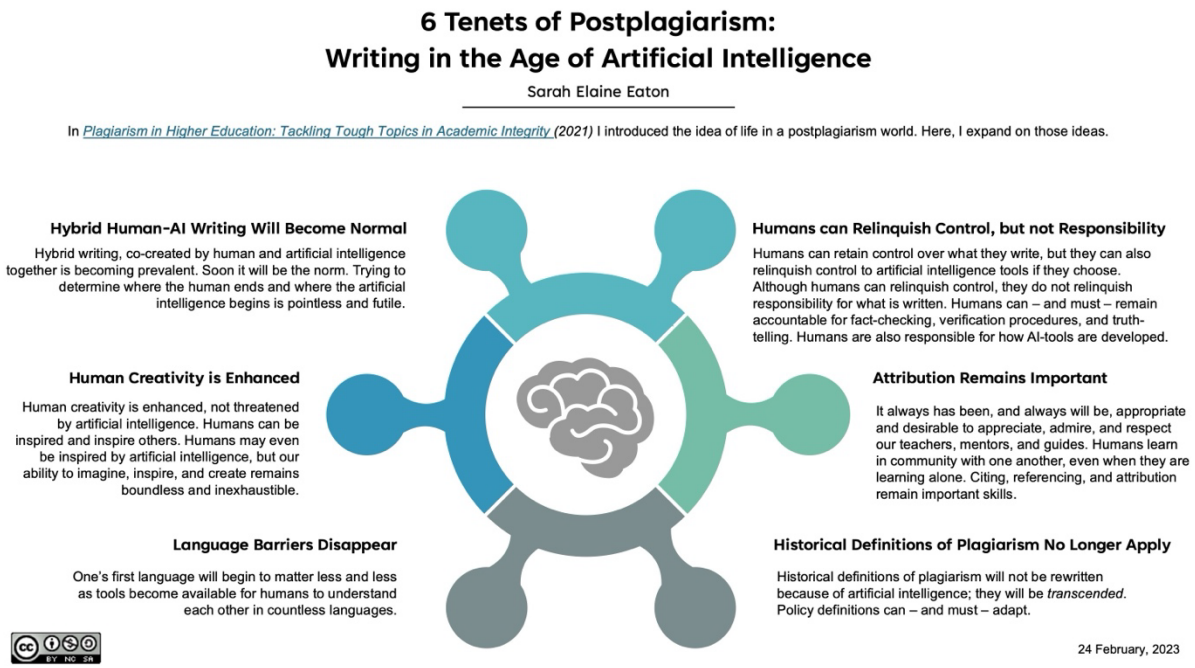
2. Authorship and Ownership: Traditional academic work is credited to individuals based on their intellectual contribution. However, when AI plays a significant role in content creation, the lines of authorship and ownership become blurred. Who is the true author— the individual, the AI, or both?

3. Attribution: There is ongoing debate about how to attribute AI-generated content. Should students cite the AI as a source, similar to a book or article? Or is the use of AI tools similar to using a calculator or spellchecker, which do not require attribution?

4. Academic Integrity Policies: Updating these policies has become necessary to reflect the challenges presented by AI, to achieve a balance in encouraging the responsible use of technology with maintaining the integrity of academic work.

5. Ethical Considerations: The ease of generating content with AI is tempting for students and researchers to submit work they didn't meaningfully engage with or understand.

While there are significant challenges, there are also opportunities to develop innovative approaches and embrace new mindsets. Sarah Eaton optimistically explores the concept of postplagiarism and academic writing in the following infographic:



Sarah Eaton's Postplagiarism infographic

Tips for Redesigning Your Assessment

1. Start with the learning outcomes.

Clearly define what you are assessing — application of knowledge, critical thinking, problem solving, analytical or evaluative skills — and determine whether the use of GenAI would support or undermine those outcomes.

2. Be explicit about AI permissions.

Clearly communicate whether learners are permitted to use GenAI and, if so, to what extent and for which purposes. Where expectations cannot realistically be monitored or evidenced, consider redesigning the task so that learning is made visible rather than relying on unenforceable restrictions.

3. Balance higher-order thinking with foundational knowledge.

Design assessments that prioritise analysis, evaluation, and creation, while also ensuring that students demonstrate the essential disciplinary knowledge needed to underpin those higher-order skills — sometimes independently of AI support.

