

3M STEM Equity Program

Request for Proposals

**Introduction**

3M is seeking a national STEM nonprofit to support a STEM program that helps advance equitable outcomes for underrepresented\* and under-resourced\*\* students.

**Statement of Need**

As a science-based company that applies science to life, 3M leverages our 46 technology platforms to create products to improve lives. 3M has a longstanding commitment to education and developing tomorrow’s workforce through strategic investments in STEM and skilled trades and through sharing the time and talents of our people.

We recognize the growing racial, gender and economic disparity gap in education, especially STEM, for students across the country. The disparities in proficiency manifest at an early age despite similar levels of interest between ethnic groups.¹ Only 19% of African American fourth graders scored proficient or above in math and 15% in science compared to 51% of White students in both subjects.² Hispanic and American Indian/Alaska Native students performed only slightly better. This persistent opportunity gap reduces the pool of talent focused on using science to solve some of the world’s most pressing sustainability challenges.

Increased exposure to STEM including participating in high-quality STEM programs increases students’ engagement with STEM. A study by the Afterschool Alliance found that quality STEM programs increase STEM skills and proficiencies. To address these disparities and to encourage broader participation in STEM and skilled trades, we aim to work with community partners that will help us achieve our goal of advancing equity in STEM for one million underrepresented and under-resourced students in STEM and Skilled Trades.

We are seeking a partner to help us reach this goal by focusing on the following three objectives:

1. Enhance student knowledge of the role of STEM in solving some of the world’s most pressing challenges.
2. Increase exposure to STEM and Skilled Trades careers.
3. Increase student participation in high-quality STEM programming and higher-level STEM coursework.

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*\*3M is using the National Science Foundation’s definition of underrepresented. NSF defines underrepresented students in STEM as women, persons with disabilities, and three racial and ethnic groups—blacks, Hispanics, and American Indians or Alaska Natives.*

*\*\*For under-resourced, 3M focuses on Title 1 schools. Where 40% of the students are on free or reduced lunch.*

Business Higher Education Forum (2011): http://www.bhef.com/sites/default/files/BHEF\_2011\_stem\_inerest\_proficiency.pdf

ACT The Condition of STEM 2016 (2016):

https://www.act.org/content/dam/act/unsecured/documents/STEM2016\_52\_National.pdf

Math: Nation’s Report Card (2017): https://www.nationsreportcard.gov/reading\_math\_2017\_highlights/  
Science: National Assessment of Educational Progress (2015): https://nces.ed.gov/nationsreportcard/

**Grant Overview**

To help middle to high school underrepresented and under-resourced students advance in STEM and Skilled Trades, 3M will invest in an organization/program with a tested and proven approach to addressing STEM equity.

**Proposal Guidelines**

*All proposals will be reviewed by a committee and competitively ranked.*

**Organization’s Mission**

* Provide an overview of the organization’s mission.
* Describe how the goals of the organization align with the objectives of this RFP.
* Describe the diversity of your organization’s leadership, including your board of directors.

**Support of Underrepresented and Under-Resourced students in STEM**

* Describe how your organization is currently reaching and supporting marginalized students. Be sure to include:
  + A description of your student outreach efforts.
  + A description of how the organization currently identifies and addresses barriers for underrepresented and under-resourced students.

**Program Information**

* How will the grant be used to support 3M’s goal of helping underrepresented and/or under-resourced students advance in STEM and Skilled Trades. Be sure to include:
  + Information on how your organization will select the barriers to success for these students.
  + Details on how the program will help students overcome these barriers

**3M Volunteer and Community Engagement**

• Describe how 3M volunteers will engage in the program. Be sure to include:

* + An explanation of how you would integrate 3M’s Science Encouragement volunteer opportunities, i.e, 3M Visiting Wizards and the 3M TECH (Technical Teams Encouraging Career Horizons).
* **3M Visiting Wizards** share the magic of science with students through demonstrations and hands-on experiments. This program allows students to see science applied in demonstrations ranging from catapults to cryogenics.
* **3M TECH** gives students an opportunity to learn about different scientific and technical careers from 3M scientists and technical employees. For more information on these programs, visit [www.3Mgives.com](http://www.3Mgives.com)
* For a list of 3M Locations, visit[**www.3Mgives.com**](http://www.3Mgives.com)
  + Additional proposed volunteer strategies

Impact Measurement

* + Describe the metrics/program evaluation that will be used to track success. Be sure to include:
    - The impact category which best represents the STEM or Skilled Trades work the 3M grant will support *(select one)*
      * Connect: The number of underrepresented and/or under-resourced students reached by an activity who can report some limited change as a result of an activity (e.g. raised awareness of opportunities to improve literacy skills)
      * Improve: The number of underrepresented and/or under-resourced students who can report some substantive improvement in their lives as a result of the activity (e.g. actually able to read better)
      * Transform: The number of underrepresented and/or under-resourced students who can report an enduring change in their circumstances, or for whom a change can be observed, as a result of the improvements made (e.g. got a job as a result of improved literacy)
  + Specific quantitative/qualitative indicators to measure the expected outcomes of each identified intervention. These should include:
    - Enhancing student knowledge of STEM and Skilled Trades careers.
* Number of careers exposed to them
* Providing access to STEM role models with similar backgrounds.
* Number of mentors, number of fields represented by mentors and the regional relevance of jobs to which students were exposed
  + Increasing student participation in high-quality STEM programming and higher-level STEM coursework.
    - * + Student participation numbers and student surveys
        + Measure participation level increases
  + Theory of Change Model – Please view the sample model. Note that the strategies of the sample in the dashed boxes are examples. Please provide specific resources, interventions, outcomes and indicators for your proposal.

**Budget Information**

Total budget required to implement proposal $100,000 - $250,000 over 2 years, with opportunities to expand in future years.

Submission Requirements

Applicants should submit a power point presentation describing the problem/barrier, the proposed program, an implementation plan and key success measures. Proposals should include a Theory of Change model using the attached template.

Submission Deadline: May 30

*All inquiries and questions can be emailed to: jlberry@mmm.com*

