

Using Generative Artificial Intelligence to Improve Instruction in Postsecondary Education (84.305C)

You can come/go as you like – you don't have to stay past your question but can!

Feel free to speak, raise your virtual hand, or use the chat box.

Let us know if you have questions about

- a) Eligible applicants
- b) The focused program of research
- c) Student outcomes (required and/or optional)
- d) Project Narrative: any of the six sections
- e) Requirements and Recommendations
- f) Budget
- g) Review process and funding decisions
- h) Working with IES program officers
- i) Other

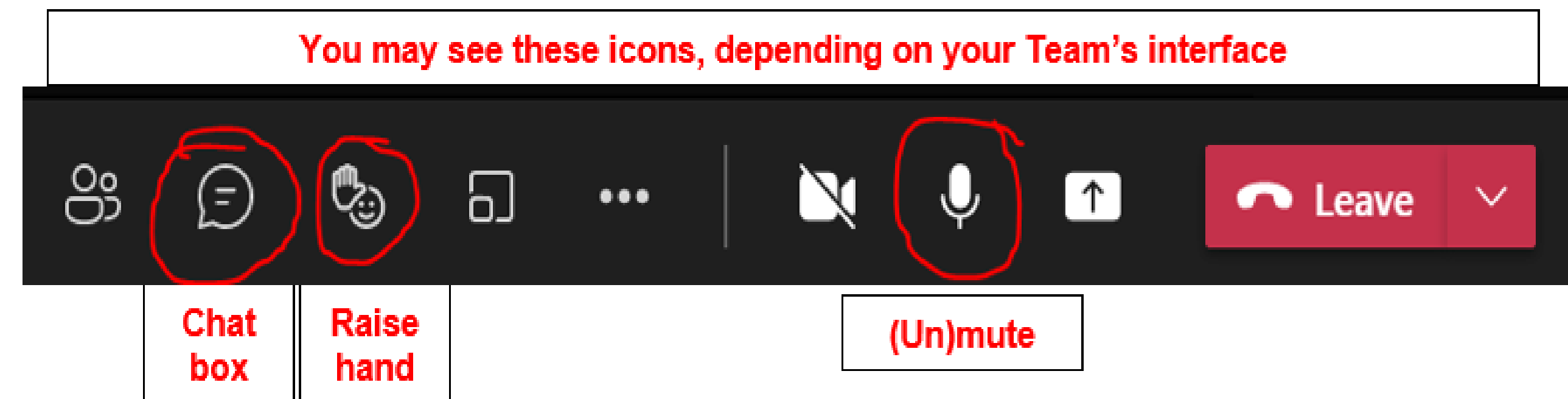
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Background for Virtual Office Hours

We will cover the highlights of the Request for Applications (RFA), but you will need to **read the RFA carefully** to develop a strong application that meets the requirements and recommendations!

<https://ies.ed.gov/funding/grantsearch/program.asp?ID=13>

- *Letter of Intent* due: **January 23, 2025**
- *Application* due: **11:59:59 Eastern Time on March 14, 2025**
- Maximum award: \$10 million
- Maximum length of grant: 5 years

Who is eligible to apply

Eligible Institutions: Institutions that have the ability and capacity to conduct rigorous research, including, but not limited to, non-profit and for-profit organizations and public and private agencies and institutions, such as colleges and universities.

NOTE: At least two postsecondary institutions, including at least one broad/open access postsecondary institution, **must** take part in the development and piloting of the generative AI tool for postsecondary instruction

- One of these can also be the applicant or they can both be postsecondary institutions working with the applicant

Postsecondary Instruction AI Center's Work

I. Program of Research focused on baccalaureate and/or sub-baccalaureate postsecondary instruction

1. Exploratory study
2. Iterative development
3. Pilot of promise study
4. Implementation support guide

II. Research Training

III. National Leadership, Capacity Building, and Outreach

Overview: Postsecondary Instruction AI Center

The Postsecondary Instruction AI Center will carry out a program of research on the use of generative AI in improving formal postsecondary instruction in postsecondary courses

The Center will focus on educators (e.g., faculty teaching courses, teaching assistants, tutors) using generative AI

