TITI

Rethinking assessment in response to ChatGPT

What is ChatGPT?

Among various generative artificial intelligence systems, **ChatGPT** is an artificial intelligence-powered chatbot that uses natural language processing to engage in conversational interactions with humans. In short, it can respond to questions and generate written content, such as articles and computer code.

What does this mean for assessment?

ChatGPT is changing many aspects of assessment and has brought the question of why we assess back to the forefront. Distance exams are particularly impacted due to the increased potential for academic dishonesty where instructors have limited control over the remote exam environment and whether students turn to ChatGPT for support. The advent of ChatGPT raises important conversations around academic dishonesty, what generative AI means for student learning, and how we can adapt (or not) to its evolving impact.

In this changing landscape, we'd like to offer guidance on approaches you can consider and how you can adapt your teaching and assessment in response to ChatGPT. We'll focus on two key questions:

1. **How might we respond to ChatGPT in assessment?**

2. **How can we assess more sustainably in light of ChatGPT?**

How might we respond to ChatGPT in assessment?

Three approaches

1. Ban the use of ChatGPT

What this means:
Prohibit its use as a tool/resource in summative assessment and take measures to enforce it.

Strategies:
- Communicate to your students what tools or resources are not permissible for your assessment type and why you've decided not to allow generative AI tools like ChatGPT in your assessment practices.

- Introduce a Declaration of Original Work for students to confirm that they've worked on assessment task/s on their own without the help of third parties and without the use of unauthorized aids.

- Choose a form of assessment that would make the use of ChatGPT impossible (e.g., oral exam, proctored written exam).

We'd advise against a blanket ban on ChatGPT as it'd be legally unenforceable except in the context of proctored exams. While there are software solutions available that claim to detect AI-generated content, these tools aren't considered official plagiarism detectors, can be outsmarted, and present data privacy concerns.

2. Minimize its use

What this means:
Design assessment/s or individual tasks in a way that'd make it impossible, impractical, or of little value to use ChatGPT.

Strategies:
- Consider different assessment types. Authentic or oral assessments are less affected by the impact of ChatGPT, and when designed well, authentic assessments can foster student ownership and improve workforce readiness skills.

- Shift from a product-oriented approach to a process-oriented one by breaking a final assessment (e.g., research paper) into smaller units so that you and your students can visibly track their progress. They can also use the formative feedback they've received towards improving their final submission or performance.

- Go one step further and ask students to document the process that led to their final work and lessons learned.

Whatever approach you decide on, it's critical to discuss it with your students to clearly communicate what tools and resources are permitted for assessment, ensure transparency, and have an open dialogue around how to engage with AI responsibly.

3. Integrate ChatGPT as a tool/resource

What this means:
Allow and embrace ChatGPT as a tool for assessment, actively integrating it into teaching, learning, and assessment. This approach would be particularly useful for distance exams.

Strategies:
- To get started, define clear learning outcomes that students should achieve in the module and what they should demonstrate in assessment.

- Consider making AI literacy an intended learning outcome to support students in developing knowledge and skills around working with generative AI tools responsibly and ethically.

- Evaluate how ChatGPT can be integrated without compromising students' ability to achieve the learning outcomes independently.

- Explore opportunities where ChatGPT can streamline less critical processes, allowing more time for acquiring essential skills and knowledge.

- Identify specific learning outcomes that can explicitly incorporate the use of ChatGPT, expanding the possibilities for student engagement and deeper learning.

- Continuously evaluate the effectiveness of incorporating ChatGPT, seeking student feedback and making adjustments as needed to optimize the desired learning outcomes.

- Work with students to critically evaluate and verify outputs from ChatGPT to build their awareness of the potential limitations and/or risks of generative AI tools. Or consider using ChatGPT as a learning opportunity.

How we see it

Integrated thoughtfully, ChatGPT can be an effective tool used alongside assessment to support you and your students.

From offering initial feedback on student work to providing outputs for assessment, ChatGPT presents an opportunity to help students reflect on their work and critically evaluate as well as build on its contributions – skills that they'll need in a future with generative AI programs.

Students should, nonetheless, be able to demonstrate their own knowledge, skills, and competencies. ChatGPT is meant to serve as a support tool, not a replacement for their original contributions to the assessment.

What might that look like?

- Allow ChatGPT for certain activities, such as structuring, brainstorming, or proofreading.

- Students can use ChatGPT for feedback at different stages and integrate this feedback into their work.

  This could be an effective feedback option when scaffolding and sequencing the ePortfolio. See our third factsheet on two approaches to the ePortfolio for more details on scaffolding and sequencing.

- To test their understanding throughout the semester, students can ask ChatGPT to create regular quizzes based on course content or use it as a study partner.

