

Fondren Fellows Project



Any questions can be directed to fondrenfellows@rice.edu

Name:

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Project Title:

Exploring Pedagogical Research at Rice and Beyond

Description:

This project involves working with Rice's Center for Teaching Excellence (CTE) to showcase pedagogical research conducted by members of the Rice community. The Fellow will design and implement search and cross-referencing strategies to discover Rice researcher-led pedagogical research and will design a training resource to disseminate this research to instructors.

Project Summary:

As the Center for Teaching Excellence (CTE) has recently entered its second decade, we have committed to conducting and disseminating pedagogical research as a central part of our mission. In order to accomplish this aim, we are proposing a project to answer two key questions:

- How has the role of pedagogical research in the CTE changed over time, and what are successes and barriers with regard to conducting pedagogical research at Rice?
- To what extent have Rice community members (faculty, staff, and students) engaged in pedagogical research, and what publications have stemmed from such research?

To answer these questions, we propose a three-phase project spanning two semesters. In the first phase, the Fellow and mentor will explore archival material about the CTE for insights into the role that pedagogical research has historically played in its mission, including successes and barriers, which will help to inform future directions for this initiative. In the second phase, we will identify and document the results of pedagogical research that has been conducted by Rice community members, particularly faculty, staff, and students who have engaged with the CTE. This phase will also involve developing search strategies that can be employed in future

iterations of this research. In the third phase, we will create a resource for instructors and graduate students that showcases evidence-based practices in college teaching, particularly those that were identified during the first two (discovery) phases of the project.

The project is suitable for a Fondren Fellow because it poses clear and focused research questions and uses existing CTE and library resources (databases and archives). It will also allow the Fellow to use their creativity and individual interests in two ways: to explore a more specific question within the discovered publications/presentations and to design the final product.

The project will primarily impact instructors at Rice through its dissemination of pedagogical research. However, there is potential for a broader impact, as instructors at other universities will have access to the findings through the method of dissemination chosen by the Fellow in collaboration with the CTE faculty and staff.

The project has good feasibility for several reasons. The mentor has worked with two Fondren Fellow projects in the past, and the goals of both projects were accomplished within the projected time frame. The CTE has a well-organized database of all past participants, which will facilitate cross-referencing with publication databases. The goals can be accomplished within a two-semester time frame, and the project requires intermediate-level knowledge of the research process rather than well-developed expertise on the part of the Fellow.

How many Fellows on the project?

1 Fellow

Key tasks:

Fall semester: Discovery

- Meet with the mentor and CTE faculty and staff to obtain an orientation to CTE mission and resources, pedagogical research, and to databases.
- Explore CTE material in the Woodson archives (if any) and CTE archives to determine the role of, successes within, and barriers to pedagogical research within the CTE's first decade.
- Create an iterative search process to cross-reference the CTE database with Fondren's databases of scholarly publications and presentations to identify CTE participants who have authored pedagogical research.
- Identify other Rice-led pedagogical research products (papers, etc.) not discovered through the previous cross-referencing process.
- Develop a specific question about the pedagogical research uncovered during this phase.

Spring semester: Dissemination

- Analyze, visualize, and summarize the findings from the archive and database review activities, with particular emphasis on the question the Fellow has developed.
- In collaboration with the mentor and CTE faculty and staff, design a resource to introduce instructors to pedagogical research, showcasing Rice researchers' pedagogical work.
- Time permitting, create the resource.

Qualifications for applicants:

- Intermediate-level knowledge of the research process, including skill in finding peer-reviewed scholarship on a specified topic
- Basic qualitative and/or quantitative data analysis skills
- Basic data visualization skills
- Strong motivation and work ethic
- Interest in disseminating evidence-based teaching practices
- Not required, but recommended: basic programming skills (e.g., Python) for automating searches and scraping data from the databases.

What would students learn through their participation in this project?

The project has the following proposed learning outcomes:

- Develop skill in finding relevant, analyzing, and summarizing pedagogical literature.
- Apply data analysis to answer a research question.
- Deepen understanding of evidence-based pedagogical practices.
- Strengthen both oral and visual communication skills, including visual design.