The following is a collection of solid resources and ideas for assessments in the midst of emerging generative technologies:

From: **University of Massachusetts Amherst, Center for Teaching and Learning. How Do I (Re)design Assignments and Assessments in an AI-Impacted World?. Retrieved 8/21/25.**

- **In-person blue book or ORAL exams** can measure recall and applied understanding independent of outside technology.
- **Short essays and reflections that incorporate course-specific materials** (like a guest lecture or museum visit) rely on primary sources and experiences that are hard for AI tools to access.
- **Alternative assignment modalities** such as oral exams, in-person presentations, video essays, posters and infographics, "visual abstracts" of scientific papers, on-paper annotation of p-sets and printed code in class on the day of submission, and many more are likely to be more AI-resilient than traditional text-only assignments.
- **In-Class Presentation with Q & A**
- **Gallery Walk Activity:** Students explore various stations featuring different topics, questions, or projects, engaging in discussion and reflection.
- **Analysis** of unexplored real-world scenarios in class: After students analyze and discuss their scenarios, ask them to visually represent their findings on posters.
- **Class Discussion Synthesis:** Require students to integrate insights gained from in-class discussions into their writing.
- **Complex Multilayered Project:** Assignment has multiple interrelated questions or tasks that build on each other, and students will need to produce highly detailed responses that meet high field-specific standards and/or language and they need to cite specific passages of the content informing their project (Clay, 2023).
- **Source Documentation:** Require students to screenshot the relevant passages that they reference in a paper or include annotated versions of their sources with their submission.

- **Process Documentation:** Require students to turn in submissions in Microsoft Word or Google Docs with the version history turned on.

AI-Integrated Assignments

- **AI-Assisted Research Project:** Leverage AI for various research tasks.
- **Document AI Collaboration:** Students use specific AI tools, documenting and reflecting on the process.
- **Judge the AI Output:** Guide students to evaluate AI-produced materials critically.
- **Chart Your AI Journey:** Assign students a performance task, such as designing a product, creating a plan, preparing for a structured debate, creating an art piece, or creating a multimedia presentation. Instruct them to research, select and utilize relevant AI tools to complete it. They should then outline and justify their chosen approach.
- **Chatbot Conversation Analysis:** Analyze chatbot responses, effectiveness, and biases.
- **AI Art Critique:** Compare AI-generated art to human-created works.
- **Ethical Implications Debate:** Engage in discussions on AI's ethical considerations.
- **Data Visualization Project:** Guide students to use AI tools for analyzing large datasets, creating visuals of findings, and discussing patterns, anomalies, and insights.

From: Inside Higher Education. Assessments that Maintain Fairness and Authenticity without Ai. September, 2024.

In-person written assessments

In-person written assessments minimise the likelihood of AI assistance and allow for direct observation and interaction. They are among the most effective methods with which to evaluate students' genuine understanding and skills, but they also require careful planning and resources to administer effectively, including ensuring a controlled environment and providing adequate supervision. Moreover, these assessments might not always fully reflect practical or real-world skills, which could be more accurately evaluated through other methods such as practical exams

Oral presentations and Q&As

Presentations provide instructors with an opportunity to evaluate students' communication skills in real time, including their ability to articulate ideas clearly, engage with the audience and respond to questions effectively.

Complex problem-solving tasks

Tasks that require students to tackle real-world scenarios or issues involve multiple variables and uncertainties and require innovative solutions. For instance, in the field of economics, students might be asked to develop a policy to address unemployment in a struggling economy. This would involve analysing labour market trends, assessing the effectiveness of unemployment policies,

suggesting new initiatives and considering the socio-economic and political implications of their proposed solutions.

Reflection essays

In this type of personal essay, the writer explores a topic from their own perspective and experiences, often examining their thoughts, feelings and learning processes related to the subject. Reflective essays involve critical analysis of personal growth and the insights gained. For example, students might be assigned a task to write a reflective essay on their experience attending an economics seminar or conference. They would reflect on the keynote speeches, panel discussions and interactions with industry experts, discussing how these experiences have deepened their understanding of economic theories and current issues.

