

Making AI *Generative* for Higher Education

AI Assessment Guidelines

The purpose of these guidelines is to assist your team in preparing for the AI assessment phase of our project. They aim to walk you through 1) choosing a strategic area of focus, and 2) planning your assessment.

Since different institutions have different priorities, capacities, and resources available, the way you conduct this assessment will be unique to your institution. The existing knowledge you bring to this exercise, including any preliminary thinking you have done around generative AI's (GAI) impact on higher education and at your institution, will also inform your process and ultimate decisions. However, we do not expect you to reinvent the wheel: this document provides guidelines and models that will help you scope your assessment in ways that are appropriate to our project.

As we mentioned at last week's cohort meeting, **the assessment exercise is intended to be an informal information-gathering activity for quality improvement/quality assurance.** [Quality improvement](#) activities are “any formal activity designed to serve as a catalyst and support for quality improvement that uses proven methodologies to achieve these improvements.” Quality assurance/improvement activities are likely already a routine part of your job and are **not** considered human subject research (and thus rarely require IRB) in part because they are not designed to create generalizable knowledge but instead to inform internal policy, procedures, and support services.

Examples of quality improvement/assurance activities include, but are not limited to: data collection for internal administration purposes (i.e., teaching evaluations or surveys about the usefulness of a training or workshop), data collected for internal use to improve programs or services, general information gathering activities focused on evaluating policies and procedure. You may choose to scope your assessment more ambitiously but our expectation is that the assessment will be a low-lift activity requiring no more than a modest time commitment on your part.

Here are the steps we recommend:

1. Choose a strategic area of focus

The strategic area of focus is simply a preliminary decision about a specific population or subject area that you will assess. **The area of focus narrows in on a segment or certain segments of your institution that is important to the universities' strategic goals and/or is of immediate need and high impact.** Your area of focus may focus on teaching, research, or both.

Examples could include a specific type of course (e.g., writing-intensive courses, Intro to Computer Science) or departments/schools/divisions (e.g, the English Department, College of Engineering, Humanities departments, the School of Fine Arts). You may decide to focus on early-career researchers in NIH or NSF fields, or on individuals for whom English is not their first language. It could also be formulated as a research question (e.g., How will generative AI impact first year writing courses? What should the Graduate College adopt as best practices for integrating generative AI into research and teaching practices?).

The scope for this area of focus will depend on your team and your institution. What is important is that you frame your area of focus narrowly to align the scale of your assessment with the time commitments required of our project and yield basic information that can be refined through the interviews and interventions that we will undertake next year.

Some questions you might want to consider when deciding on an area: What potential GAI impacts on higher education are of particular interest to your team members? Are there areas of research/teaching that GAI will impact, but are not already getting sufficient attention from your institution (or within higher ed generally)? Are there already GAI initiatives happening at your institution that you want to align with?

The deadline for sharing your choice with us is November 17. (Note that we have adjusted this date in response to your feedback at our last cohort meeting)

2. Design your assessment instrument

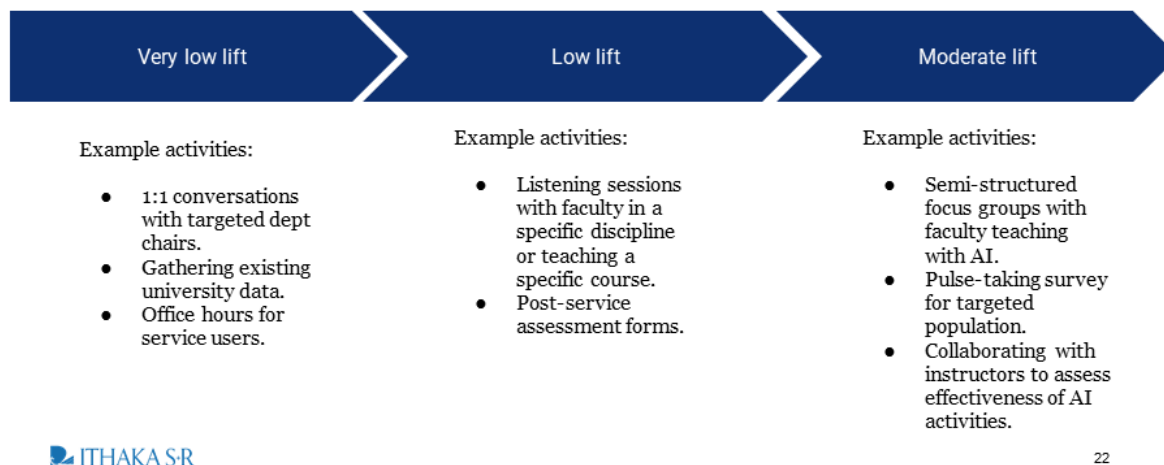
Step 1: Determine What Data Has Already Been Collected

