

Postdoctoral Research Fellow Position for National Science Foundation Research Study in Mathematics and Science Teacher Education

Educational Testing Service (ETS) is seeking a postdoctoral researcher to contribute to a National Science Foundation study focused on developing a suite of practice-based activities for synchronous and asynchronous integration within online and face-to-face elementary and secondary mathematics and science education courses to help preservice teachers learn how to facilitate argumentation-focused discussions. The practice-based activities include: (1) interactive, online digital games that create targeted practice spaces to engage preservice teachers in considering and responding to students' content-focused ideas and interactions; (2) performance-based tasks that provide opportunities for preservice teachers to practice facilitating discussions with a group of five upper elementary student avatars in a simulated classroom; and (3) a virtual reality environment that allows for verbal, textual and non-verbal interactions between a teacher avatar and 24 student avatars in an immersive whole classroom environment. Support materials will complement each of the three activities to help teacher educators productively use and integrate these activities into their mathematics and science methods course. The overall research project is a collaboration between multiple partners at ETS, Indiana University, Massachusetts Institute of Technology, Towson University, and the University of North Carolina at Chapel Hill. A short description of this NSF project can be found at: <http://cadrek12.org/projects/online-practice-suite-practice-spaces-simulations-and-virtual-reality-environments>

Responsibilities include, but are not limited to:

- Complete orientation on the overall project goals and outcomes
- Participate substantively in project research including qualitative and quantitative data analysis and overall project management
- Oversee work across the project's partner institutions to coordinate the main study data analysis and dissemination
- Maintain project databases
- Propose, lead, and participate in professional presentations at state, regional, and national conferences of relevant professional organizations focused on a wide variety of foundational research and development issues related to understanding mathematics and science teaching quality and assessment
- Author conference proposals and manuscripts based on the project's research and development work and findings

Completion of Ph.D. degree is required. Strong background in K-12 science and/or mathematics education, assessment, and/or teacher education/professional development is required for this position, with preference given to background in grades 4-8. Previous experience with and familiarity with the Common Core Standards in Mathematics and the Next Generation Science Standards as well as knowledge about and/or experience with teaching elementary and/or middle school mathematics and/or science is preferred.

Start date for the position would be as soon as possible but no later than January 1, 2023. The appointment is through July 2023. Work can take place remotely. Some travel to partner

institutions and conferences may be required. Compensation will be commensurate with experience.

If you are interested in applying for this position, please submit an application at: <https://etscareers.pereless.com/index.cfm?fuseaction=83080.viewjobdetail&JID=352701&BUID=2538&cid=83080>. A complete application should include a cover letter, curriculum vitae, research statement, and two writing samples. Any inquiries about the position should be directed to Dr. Jamie Mikeska at jmikeska@ets.org.