



Call for applications: AI-enhanced Assistive Technology in Teaching and Learning

Purpose

As part of the [Transformative Education 2.0](#) Purdue Move, and with generous financial support from the [Lilly Endowment](#), the Innovation Hub invites applications for a new funding program related to innovative uses of AI-enhanced assistive to support academic success for all learners. The [Purdue Innovation Hub](#) supports innovative, transdisciplinary, and scalable initiatives and programs in teaching and learning. Proposals submitted for this competition should align with the Innovation Hub priorities of teaching and learning innovation at scale for residential students on the West Lafayette campus.

Program Description

Program priorities. This funding opportunity supports the development and deployment of innovative AI-enhanced assistive technology in course-based learning environments. Purdue anticipates an increase in the number of enrolled students with reported disabilities, consistent with national trends in higher education. From language translation and captioning to image recognition and summarization functionality, AI-enhanced tools have the potential to address current gaps in support for students with a range of disabilities. The most commonly self-reported disability categories supported by the Disability Resource Center currently include attention-deficit/hyperactivity disorder, anxiety and depression, chronic medical conditions, learning disabilities and autism. Purdue should be at the forefront of deploying innovative assistive technologies in parallel with evidence-based pedagogical strategies.

As such, this funding program supports actual uses of AI-enhanced assistance technology in teaching and learning environments. *This is not a research funding program, and proposals focused on research about AI tools will be returned without review.* This funding will support projects with the potential to make a discrete impact on the quality of residential undergraduate teaching and learning support at Purdue. Proposals are invited in any area of teaching and learning, from any discipline, and from any relevant angle, including:

- Deploying AI-powered technology within a specific learning domain and context and/or deploying technology with a specific group of learners across their curriculum. AI-enhanced assistive technologies may include but are not limited to:
 - Real-time Language Translation and Captioning (speech-to-text and text-to-speech tools)
 - Smart Tutoring Systems
 - Word Prediction Software
 - Gesture, Image and Motion Recognition
 - Enhanced Feedback Systems
 - Personalized Learning Platforms
 - Tools that increase students' ability to manage and self-direct their learning through evidence-based cognitive strategies
- Exploring policy implications of AI-enhanced assistive technology in teaching and learning applications, including dimensions of student privacy, academic integrity issues, or other considerations that can be addressed through academic policies.
- Characterizing key equity, ethical, or trustworthiness considerations of using AI to support students with disabilities.
- Exploring AI-enhanced strategies and tools that empower faculty and instructors to practice universal design and thoroughly evaluate and enhance the accessibility of their teaching materials, including documents, presentations, assessments, and digital content with a goal of making them more accessible for all students.
- Understanding tool-specific considerations, resource demands, limitations, and strengths for specific populations within the disabled student demographic at Purdue. *The project must explore*

the tool's alignment with content, assessment, and pedagogy appropriate for supporting students with disabilities.

In all cases, funded projects will focus on the **practice of teaching and learning with a particular focus on supporting students with disabilities**. Projects can approach teaching and learning practices from instructor, student, and/or staff perspectives.

All faculty and staff members engaged in undergraduate teaching and learning on the West Lafayette campus are eligible to apply for funding. Projects up to \$80,000 and up to 12 months in duration will be considered for this round of funding. Subsequent funding may be available, pending performance and promise for continued impact.

Program parameters and expectations. This program is entirely about the deployment of innovative AI-enhanced tools in support of students with disabilities. As such, these are *development grants*, not research grants. *This is not a research seed funding program*, and applications for research funding will be returned without review. These *development grants* support exploration of the content, assessment, pedagogy, equity, and policy dimensions of leveraging technology. Project teams are expected to deploy one or more experiments in teaching and learning with actual students, and each project needs an appropriate plan to collect feedback from all stakeholders involved in the project, especially students.