If data germane to your area of focus has already been collected through other initiatives at your institution, you are welcome to use or build on this data as your assessment. We do not intend the assessment to repeat work that has already been done.

Identifying what data has already been collected may also help you identify important gaps that could serve as your area of focus.

Step 2: Select an Appropriate Assessment Framework

There are many ways to frame your assessment that will yield useful information without requiring substantial time commitments for your team. While you are free to structure your assessment however you wish, we recommend using one of the following examples as a model:



Step 3: Determine Assessment Questions

Think through how you want to explore readiness and brainstorm questions for your assessment. Questions will vary depending on your area of focus but will likely focus on understanding attitudes towards GAI, usage of GAI in educational or research contexts, and support needs. We are happy to help you brainstorm and develop your assessment instrument.

Sample questions could include:

Teaching oriented:

1. Are you or your students using generative AI in the classroom?
2. To what extent is using ChatGPT ethical/appropriate for coursework?
3. What uses of ChatGPT do you think would be beneficial for students?
4. Can you give me an example of an assignment you've used that incorporated GenAI? How did you assess students' work?

Research oriented:

1. Describe the use of generative AI in your work.
2. What elements of your research do you anticipate will be most influenced by GAI?
3. How prepared do you feel to incorporate generative AI into your research workflow? What specific support services or resources would be of most value to you?

General:

4. What would you like to learn about GAI?

5. What do you see as the major upsides and risks of generative AI to higher education?
6. Have you used ChatGPT or other similar tools?
7. How well do you understand how ChatGPT and other LLMs work?

4. Conduct your assessment

Once your instrument is complete you'll need to conduct the assessment. Depending on your choice of format this may involve reaching out to a few individuals for a brief conversation, developing a short survey to be distributed to faculty in a specific department, holding focus groups to identify instructors' needs, etc.

You should complete your assessment no later than February 9, 2024. (Note that we have adjusted this date in response to your feedback at our last cohort meeting).

5. Develop findings

Because your assessment is intended to serve internal purposes, we are not requiring you to share any formal analysis or reporting with Ithaca S+R. You are welcome to use any method you wish to interpret what you learn from your assessments. Here are a few frameworks that may be helpful to you in organizing your observations.

We will have a cohort meeting in February or March, 2024, where we will ask you to share some general observations about what you learned.

In most cases, we anticipate that your findings from the assessment exercise will serve as a bridge to the interview phase of the project, which will provide the opportunity to do a deeper-dive into the general trends you observed in your assessment.

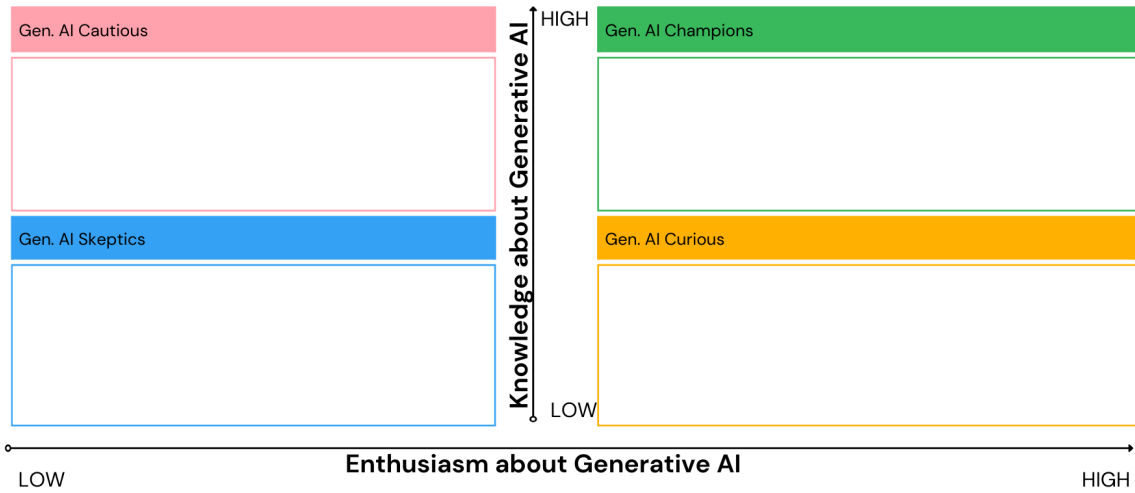
Assessment Rubrics and Frameworks:

