Teaching As Research at Hopkins: TAR@Hopkins

Program Overview

Johns Hopkins University is a member of the Center for the Integration of Research, Teaching and Learning (CIRTL). CIRTL’s mission is to enhance excellence in undergraduate STEM education through the development of a national faculty committed to implementing and advancing effective teaching practices for diverse learners as part of successful and varied professional careers. One of the three core pillars which form the foundation of CIRTL is Teaching-as-Research or TAR. Teaching-as-research is the deliberate, systematic, and reflective use of research methodology by instructors to develop and implement teaching practices that advance the learning experiences and student learning outcomes.

Through a CIRTL grant aimed at fostering this approach to instruction, Johns Hopkins has developed TAR@Hopkins to provide opportunities that support teaching-as-research projects. The TAR fellowship program, open to doctoral students and postdoctoral fellows in any STEM discipline broadly interpreted, is comprised of three parts: (1) a half-day assessment workshop, “Introduction to Assessment and TAR,” (2) three planning and design workshops that cover critical elements of effective assessment, and (3) a teaching practicum and learning community experience. TAR fellowships carry a stipend of $1,250 above the teaching stipend. Each TAR Fellow is asked to provide a short report at the conclusion of the TAR project and agree to make a brief presentation to other doctoral students and postdoctoral fellows in the Johns Hopkins Preparing Future Faculty Teaching Academy.

To Apply:  https://collaborate.johnshopkins.edu/sites/PFFTA/page/TAR-apply.aspx

What is involved?

For TAR projects to be conducted in the 2015 Fall or 2016 Intersession terms, apply by July 3rd.

⇒ In August, attend the ½ day Assessment Workshop* and three 1-hour sessions (on developing learning objectives, devising active learning activities, locating assessment research in your discipline) to help you develop your TAR project.
⇒ Attend three additional 1-hour "learning community" sessions with other TAR Fellows over the period of your course to support the implementation of your TAR project implementation.
⇒ Write and present your final report!
⇒ ✓ Receive stipend.

For TAR projects conducted in the 2016 Spring or Summer terms, apply by November 1st.

⇒ In January, attend the ½ day Assessment Workshop* and three 1-hour sessions (on developing learning objectives, devising active learning activities, locating assessment research in your discipline) to help you develop your TAR project.
⇒ Attend three additional 1-hour "learning community" sessions with other TAR Fellows over the period of your course to support the implementation of your TAR project.
⇒ Write and present your final report!
⇒ ✓ Receive stipend.
*Note: TAR Fellows who attend the May Summer Teaching Institute are not required to attend the ½ day Assessment workshop as this material will have been presented during the Summer Teaching Institute.

By the end of the TAR@ Hopkins Fellowship, STEM doctoral students and postdocs will be able to:

- Define the research question(s) at the core of their TAR projects
- Conduct literature reviews that inform their TAR research designs
- Develop a TAR protocol, including construction of an hypothesis about projected instructional innovations or increased learning gains
- Design or identify data collection instruments and collect data
- Describe the IRB process – or, if applicable – submit IRB exemption application
- Analyze data collected
- Evaluate and summarize results
- Present findings

**Part I: Introduction to Assessment & Teaching-as-Research (TAR) Workshop**

This is a half-day workshop offered twice per year – once during Intersession (for those with spring or summer teaching appointments) and the other, in August (for those with fall or intersession teaching appointments). This is an introductory workshop that covers various assessment approaches and tools, offers an introduction to the IRB process, and examines challenges inherent in educational research. A formal Teaching-as-Research practicum option is also described. There is no fee to attend. The Assessment workshop is open to any Johns Hopkins STEM doctoral student or postdoctoral fellow; it has been developed to support those preparing to teach and those interested in teaching assessment, in the programs below or in other teaching opportunities:

- Bloomberg School of Public Health Gordis Teaching Fellows
- Krieger School of Arts and Sciences Postdoctoral Fellows
- Krieger School of Arts and Sciences Dean's Teaching Fellows
- Krieger School of Arts & Sciences SOUL Program
- Preparing Future Faculty Teaching Academy Participants
- School of Medicine Teaching Fellows
- Whiting School of Engineering HEART Fellows
Part II: Planning and Design Workshops

Part II is a series of three, 1-hour workshops offered in August for fellows conducting TAR projects in the fall or intersession terms and in January for fellows conducting TAR projects in the spring or summer terms. These workshops present information that prepares TAR fellows to implement a CIRTL-defined full-inquiry cycle project. By the end of Part I, students will a) identify discipline-relevant educational research literature; b) develop hypotheses related to student learning outcomes; c) design instructional activities and strategies to test their hypotheses; d) understand the process for developing an IRB exemption application; e) identify data collection instruments to gather information; and f) analyze the data collected to test the hypothesis.

During this part of the practicum, facilitators will help students plan and design their TAR projects. Topics will be introduced by faculty and Center for Educational Resources instructional design staff who will also facilitate discussion and give feedback on the participants' TAR project designs and assessment strategies.

Specific topics covered in Part II of the practicum include:

- How does TAR fit into the landscape of educational research (e.g., Science of Learning)
- How to perform a literature review in educational research
- Formulating a project topic and hypothesis (including scope and feasibility)
- Overview of the Institutional Review Board process: application, submission, approval timeframe, etc.
- Including active learning activities in your course
- Formulating concrete learning objectives that can be assessed
- Identifying assessment tools

Part III: Teaching Practicum and Learning Community

Part III of the TAR practicum provides support and mentorship while the TAR Fellows implement, collect data, and analyze their TAR projects. A facilitated learning community supports TAR Fellows through their teaching assignments and TAR project implementations. The group shares ideas and challenges as they conduct their TAR projects. Three 1-hour sessions are held to give TAR fellows the opportunity to discuss their course implementations and TAR projects, and present their data and analyses to peers.

Discussion topics that may be covered in Part III of the practicum may include:

- Project design from a statistical perspective
- Survey design
- Introductory qualitative and quantitative data analysis topics
- Outcomes / Final Poster Presentation

Resources to help develop your TAR project

JHU TAR Presentation Template
TAR Framework/Rubric
CIRTL TAR Workshops/Recordings
Examples of TAR Projects
CIRTL TAR Learning Community Page and Resources

Opportunities for disseminating your findings

A JHU Poster Session
CIRTL Network Meeting
Lilly Conference
Professional and Organizational Development Network in Higher Education (POD)
2016 Gateway Science Initiative/Science of Learning Symposium
Professional discipline-focused meeting