Reflective essays can be time-consuming for instructors to mark. However, to manage marking effectively, instructors should develop clear rubrics, limit essay length, provide selective feedback, use technology tools and incorporate self and peer assessments. Clear rubrics that evaluate criteria such as depth of reflection, connection to course content, critical thinking, clarity and organisation, and evidence of personal growth will help instructors to grade personal reflection effectively. This approach ensures consistency and fairness, allows for meaningful feedback and focuses on the reflective process rather than just the content of the reflection.

Debates and discussions

Structured forms of communication such as debates and discussion require individuals or groups to present arguments, counter-arguments and rebuttals on specific topics or issues. For example, students might be assigned to participate in a debate or discussion on the ethical implications of AI in society as part of their assessments.

Project-based assessments

Project-based activities or tasks assess students' knowledge, skills and competencies from start to completion. Students might be tasked with creating a business plan for a start-up company, which includes conducting market research, developing financial projections and formulating effective marketing strategies. In such assessments, AI detection software should be used alongside designing unique and context-specific assignments to ensure authenticity.

Case studies

Detailed and in-depth examinations of a particular event, project or phenomenon within its real-life context assess students' ability to critically analyse complex issues, apply theoretical knowledge to practical situations and derive evidence-based insights. For example, students might study the integration experiences of international students at a local university, examining cultural adjustment challenges, social interactions with domestic students and access to support services. In the example, AI might struggle to analyse qualitative data such as personal experiences and social interactions, because it lacks the subjective judgement and detailed understanding required to interpret these complex, context-specific situations accurately.

Progressive assessments and defence

Assessing students' progress over time ensures a comprehensive evaluation of their understanding and application of course material as these develop. Instead of focusing solely on the final product, this method drops in at regular checkpoints, where students must submit portions of their work and defend their understanding and decisions. This ongoing engagement helps maintain academic integrity, even if students use AI tools, as it requires students to regularly demonstrate their understanding and involvement through stages of the assignment. This process makes it clear that the final submission reflects their own work and insights rather than being solely based on AI-generated content.

From: Northern Michigan, Center for Teaching and Learning.
Creating AI-Resistant Assignments, Activities, and Assessments (Designing Out)
Retrieved 8/19/25.

1. **"Going Medieval":** Reintroducing traditional pen-and-paper assessments for certain assignments or exams can significantly reduce the temptation and ability to use AI dishonestly. This method requires students to articulate their thoughts and demonstrate their understanding without the immediate assistance of digital tools. Handwritten submissions emphasize comprehension and the ability to communicate ideas effectively without relying on AI for content generation or editing. While not applicable to all types of assessments, especially those that require digital skills, pen-and-paper tasks can be particularly effective for testing foundational knowledge, mathematical calculations, conceptual diagrams, or in-class essays. This approach also encourages students to develop their ideas independently and can be combined with oral exams or in-person presentations to further ensure academic integrity.
2. **Emphasize Originality and Critical Thinking:** Design assignments that require students to apply concepts to new situations, solve complex problems, or integrate multiple sources of information. These tasks are harder to outsource to AI and emphasize students' unique perspectives and critical thinking skills.
3. **Use Personalization:** Tailor assignments and questions to individual students or current events. Personalization makes it difficult for students to find existing AI-generated answers or content that matches their specific assignment criteria.
4. **Incorporate Reflective Components:** Ask students to include a reflection on their learning process, the challenges they faced, and how they overcame them. This not only encourages deeper engagement but also makes it more challenging to use AI tools dishonestly.
5. **Implement Process-Based Assessments:** Break larger assignments into stages (proposal, outline, draft, final submission) and evaluate each stage. This approach allows instructors to monitor progress and understand students' thought processes, making it harder for students to completely rely on AI.
6. **Adopt Oral Examinations or Presentations:** Oral exams or presentations require students to demonstrate their knowledge and thinking in real-time, making it difficult for them to rely on AI-generated content without a deep understanding of the material.
7. **Utilize Open-Book, Open-Note Exams:** Design assessments that allow students to use

resources but test their ability to apply, analyze, and synthesize information rather than recall facts. This can reduce the temptation to use AI inappropriately.