Proposers must demonstrate that their project team possesses the required experience and expertise to execute their project. *If necessary, Innovation Hub leadership will connect proposers to relevant expertise needed to achieve their goals*, for example: the Disability Resource Center, pedagogical expertise, assessment resources, and so forth as appropriate and required for the project. Proposals that seek to deploy commercially available products and software will be reviewed in partnership with the appropriate IT content experts to ensure compliance with university standards. A draft Project Charter with expanded detail is attached to this RFP. Please pay special attention to the section on eligible expenses; *in general*, grants may not be used to support post-docs or PhD students, except in exceptionally narrow circumstances. *We urge proposers to discuss their ideas* with grant program leadership by submitting a one-page summary to innovation-hub@purdue.edu.

Application Process

Applicants must submit a written application for their project composed of:

- A proposal for the project itself *written using the template available on the program website*, and including all the required elements defined in the template. These include: title, team, and budget information; a description of the teaching and learning context; a detailed project description; an expected budget and justification; references cited. The detailed project description must include a clear statement of the expertise, partnerships, or resources required to make the project successful.
- A brief (two-page) CV for each of the project team members.
- A statement of support from their department head or dean (a brief email is sufficient).

Successful applicants will demonstrate a clear and compelling need for the project (i.e., a clear benefit to stakeholders), ensure that the stakeholder voice is represented in their development, execution, and evaluation of the project, and propose a realistic project plan and budget. Submit applications as a **single PDF document** via the [online submission portal](#) by **deadline stated on the program website**.

Notes for proposers

- Refer to the [Innovation Grants webpage](#) for important dates, including a recorded webinar.
- All proposers are *strongly encouraged* to submit a one-page overview of their project to innovation-hub@purdue.edu as an attachment. Hub and Online leadership will gladly iterate with proposers in before the submission date so that their proposals can be as competitive as possible.
- The [Innovation Hub website](#) contains expanded detail about this and other Hub programs and funding opportunities.

Project Charter Template (to be completed when project awarded)

Project information. (project team, title, funding request, start/end dates, etc.)

Project description. A 300-word summary of the project.

Project deliverables. An itemized statement of expected deliverables by the end of the project period.

Assessment. A statement of the assessment and/or evaluation goals and activities for the project, which will likely be developed in collaboration with Innovation Hub and Purdue Online leadership.

Budget. An itemized budget of project expenses that complies with the statement of eligible expenses below. No-cost extensions to the original project period are not guaranteed and are significantly dependent upon progress and specific circumstances that affected the project timeline or expenses. At the end of the project period, unexpended funds will be recovered by the sponsoring organization (Innovation Hub or Purdue Online).

Eligible expenses. The project team agrees that the following expenses are—in general—not allowed under the terms of this award: research assistants and post-docs (salary, fringe, tuition), travel, conference registration and related costs, entertainment, significant financial support directed to external entities, and commodity computing equipment like laptop computers. *Each of these ineligible categories is subject to negotiation depending upon the needs of the project, but in general these expenses will not be supported in this funding program.* Project budget is expected to support the project team (AY buyout, summer support, staff support) as well as the cost of partnerships related to the project (for instance, expertise accessed through the Envision Center, the Center for Instructional Excellence, the Disability Resource Center, or elsewhere). Participant support costs are allowed, such as funds for laboratory consumables.

Project team expectations. Project teams will have access to substantial resources including professional project management. As such, project teams are expected to:

- Be good stewards of funds by aligning expenses with project goals and activities, and by collaborating with Innovation Hub leadership if project goals need to change in response to new evidence or unforeseen circumstances.
- Prioritize the innovation project and in particular be responsive to the Innovation Hub staff and graduate research assistant in order to support and enable the success of the project.
- Collaborate with Innovation Hub leadership on assessment and evaluation efforts and prioritize communication and availability for discussions with leadership.
- Comply with reporting requirements (two-page interim report due 6 months after award and another at 12 months after award; six-page final report due 30 days after award end date).

Signatures. Co-signed signature page by the project team and Innovation Hub and leadership (DocuSign).