- Create exam questions that ask students to come up with a good prompt for a specific question and explain how they went about it.

How can we assess more sustainably in light of ChatGPT?

The emergence of ChatGPT presents a unique opportunity for us to question the way we currently do assessment and explore dynamic ways to assess student learning more sustainably.

In response, two promising approaches – formative assessment and the ePortfolio – provide opportunities for more authentic assessment and get to the heart of why we do it: What do students know so far and how can we support their development towards achieving key learning outcomes?

By tracking student progress over time, both formative assessment and the ePortfolio make evidence of learning and its challenges visible, enabling ongoing dialogues around feedback to enhance their future work.

Formative assessment can be paired with summative assessment (e.g., project work) to give students regular feedback on their current level, identify strengths and areas needing improvement, and encourage them to adjust their learning strategies and work.

This iterative process becomes motivating for students as they see their own progress over time and take ownership of what they've accomplished. Meanwhile, the ePortfolio highlights the individual and reflective work of students throughout a multidimensional learning journey.

Both the ePortfolio and formative assessment in turn foster a culture of growth and academic integrity while reducing the incentive for students to outsource their efforts to ChatGPT by promoting deeper engagement with their learning.

Formative assessment

1. Focuses on the process
Formative assessment focuses on students' ongoing progress towards achieving course learning outcomes.

Through formative assessment strategies (e.g., quizzes, (one-)minute paper), including feedback, students are encouraged to actively engage in continuous learning and build knowledge over time. For you as an instructor, there's the added benefit that you can monitor students' current level, identify inconsistencies or sudden changes in their work over the semester, and address or discourage academic dishonesty early on.

2. Offers more opportunities for improvement
Formative assessment provides multiple low-stakes opportunities for students to put their knowledge and skills into practice and adjust their approach. By offering continual, specific, and forward-looking feedback, instructors can help students identify areas of improvement throughout the learning process. Students can see how their efforts translate into improved performance and build a sense of ownership over their own learning (self-efficacy). This motivates students to further their learning.

3. Promotes academic integrity
Formative assessment encourages academic integrity by offering students multiple chances to test their understanding, make mistakes, and enter into dialogue with you or their peers around how they can improve in the future based on feedback. In building a healthy error culture, students are encouraged to talk about their failures and how they can learn from them in a process where they're invested in their progress, making it less likely that they'll turn to ChatGPT.

The ePortfolio

1. Documents the learning journey
The ePortfolio offers students the opportunity to document and showcase their work, unique learning experiences, and see their potential growth over time, highlighting the personal learning process and how they got "there" (e.g., reached the learning outcomes). By scaffolding the ePortfolio (see our third factsheet on two approaches to the ePortfolio) and facilitating ongoing formative assessment, you can monitor student progress and discourage last-minute reliance on ChatGPT.

2. Fosters reflective practice
The ePortfolio promotes ongoing reflection and metacognition as students are encouraged to critically evaluate their own learning and consider how they might transfer their knowledge to other contexts. This fosters a sense of ownership, motivates students to produce original work, and reduces the need to resort to ChatGPT. The personal aspect of reflection also encourages students to draw meaningful connections between their academic learning and individual experiences, making it more challenging for students to use ChatGPT to replicate.

3. Encourages multimodal representation
The ePortfolio potentially allows for diverse types of artifacts, including text, visuals, videos, audio, and interactive elements. This enables students to demonstrate their knowledge, skills, and competencies in a richer and more inclusive way while highlighting their creativity, perspective, and depth of understanding. This range of possibilities not only enhances student engagement and motivation but also prepares them for the modern digital landscape where effective communication through multiple channels is increasingly valued, expanding on their skills beyond ChatGPT.

What do we mean?

Artifacts (in an ePortfolio) are evidence of student work showcasing experiences, achievements, and learning in various contexts.

Authentic assessment focuses on assessing students' ability to apply their knowledge, skills, and competencies to real-world situations and problems that they're likely to encounter later in their professional life. It challenges them to come up with creative and unique responses that require higher-order thinking and problem-solving skills.

An **ePortfolio** is a digitized collection of artifacts together with reflection that documents a learning journey over time.

Distance exams refer to all forms of summative assessment that are conducted remotely and do not require being physically present in an exam room. Distance exams can include written, oral, and practical exams. They're often carried out via a video conferencing system and may or may not be proctored (e.g., take-home exams, research papers).

Formative assessment is an ongoing method of assessment (e.g., quizzes, one-minute paper) that evaluates students' knowledge and monitors their progress with the goal of providing future-oriented feedback as they learn. It makes evidence of learning and its barriers visible. With the results, you can see students' current level to make decisions on your teaching and how to support them in their learning.