Afterschool STEM Impact Awards 2013

Sponsored by the Noyce Foundation

The Afterschool Alliance and the Noyce Foundation invite applications for one of two $10,000 Afterschool STEM Impact Awards! As afterschool STEM programming grows around the nation, we would like to recognize programs that are clearly demonstrating their impact on participants. Such programs highlight the power of afterschool programs as key partners in STEM education reform and can also serve as best-practice models.

In addition to the cash award, winners and other notable applicants will be promoted nationally through a variety of opportunities—they will be featured in a special series of Afterschool Alliance issue briefs, invited to participate in webinars, co-present at national and state conferences, and generally highlighted as model programs.

Applications for this year are invited for one of two award categories:

1. **Afterschool programs that are a strong partnership between an afterschool provider and a STEM-rich institution(s),** which include science centers or museums, nature centers, universities, government labs, STEM-related businesses, or other similar institutions. Programs may focus on any STEM topic.

   OR

2. **Afterschool programs that have a strong computing and/or engineering component**.
   a. Rigorous K-12 computing education is more than learning to use a computer, building a spreadsheet, writing website content or even editing images in Photoshop. It's about problem-solving, computational thinking and abstract reasoning across a broad range of subjects. It's not learning how to use technology—it's acquiring the skills and knowledge required to create technology. For the purposes of this contest, computing includes but is not limited to coding, programming mobile apps, and software or hardware design.
   b. Engineering is about creative, iterative problem-solving—often across a variety of discipline areas. Programs should be rooted in the engineering design process, and students should be developing and building a solution to a problem.

To be eligible to apply, programs <u>MUST</u>:

- **Offer the STEM program during the school year (before school, after school and/or on weekends).** Summer-only programs are not eligible.

- **Offer the STEM program for students in 4th through 8th grade.**

- **Serve students from populations under-represented in STEM fields**, including rural or low-income populations; girls; students of African American, Hispanic, or Native American ethnic background; English Language Learners (ELL); and students with disabilities.

- **Have been offering the STEM program for two years or more.** The second year can include the 2012-2013 year.

Submission Deadline: May 15, 2013 at 11:59 p.m. EDT.

Application Survey Link: https://www.surveymonkey.com/s/STEMimpact

Additional Guidelines:

- We encourage all applicants to **review the questions below and generate their responses prior to beginning the online application**. Once you begin filling out the online application, you must finish. Answers cannot be saved or returned to at a later date.

- One section in the application requires you to read and apply the report *Defining Youth Outcomes for STEM Learning in Afterschool*. See page 7 for more information.

- By submitting an application, each applicant agrees that the Afterschool Alliance and the Noyce Foundation may use the contents of the application for purposes of promoting our missions, which includes, but is not limited to, use in brochures, program profiles, letters, websites, and other promotional materials.

If you have any questions about applicant requirements, answering the application questions, or technical difficulties with the online application please contact Melissa Ballard, Research Assistant, at mjballard@afterschoolalliance.org or call (202)347-2030.

BASIC INFORMATION

Personal information will not be shared with or distributed to any third party.

1. Please tell us about the applying program.

Program Name:	
Lead Organization/Agency:	
Program Contact & Title:	
Address:	
City/Town:	
State:	
ZIP:	
Website:	
Email Address:	
Phone Number:	

2. Please provide your contact information.

Name	
Title & Organization	
Address:	
City/Town:	
State:	
ZIP:	
Email Address:	
Phone Number:	

3. Would you like to receive email updates from the Afterschool Alliance? (yes/no)

REQUIRED CHARACTERISTICS

4. Does the STEM program operate during the school year (before school, after school, and/or on weekends)? (yes/no)

5. Does the STEM program target students in 4th-8th grade? (choose one)
   - o Yes (choose all that apply)
     - □ 4th grade
     - □ 5th grade
     - □ 6th grade
     - □ 7th grade
     - □ 8th grade
   - o No

6. Does the STEM program serve populations under-represented in STEM fields? These include rural or low-income populations; girls; students of African American, Hispanic, or Native American ethnic background; English Language Learners (ELL); and students with disabilities. (yes/no)

7. Including the 2012-2013 school year, how long has the STEM program been active? (choose one)
   o   Less than 2 years
   o   2 to 5 years
   o   6 to 10 years
   o   More than 10 years

AWARD CATEGORIES

8. Which award category is the STEM program applying for? (choose one):

   o   Partnerships

   Meaningful partnerships with STEM-rich institutions can improve and amplify the quality and outcomes of an afterschool STEM program. Discuss how the partnership developed, as well as the mission and vision of the applying program. Please include a description of what each partner provides and the responsibilities to the other partner(s). (250 words or less)

   o   Computing and/or Engineering

   Rigorous K-12 computing education is about problem-solving, computational thinking and abstract reasoning across a broad range of subjects. It's not learning how to use technology—it's acquiring the skills and knowledge required to create technology.

   Engineering is about creative, iterative problem-solving—often across a variety of discipline areas, rooted in the engineering design process.

   Identify the aspects of and application area of computing and/or engineering the STEM program focuses on and how the program design enhances this type of learning and thinking. Please include a brief description of the history, mission and vision of the program. (250 words or less)

PROGRAM DETAILS

9. What are the intended goals and outcomes of the STEM program? (100 words or less)

10. Describe how the STEM program measures its success. What type of data do you collect related to program goals? Who is responsible for data collection and analysis? Please list any assessment tools used. Program results are to be detailed in the next question. (150 words or less)

11. Please share any data and outcomes of the applying program. (150 words or less)

12. What strategies are used to target and engage under-represented populations? (100 words or less)

13. Do you believe that your STEM program is scalable? If yes, please describe any steps taken toward this end or the plan for doing so. If not, this does not count negatively against your application, but tell us what it would take for you to scale your program. (100 words or less)

   These are some example characteristics of programs with the potential for scaling:

   - Replicable curriculum
   - Training model for staff and/or volunteers
   - Overall structure or model that isn't unique to one situation or geographic area

- Flexibility to work in different systems, areas, etc.

