Call for applications: Innovation in teaching and learning in an AI-rich environment

Purpose

As part of the <u>Transformative Education 2.0</u> Purdue Move, and with generous financial support from the <u>Lilly Endowment</u>, the Office of the Provost invites applications for a new funding program related to the Provost's goal of making Purdue the most innovative residential learning program in the US among large research universities. The <u>Purdue Innovation Hub</u> 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 rapidly-deployed experiments for teaching and learning in an AI-rich environment. Recent developments in generative AI, such as ChatGPT, capture much of the media attention but represent only one dimension of how AI might shape the future of teaching and learning. AI-based agents for office hours, student advising, sentiment analysis, and many other dimensions of learning and the student experience will continue to emerge, and Purdue should be at the forefront of translating research to practice.

As such, this funding program supports actual uses of AI in teaching and learning. *This is not a research seed funding program, and proposals focused on fundamental research about AI 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 in an AI-rich environment at Purdue. Proposals are invited in any area of teaching and learning, from any discipline, and from any relevant AI angle, including:

- Applying artificial intelligence and/or machine learning technologies to drive learning innovations
 at scale by focusing on: content creation, personalized and/or adaptive learning, accelerated
 grading, enhanced faculty efficiency, student success, or other dimensions of innovation.
- Exploring policy implications of AI in teaching and learning applications, including dimensions of human-AI collaboration, 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/enable teaching and learning at scale.
- Understanding tool-specific considerations, such as appropriate use of ChatGPT within a specific learning environment. Projects that take a tool-based perspective must explore that tool's alignment with content, assessment, and pedagogy appropriate for the learning environment.

In all cases, funded projects will focus on the **practice of teaching and learning in an AI-rich environment**. 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 practice of teaching and learning in an AI-rich environment. These *development* grants support applied exploration of the content, assessment, pedagogy, technology, equity, and policy dimensions of teaching and learning in an AI-rich environment. 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: IT support, pedagogical expertise, assessment resources, and so forth as appropriate and required for the project. 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 <u>online submission portal</u> by **deadline stated on the program website**.

Notes for proposers

- Refer to the <u>Innovation Grants webpage</u> 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 <u>Innovation Hub website</u> 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, or elsewhere). Participant support costs are allowed, such as funds for laboratory consumables.

Partnerships. Innovation Hub and Purdue Online leadership will facilitate partnerships as necessary with on-campus entities, including cost estimates. Project teams will have access to the network of Innovation Fellows (teaching and learning leaders with passion and expertise in a specific area), whose roles as project consultants will be funded by Innovation Hub or Purdue Online, as appropriate.

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 and Purdue Online 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 project manager assigned to the project, whose job it is to support and enable the success of the project.
- Collaborate with Innovation Hub and Purdue Online 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/or Purdue Online leadership (DocuSign).