

**ASSISTANT PROJECT SCIENTIST
SCIENCE EDUCATION TECHNOLOGY
GRADUATE SCHOOL OF EDUCATION
UNIVERSITY OF CALIFORNIA, BERKELEY**

SCIENCE AND TECHNOLOGY

We seek a full time project scientist to join our research group in science and technology education. (See TELSCenter.org for more details.)

The project scientist will work in a multidisciplinary collaboration funded by the National Science Foundation, including leaders in education, technology, and the science disciplines. Dr. Marcia Linn, at University of California Berkeley, is the Principal Investigator. Lydia Liu, at Educational Testing Service, Inc. directs a subcontract on automated scoring and analysis.

This position is for a research leader under PLANS (Project Learning with Automated, Networked Supports), a National Science Foundation project awarded May 1, 2015, which seeks to transform science and engineering (S&E) education by combining *investigation* and *analytic* technologies to guide students' design projects. The work draws from current research on teaching, learning, computer science, software design, and computational linguistics. The group builds on previously successful uses of technology such as the Web-based Inquiry Science Environment (WISE). This research will contribute to design and assessment frameworks to guide future education researchers, curriculum and assessment designers, and policy makers.

The project scientist will be part of a team of researchers engaged in creating new technologies to design and assess open-ended inquiry activities to improve student understanding of complex science topics. PLANS will create a genre for extensible, progressive, project learning materials that develop students' abilities to combine science practices, disciplinary concepts, and crosscutting themes to create and test designs for contemporary problems such as climate change or energy conservation. This integration will enable PLANS to research strategies for guiding students to gain coherent understanding of the science concepts, practices, and cross-cutting themes called for in the Next Generation Science Standards (NGSS). PLANS uses advanced analytics that draw on logs of students' actions and scores of their products (e.g., models, graphs, sketches, critiques, and explanations) to monitor progress and provide individualized guidance. PLANS will investigate how analytic tools in a project-based learning environment can help students achieve deeper understanding of science.

The project scientist has research group management responsibilities and will be expected to coordinate the development and testing of technology-enabled learning resources for student-led projects created by technology experts, graduate student researcher, and classroom teachers. This will include developing assessments, creating materials for student-led projects, designing research for the projects, and writing reports. The project scientist will collaborate with experts in analytic technologies to identify ways to guide students toward deeper understanding. This will include creating indicators, coordinating data collection, and coordinating design of models to deliver guidance.

Basic qualifications required to be considered an applicant for the position are a PhD or equivalent degree in a relevant field (e.g. education, psychology, mathematics, natural science, engineering, computer science etc.). Applicants must have undergraduate degree or equivalent degree in the natural sciences, engineering, mathematics, or computer science.

Additional Qualifications:

- Applicants must demonstrate the ability to work on a team, skill in collaborating with teachers and school leaders, interest in working in partnerships to develop innovations
- Strong writing skills
Ability to customize technologies such as software design tools, and interest in designing and analyzing complex research studies conducted in school settings

Preferred qualifications:

- Experience in the design, implementation, and analysis of science materials and assessments
- Familiarity with data mining and analysis techniques
- Ability to apply quantitative analysis skills to complex data sets
- Applicants must have 3 years teaching experience in U.S. public schools
- Applicants must have 5 years research experience relevant to the learning sciences

This position will be open until filled. We seek a candidate who can start as early as October, 2015. Start date is negotiable. The position has an annual salary ranging from \$57,000-\$63,300. The position is for one year with possible renewal for a second and third year. Berkeley has an excellent benefits package and a number of policies and programs in place to support employees as they balance work and family.

All interested applicants should apply at <https://aprecruit.berkeley.edu/apply/JPF00811>. For information about the position or applications process, please contact Elizabeth Geer at emgeer@berkeley.edu

A completed application will include 1) Cover Letter, 2) Updated Curriculum Vitae, 3) Statement of Purpose, 4) Contact information for three to five professional references.

All letters will be treated as confidential per University of California policy and California state law. Please refer potential referees, including when letters are provided via a third party (i.e., dossier service or career center), to the UC Berkeley statement of confidentiality (<http://apo.berkeley.edu/evalltr.html>) prior to submitting their letters.

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The University of California is an Equal Opportunity/Affirmative Action Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability, age or protected veteran status. For the complete University of California nondiscrimination and affirmative action policy see: <http://policy.ucop.edu/doc/4000376/NondiscrimAffirmAct>.

The school/department is interested in candidates who will contribute to diversity and equal opportunity in higher education through their teaching or research.