4. Use multi-faceted and individualised assessment formats.

Combine artefact-based tasks with lower-risk approaches such as oral presentations, peer evaluation, drafts or sketches, reflective journals, or short viva-style discussions to verify understanding and personalise learning.

5. Assess the learning process, not only the final product.

Build in touchpoints or staged components where each part of the assessment develops from the previous one. This might include proposals, annotated drafts, progress reflections, or interactive oral elements. These approaches make student thinking visible and strengthen assessment validity.

6. Incorporate structured collaboration.

Include opportunities for collaborative problem-solving, peer feedback, or group projects, with mechanisms to recognise individual contributions. Collaboration reflects authentic professional practice and makes learning less easily outsourced.

7. Engage students in dialogue about AI and assessment.

Facilitate open conversations about GenAI use, academic integrity, and responsible practice. Where appropriate, involve learners in aspects of assessment design — such as discussing criteria or co-creating elements of marking rubrics — in line with inclusive and UDL-informed approaches.

Conclusion

GenAI does not diminish the value of assessment; it sharpens our understanding of why assessment matters. In an AI-enhanced world, assessment is no longer simply a mechanism for measuring knowledge, but a means of making learning visible and revealing how students think, apply, question, create, and grow. This moment therefore presents not only a challenge, but an opportunity to strengthen assessment practice in ways that are more authentic, more transparent, and more aligned with real-world learning and professional contexts.

Redesigning assessment in response to GenAI requires informed, reflective, and collaborative engagement from educators. It also requires institutional support, space for professional development, and recognition of the emotional and cognitive load that rapid technological change can bring. Equity, access, and ethical considerations must remain central as we shape practices that are fair and inclusive for all learners.

This framework affirms that sustainable academic integrity is achieved not through surveillance or detection alone, but through thoughtful, structurally sound assessment design, the development of AI literacy, and a culture that values learning processes as much as outcomes. By embedding these principles at module and programme level, institutions can uphold academic standards while preparing graduates who are critically aware, adaptable, and capable of working responsibly in an AI-influenced society.

Initially developed as part of the N-TUTORR national project GenAI:N3, this framework is a living resource that continues to evolve. The approaches outlined here can be adapted, combined, and expanded in response to disciplinary needs, emerging research, and evolving technologies. Most importantly, it seeks to support ongoing dialogue and shared exploration across the higher education community as we collectively shape the future of assessment in the age of GenAI.

Reading List

Artificial Intelligence Act, "EU Artificial Intelligence Act | Up-to-date developments and analyses of the EU AI Act, https://artificialintelligenceact.eu/

Bassett, M. A., Bradshaw, W., Bornsztejn, H., Hogg, A., Murdoch, K., Pearce, B., & Webber, C. (2026). Heads we win, tails you lose: AI detectors in education. Journal of Higher Education Policy and Management, 1–16. doi:10.1080/1360080X.2026.2622146

Chan, C.K. and Colloton, T. (2024) 'Redesigning assessment in the AI era', Generative AI in Higher Education, pp. 87–126. doi:10.4324/9781003459026-4.

Corbin, T., Dawson, P., & Liu, D. (2025). Talk is cheap: why structural assessment changes are needed for a time of GenAI. Assessment & Evaluation in Higher Education, 50(7), 1087–1097. doi:10.1080/02602938.2025.2503964

Corbin, T., Bearman, M., Boud, D., & Dawson, P. (2025). The wicked problem of AI and assessment. Assessment & Evaluation in Higher Education, 1–17. doi:10.1080/02602938.2025.2553340

Curtis, G. J. (2025). The two-lane road to hell is paved with good intentions: why an all-or-none approach to generative AI, integrity, and assessment is insupportable. Higher Education Research & Development, 44(8), 2151–2158.

Dawson, P. (August 2024) 'How to make a 100% accurate AI detector: or why we need specificity in discussions of AI detector accuracy', LinkedIn article

Dawson, P., Bearman, M., Dollinger, M., & Boud, D. (2024). Validity matters more than cheating. Assessment & Evaluation in Higher Education, 1–12. doi:10.1080/02602938.2024.2386662

Deep, P. D., (2025). Evaluating the effectiveness and ethical implications of AI detection tools in higher education. Information, 16(10), 905. doi:10.3390/info16100905

Dietis, N. (2025, March 25). AI in Higher Education: Mapping Key Guidelines and Recommendations. European Commission Futurium. https://futurium.ec.europa.eu/...

