

Job Announcement

Science Educator, Instructional Material Development for Informal STEM Learning

Position Title: *Science Educator*

Reports To: Principal Scientist, BSCS

Date: 2/25/22

BSCS Science Learning (BSCS) has an immediate opening for a Science Educator to develop engineering education resources for informal STEM learning and teaching. We are looking for someone to join a project that is developing a set of museum-based activities and instructional materials for educators, families, youth, and public audiences. We seek a motivated, creative individual who shares our mission of transforming science education, and our commitment to equity and social justice.

About BSCS Science Learning

BSCS Science Learning is an independent, nonprofit organization that develops, studies, and disseminates powerful approaches to science education. Our mission is to improve science teaching and learning through research-driven innovation. Founded in 1958, BSCS has brought the experience of inquiry learning to millions of students and teachers across the U.S. and around the world. Today, BSCS conducts research on how to improve science teaching and learning, develops instructional materials, offers professional learning programs for leaders, teachers, and educators; and conducts leadership development programs for schools and districts. Underlying all this work is our commitment to providing all young people with equitable, inclusive, and just science learning opportunities.

The Role of a Science Educator at BSCS

Science Educator is a position of substantial professional responsibility at BSCS. Science educators serve as key personnel on innovative research and development projects, taking independent responsibility for one or more of the following: designing and developing instructional materials in STEM, developing and implementing professional learning programs, and conducting research and evaluation on science teaching and learning. Often science educators work in different roles across two or more projects.

Responsibilities of this Position

This science educator will play a central role in the design and development of innovative engineering education activities, demonstrations, mobile education applications, and a website that will focus primarily on the topic of modern radio, wi-fi communications, and cellular technologies. In this role, the science educator will work closely with BSCS staff, museum educators, and independent contractors. They will be responsible for writing learner activity guides, facilitation guides for educators, and mobile web content using key ideas, design values, and STEM concepts identified in a specific learning framework that includes culturally relevant approaches to design. These activities and activity guides will be designed for use by informal educators working in museums, science centers, and other out-of-school learning environments across the country. These materials are intended to support greater awareness, interest, participation, and understanding of the science and engineering of radio frequency communications; and socio-scientific issues related to radio technologies for public audiences, families, and youth.

We seek a strong science communicator and writer who can work independently as well as as a thought-partner to co-design materials with diverse audience groups including Spanish-speaking and Latinx communities. This work includes the following:

- Participating as a team member in a co-design process with informal educators, disciplinary experts, and youth
- Identifying and using appropriate science resources to support family, visitor, and youth learning (e.g., data, images, videos, simulations).
- Writing educator-facing activity guides, tip sheets, and training materials; and visitor-facing explanations and signage, and
- Contributing to the management and production process to finalize the materials.

Abilities and Expertise

This position requires a background in science or engineering education and expertise in developing instructional materials as described below.

Minimum Requirements:

- Expert at developing instructional materials for middle-school level learners, including experience writing for public audiences and informal educators.
- Understanding of physics of radio, electromagnetic radiation, wifi digital and analog data communications, and how cellular networks operate.
- Ability to manage complex work and achieve specified goals under time and resource constraints
- Ability to collaborate effectively in diverse groups across a variety of contexts;
- Excellent writing and oral communication skills.

Any of the following are desirable:

- Science content and science teaching (pedagogical content) knowledge for physical sciences, physics, electrical engineering, and/or mechanical engineering
- Experience developing content for multimedia products including websites and apps
- Familiarity with working with museums and informal STEM education staff
- Expertise in supporting emergent multilingual learners and youth
- Experience designing for or working with historically marginalized populations

Essential Qualities

The following are required to function effectively in this position:

- A commitment to improving science education;
- A commitment to equity and social justice in education;
- Strong internal motivation;
- Flexibility and openness.

Additional Information about the Position

This is a limited term position, tied to specific project funding. The term is two years, with the option of an extension based on funding.

We are open to remote work arrangements for this position. Preference will be given to individuals who are in the San Francisco Bay Area, where the project leads are located, or willing to relocate.

This position will require travel to museum and community sites for project meetings and evaluation. (BSCS has temporarily suspended travel requirements for all positions in response to the COVID-19 pandemic.)

Salary range: The full-time, annual salary range for this position is \$80-95,000, depending on experience and qualifications.

To Apply:

Applicants should email the following items to careers@bscs.org. Please put "Science Educator, Informal" in the subject line.

1. Resume or curriculum vitae.
2. Educational Statement (1 page) that describes relevant prior experiences in instructional materials development in informal learning and teaching related to science, technology, and engineering education.
3. Diversity, Inclusion, and Social Justice Statement (1 page) that describes (1) relevant prior experience responding to the interests, social identities, and obstacles to learning faced by marginalized populations, and (2) your views about equity, inclusion, and social justice in science education and how they have been shaped by your educational, personal, and/or professional experiences.
4. Instructional materials sample. Please include a sample of instructional materials on which you were the lead writer or a significant co-writer. If possible, include both teacher and student materials. Please limit the sample to 25 pages.
5. Cover letter. In your cover letter, please describe your interest in the position and whether you desire to work in San Francisco or remotely.

We will begin reviewing applications on March 18, 2022 and will continue to accept applications until the position is filled.