8. **Incorporate Peer Review:** Have students review and provide feedback on each other's work. This not only exposes students to different perspectives but also makes it more difficult to pass off AI-generated content as their own, especially if they have to defend their work.
9. **Leverage Technology for Verification:** Use plagiarism detection software that is updated to recognize AI-generated content. Although not foolproof (there is a significant chance for false positives or negatives), it may serve as a deterrent and a tool for helping to identify potential misuse of AI. At this point in its development, however, it should not be used as the sole identifier of academic dishonesty.
10. **Test Assignments with Generative AI:** Before finalizing your assignments, use Generative AI tools to attempt them. This step helps to identify if the assignments can be easily completed by AI, potentially bypassing deep understanding or genuine student engagement. Assignments that can withstand AI completion typically require nuanced thinking, personal insights, or complex synthesis of information, making them more resistant to digital shortcuts and emphasizing students' original contributions. Testing ensures the assignments truly assess critical thinking and comprehension, rather than just the ability to retrieve information.
11. **Educate About the Ethical Use of AI:** Teach students about the ethical considerations of using AI tools, including what constitutes legitimate use versus academic dishonesty. Clear guidelines can help students navigate the use of AI responsibly.
12. **Promote a Culture of Integrity:** Beyond specific assignments or technologies, fostering an educational environment that values honesty, integrity, and hard work can discourage academic dishonesty. This includes having open discussions about the challenges and implications of AI in academia.
13. **Experiment with Cheating-Resistant Assessments:** Design assessments that are unique and context-specific, making it challenging for third-party services to provide relevant assistance. This might include complex, course-specific projects or problems that require a deep understanding of the subject matter.

Detailing AI Usage

If you are going to allow students to use Generative AI when completing assignments, you may wish to have them detail that usage. How did they use it? Why did they use it where they did? What prompts did they use? Having students detail their AI usage when completing assignments can offer a range of benefits, both educationally and ethically. Here's a breakdown of some key advantages:

1. **Transparency:** By detailing AI usage, students promote transparency. This allows educators to understand how the work was completed and the extent of the students' engagement with the material.
2. **Learning Reflection:** Detailing AI usage encourages students to reflect on their learning process, considering not just the final answer but also how they arrived at it. This metacognitive process can deepen understanding and encourage self-regulated learning.
3. **Academic Integrity:** It upholds principles of academic integrity. Students are being honest about their sources and methods, which is crucial in maintaining trust and fairness in the

educational environment.

4. **Assessment Accuracy:** When educators are aware of AI usage, they can more accurately assess a student's comprehension and abilities, tailoring support and instruction to the student's actual needs.
5. **Skill Development:** By tracking AI usage, students can be more conscious of the skills they are developing and those they are outsourcing to AI, such as critical thinking, problem-solving, and creativity.
6. **Ethical Awareness:** It instills a sense of ethical responsibility in students regarding the use of technology. Understanding the boundaries of AI assistance is crucial as they enter a workforce where AI tools are commonplace.
7. **Collaboration Skills:** It could encourage collaboration between students and AI, as detailing usage requires understanding how AI works and how to integrate it effectively into their workflow.
8. **Pedagogical Insights:** For educators, understanding how students use AI can provide insights into how AI can be integrated into the curriculum to enhance learning outcomes.
9. **Digital Literacy:** Students learn to be discerning in their use of digital tools. Detailing AI usage means they need to understand the capabilities and limitations of these tools, contributing to their digital literacy.
10. **Responsibility and Control:** It helps students maintain control over their learning process, using AI as a tool rather than a crutch, ensuring that the learning objectives of the assignment are still met.