- as part of the instruction they directly provide to students and/or
- that they assign to students to use to complete their coursework

Four components of the Program of Research

1. Exploratory Study

- Identify generative AI tools being used to improve postsecondary instruction
- May have a broad or narrow focus centered on a particular type of tool, postsecondary institution or program, educator, and/or postsecondary student

2. Iterative Development

- Develop at least one new or revise at least one existing generative AI tool designed for use in postsecondary instruction (with at least two institutions, at least one broad/open access)

3. Pilot of Promise Study

- Conduct a pilot study to assess the promise of the tool for improving postsecondary students' academic outcomes (achievement or postsecondary progress), educators' instructional outcomes, and other outcomes of interest

4. Implementation Support Guide

- Develop a guide on how to implement the new tool, if promise shown by pilot study, or a more general discussion of needs and supports for implementing similar types of tools

Program of Research (cont.)

For each research activity, you'll need to discuss –

- **Significance:** the importance of types of generative AI tools you'll be exploring, developing, and piloting and how your findings will support the postsecondary institutions involved, other postsecondary institutions, and research on postsecondary instruction using AI
- **Research Plan:** how you would carry out each research activity

See the Requirements and Recommendations for both the Significance and Research Plan

- ✓ **Requirements:** what must be met for your application to be peer reviewed
- ✓ **Recommendations:** what the reviewers use in their review of your application

Research Training

GOAL: To provide training to increase the field's capacity to carry out and disseminate high-quality research on the development, implementation, and evaluation of generative AI tools used in postsecondary instruction.

Consider and discuss:

- the knowledge, skills, and abilities that professionals (including education researchers, education technology developers, and postsecondary educators, institutional researchers, administrators, and policymakers) need to build the activities, products, and resources the Center will create to address their needs

Research Training (cont.)

- Also discuss how your training will improve researchers' capacity to
- carry out high-quality research on generative AI tools used in postsecondary instruction including both current and the next generation of researchers
 - disseminate the findings from high-quality research on generative AI tools used in postsecondary instruction

The RFA contains a set of Requirements and Recommendations for the Research Training

National Leadership, Capacity Building, and Outreach

GOAL: To be a trusted source of scientific research in postsecondary instruction using AI that can be used to improve education policy and/or practice and learner outcomes

Activities:

- Meet with the multiple stakeholders to learn their interests and how to make the Center's work useful to them (establish an advisory board)
- Disseminate findings and products from the four research activities (the Program of Research)
- Use the findings and products from the Program of Research, the Research Training, and the leadership/outreach/dissemination activities to build the field's capacity to improve postsecondary instruction using generative AI

The RFA contains a set of Requirements and Recommendations for National Leadership, Capacity Building and Outreach

Two other issues to describe

1) Management and institutional resources:

- Discuss the structure, management, resources including involvement of postsecondary institutions and stakeholders

2) Personnel:

- Identify the key persons responsible for each activity to be carried out by your Center (e.g., each research activity, research training, leadership, outreach, dissemination), their expertise and experience for such work, and their time contribution (FTE) to the Center
- Describe the PI and co-PIs expertise and experience for managing a grant of this size

The RFA contains a set of Requirements and Recommendations for Management and Institutional Resources and Personnel

IES program officers: Your best resource

Program officers can

- Discuss your ideas for the Center
- Provide feedback on drafts of your application

To discuss your research idea with a program officer

- Submit a letter of intent by 1/23/25 (requested not required) – the program officer will respond and ask if you would like to meet to discuss your ideas
- Email a short synopsis (~1 or 2 paragraphs) or questions to the program officer

The PO is available for discussion both before you submit and after you receive your reviews

List of applicant resources

Request for Applications (RFA)

Education Research and Development Center Program (FY 2025) — 84.305C

<https://ies.ed.gov/funding/25rfas.asp>

Program Officer

Dr. Meredith Larson – Meredith.Larson@ed.gov

IES Application Submission Guide

For information on preparing and submitting applications through Grants.gov

<https://ies.ed.gov/funding/25rfas.asp>

Grants.gov Support

For support on submitting your application through the portal

<https://www.grants.gov/support>

Discussion and Questions