Farrell, H. & McCarthy, K. (2025). Manifesto for Generative AI in Higher Education: A living reflection on teaching, learning, and technology in an age of abundance. GenAI:N3, South East Technological University https://manifesto.genain3.ie/

Furze, L. (2024) Practical AI strategies: Engaging with Generative AI in Education. Melbourne, Australia: Amba Press.

Hartley, P. et al. (2024) 'Using generative AI effectively in Higher Education', Using Generative AI Effectively in Higher Education, pp. 1–7. doi:10.4324/9781003482918-1.

International College of Management Sydney (2024): Artificial Intelligence in Education (AIED) Framework

Kim, H.N. (2025). Detecting the Undetectable: The Need for a New Paradigm for Academic Writing Evaluation in the AI Era. doi:10.1007/978-3-031-94153-1

Liu, D. and Bridgeman, A. (June 2023) 'ChatGPT is old news: How do we assess in the age of AI writing co-pilots?', University of Sydney

Liu, D. and Bridgeman, A. (Dec. 2023) 'Embracing the Future of Assessment at the University of Sydney', University of Sydney

Liu, D. and Bridgeman, A. (July 2024) 'Frequently asked questions about the two-lane approach to assessment in the age of AI', University of Sydney

Lodge, J. M., Howard, S., Bearman, M., Dawson, P, & Associates (2023) 'Assessment reform for the age of Artificial Intelligence'. Tertiary Education Quality and Standards Agency. TEQSA

NAIN AI guidelines (2023): NAIN Generative AI Guidelines for Educators 2023

Newton, P. M., & Draper, M. J. (2025). Widespread use of summative online unsupervised remote (SOUR) examinations in UK higher education. Quality in Higher Education, 31(1), 127–141. doi:10.1080/13538322.2025.2521174

O'Sullivan, James, Colin Lowry, Ross Woods & Tim Conlon. Generative AI in Higher Education Teaching & Learning: Policy Framework. Higher Education Authority, 2025. doi.org/10.82110/073e-hg66

Perkins, M., Roe, J., Furze, L. (2025) 'Reimagining the Artificial Intelligence Assessment Scale'. Journal of University Teaching and Learning Practice, 22(7). doi:10.53761/rrm4y757

Suhail, A.H., Guangul, F.M. and Nazeer, A. (2024) 'Evolution of assessment and feedback methods in Higher Education', Utilizing AI for Assessment, Grading, and Feedback in Higher Education, pp. 57–84. doi:10.4018/979-8-3693-2145-4.ch003.

TEQSA guidelines (Nov. 2023): Assessment reform for the age of artificial intelligence; The evolving risk to academic integrity posed by generative artificial intelligence

UNESCO. 2021. Recommendation on the Ethics of Artificial Intelligence. Paris: United Nations Educational, Scientific and Cultural Organization. https://unesdoc.unesco.org/ark:/48223/pf0000381137

Upsher, R. et al. (2024) 'Embracing generative AI in authentic assessment', Using Generative AI Effectively in Higher Education, pp. 106–114. doi:10.4324/9781003482918-16.

Various articles - 'AI and Assessment in Higher Education', Spotlight. Times Higher Education

Virmani, S. and Lau, A. (June 2024) 'Balancing impact and time: A strategy for adapting assessments in the age of GenAI', The SEDA Blog

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Hazel Farrell has been immersed in the AI narrative since 2023 both through practice-based research and the development of guidelines, frameworks, tools, and training to support educators and learners throughout the HE sector.

She led the national N-TUTORR GenAI:N3 project which was included in the EDUCAUSE 2025 Horizon Report as an exemplar of good practice. She is the SETU Academic Lead for GenAI and Chair of the university's GenAI Steering Committee. The practical application of GenAI provides a strong foundation for her research, with student engagement initiatives for creative disciplines at the forefront of her work. Hazel recently won DEC24 Digital Educator Award for her GenAI contributions to the HE sector.