From: University of Chicago. Strategies for Designing AI-Resistant Assignments
Retrieved 8/19/25.

Slow Down Reading

Easily producing reading summaries and "chatting with a text" using AI may help students initially encounter a difficult text, but it also may offer an illusory mastery of the material if used uncritically, as Marc Watkins argues in Rhetorica, his Substack. Encourage students to slow down their reading of critical texts in your discipline by engaging with them meaningfully.

Social Annotation

Have students engage with texts, one another, and yourself using a social annotation tool like Hypothesis. As Waktins notes, "Creating active reading assignments where students are required to annotate a text and discuss it with fellow students slows down the process and adds friction to the experience. It also makes the reading a social activity as opposed to an individual one and invites inquiry and debate within the reading process." You may point out to students that they can offer glosses, provide interpretations, ask or respond to questions, and offer personal responses in their annotations, as appropriate.

Commonplacing

Have students record crucial quotes and interact with important passages in their own commonplace books or notes, which the UChicago Library characterizes as "at once a book form

and a method of reading." Popular among writers and thinkers, from John Locke to the present day, commonplace books are typically organized by theme and include quotes, ideas, and observations that are often useful for future reference and reflection. This can be done on pen and paper, in Google Docs, or in more purpose-built tools like Microsoft OneNote and Notion.

Concept Maps

Concept maps can be powerful tools for students to engage critically with texts, lectures, and other class activities. Students can create diagrams that show the relationships between ideas, with connecting lines and linking words visually and textually describing the relationships between concepts. Learn more about concept mapping and how it's being used by UChicago instructors, including Jennifer Spruil, in the Social Sciences Core of the College.

Focus on Process

Focusing on process—e.g., the steps you take to solve a problem or write an essay—may become more important as generative AI can quickly produce fluent, albeit generic and possibly inaccurate, text. Demystifying how academic "products" are made—e.g., identifying the recursive processes involved in writing an essay, or common steps in deriving an equation—and engaging students in reflection on their own processes, may help students avoid the temptation of solely and uncritically relying on AI tools.

Scaffold Writing Assignments

Break up large writing assignments into smaller constituent parts. For instance, for a research paper due at the end of the quarter:

1. Incorporate time for in-class, exploratory thinking and writing; you may wish to collect samples of students' writing to get a sense for how they write.
2. Assign students to submit a topic and draft thesis for your feedback.
3. Have students develop and submit a literature review and outline.
4. Meet with students briefly to discuss their progress.
5. Ask students to provide feedback to one another before submitting final drafts, if possible.
6. Allow students the opportunity to revise and resubmit following your final round of feedback.

Require Student Reflection

Require students to reflect on their own thinking, processes, and approaches in their work. This kind of reflection can help promote metacognition, which can help students become better regulated learners who are able to identify gaps in knowledge and opportunities for continued learning. For example, you might ask students to:

- Explain why they chose the references and other source materials for their projects.

- Describe their approach to solving a problem or completing a project, including identifying barriers or false starts along the way.
- Identify any lessons learned that can be applied to future contexts.
- Discuss how a concept relates to their own experience, if applicable, and how understanding the concept may influence their interpretation of the experience.

Encourage Active, Experiential, and Collaborative Learning

Active learning Active learning engages students in the learning process, rather than passively listening to a lecture or reading a text. Use software like PollEverywhere to prompt students to respond to questions in real time. You may wish to intersperse your lecture with knowledge checks and opportunities for retrieval practice, or assign students "exit tickets" prior to leaving class.

Experiential learning engages students through reflection on experiences, often outside the classroom, such as in field studies, lab work, and supervised internships. GAI models do not have direct access to students' experiences and are unable to make meaning from them.