Note that these tools are focused on readiness assessment but may also be useful for needs assessments.

1. Stakeholder mapping rubric by Ithaca S+R:

Stakeholder Mapping

Put names/groups of stakeholders in the quadrant that fits them best.



2. Key aspects of readiness to integrate technology into an organization:

IR Category	Operationally defined
Demand for new technology	Institution has key actors engaging with and identifying new technologies that meet field/organisational needs
Strategic focus	Institution has identified potential new technologies and determined their relation to existing ones.
Relative need and benefit of new technology	Institution has key actors assessing capacity to take-on and develop new technologies within current and future contexts
(E)valuation processes in place	Assessments of the (diverse) values of new technologies are undertaken and shared
IR enacted through specific enablers within and outside of the organisation	Key individuals/groups are formally tasked to enable adoption especially in regards to meeting standards and regulatory requirements
Receptivity	Novel institutional structures are created, in anticipation of expected challenges/affordances presented by new technology. These structures reflect the need to retrain staff, the construction of new innovation spaces and new technology platforms etc
Adoptive capacity	Novel technology aligns with institutional priorities and organisational capacities. Initial problems and unanticipated challenges/affordances are identified and seen to be manageable.
Sustainability	Novel technology is routinely produced/used/assessed within institution. Current institutional arrangements and resources are sufficient for routine and ongoing production, assessment and deployment.

Source: Webster, Andrew and John Gardner, "Aligning technology and institutional readiness: the adoption of innovation." *Technology Analysis & Strategic Management* 31, no. 10, 1299-1241, <https://doi.org/10.1080/09537325.2019.1601694>.

Here's an example of how you might organize department-level observations based on this framework:

Readiness Category	Observations
Demand for new technology	The Chair of the Geology Department is actively engaged in identifying new technologies to facilitate fulfilling the department's research and teaching missions.
Strategic focus	Faculty in the Geology Department have identified several generative AI tools that could supplement existing tools used to teach rock identification to students in both the classroom and the field.
Relative need and benefit of new technology	As part of the Geology Department's annual planning meeting, faculty and staff discussed the need for generative AI tools and whether the benefits outweighed the costs/risks. The general consensus was that faculty were interested in generative AI tools but were concerned that students might use the tools to cheat.
(E)valuation processes in place	The Geology Department has not yet begun work in this area.
IR enacted through specific enablers within and outside of the organization	The Master's Program faculty in the Geology Department mapped the 36 technical geology competencies from the National Association of State Boards of Geology (ASBOG) Task Analysis Survey against the curricular content and have identified 11 competencies that could be taught more efficiently/effectively by using generative AI tools.
Receptivity	The graduate faculty in the Geology Department seem more enthusiastic about the use of generative AI tools than the undergraduate faculty. The Department Chair said she plans to organize a series of

	<p>brown bag lunches so that graduate faculty can share examples with undergraduate faculty of how they've used generative AI tools in the classroom and in the field.</p>
Adoptive capacity	<p>The University's mission statement asserts that it is "committed to providing students with a world-class educational experience that incorporates the latest technological advances." The University has budgeted funds to assist departments in incorporating generative AI tools into their teaching and research.</p>
Sustainability	<p>Multiple stakeholders reported that the university has a history of adopting new technologies and then abandoning them rather than providing for their ongoing support. To address this risk proactively, the Geology Department has asked the Dean to commit five years of funding to support the adoption of generative AI tools.</p>