- Access to staff and/or volunteers to implement in different areas

14. What is the program's plan for sustainability? In your response, be sure to discuss organizational commitment, future funding sources and other resources necessary to support the program. (100 words or less)

15. If your program wins the Afterschool STEM Impact Award, how will the $10,000 be used? A detailed budget is not necessary. Please note that a small portion of the award monies will need to be used to cover conference travel in order to share your program's model with others in the field. (50 words or less)

AFTERSCHOOL ALLIANCE OUTCOMES FRAMEWORK

The Afterschool Alliance recently released a report, *Defining Youth Outcomes for STEM Learning in Afterschool.* The study reflects a consensus from expert afterschool practitioners and supporters on the appropriate and feasible outcomes for children and youth participating in afterschool STEM programs. The report defines a set of indicators and sub-indicators that support those outcomes, which are intended to provide a common framework and language for programs to utilize as they talk about their goals and outcomes.

Please read the report, particularly focusing on Table 3 on page 18, and tell us the sub-indicators observed from students participating in your STEM program.

Not all programs will see evidence of all the sub-indicators and we do not expect them to do so. The afterschool field is hugely diverse and the impacts are entirely dependent on the situation and focus of each program.

Select all that apply and give examples of evidence for each of the sub-indicators selected.

16. Outcome A, Indicator 1: Active participation in STEM learning opportunities

    □   Active engagement and focus in STEM learning activities

    □   Pursuit of other out-of-school-time STEM learning opportunities

    □   Pursuit of school STEM learning opportunities

    Examples of evidence for any sub-indicators selected (50 words or less):

17. Outcome A, Indicator 2: Curiosity about STEM topics, concepts or practices

    □   Active inquiries into STEM topics, concepts or practices

    □   Active information-seeking about mechanical or natural phenomena or objects

    Examples of evidence for any sub-indicators selected (50 words or less):

18. Outcome B, Indicator 1: Ability to productively engage in STEM processes of investigation

    □   Demonstration of STEM knowledge

    □   Demonstration of STEM skills

    □   Demonstration of an understanding of STEM methods of investigation

    Examples of evidence for any sub-indicators selected (50 words or less):

19. Outcome B, Indicator 2: Ability to exercise STEM-relevant life and career skills

   □   Demonstration of mastery of technologies and tools that can assist in STEM investigations

   □   Demonstration of ability to work in teams to conduct STEM investigations

   □   Demonstration of applied problem-solving abilities to conduct STEM investigations

   Examples of evidence for any sub-indicators selected (50 words or less):

20. Outcome C, Indicator 1: Understanding of value of STEM in society

   □   Demonstration of an understanding of relevance to STEM to everyday life, including personal life

   □   Demonstration of knowledge of important civic, global and local programs that can be addressed by STEM

   □   Demonstration of awareness of opportunities to contribute to society through STEM

   Examples of evidence for any sub-indicators selected (50 words or less):

21. Outcome C, Indicator 2: Awareness of STEM professions

   □   Development of an understanding of the variety of STEM careers related to different fields of study

   □   Demonstration of knowledge of how to pursue STEM careers

   □   Demonstration of awareness that STEM is accessible to all

   Examples of evidence for any sub-indicators selected (50 words or less):

PROGRAM DEMOGRAPHICS

22. How would you characterize the community the STEM program serves? (check all that apply)

    □ Urban

    □ Rural

    □ Suburban

23. Percentage of STEM program participants that are:

Female	
Male	

24. What ethnic groups (by percentage) are served by the STEM program?

Asian/Pacific Islander	
African American	
Caucasian	
Hispanic/Latino	
Native American	
Other	

25. Percentage of STEM program participants that:

Qualify for federal free or reduced lunch program	
Are Limited English Proficient (LEP)	
Have special needs or disabilities	

PROGRAM OPERATIONS

26. Is the STEM program offered at more than one site? (choose one)

    o No, the program operates at only one site.

    o Yes, but only one individual site is applying for this award.

    o Yes, and this application is inclusive of all sites
      How many total sites offer the STEM program for 4th through 8th graders?

27. How often is the STEM program offered:

On average, how many days a week does the STEM program operate during the school year?	
How many hours per day does the STEM program operate?	
What is the total number of weeks the STEM program runs during the school year?	

28. Please tell us about the afterschool program's participation numbers.

What is the annual enrollment for children of all ages served by the comprehensive afterschool program?	
How many 4th-8th grade students participate in the comprehensive afterschool program?	
How many 4th-8th grade students participate in the STEM component of the afterschool program?	
What is the average session attendance of 4th-8th grade students in the STEM component?	

29. Where is the STEM program held? (choose one)

- o School site
- o Museum, science center, zoo, aquarium, nature center, etc.
- o Library
- o College or university
- o Community-based organization (such as the YMCA, Boys and Girls Club, etc.)
- o Recreation center
- o Faith-based organization
- o Other (please specify)

PROGRAM FUNDING

30. Is the applying organization a 501(c)(3)? (yes/no)

31. What are the STEM program's current funding sources? (check all that apply)

- □ 21st Century Community Learning Center initiative
- □ Child Care and Development Fund
- □ Title 1 (School Improvement Grants, SES, etc.)
- □ USDA Afterschool Snack or Afterschool Meal program
- □ School district, city or county funds
- □ Corporate
- □ Philanthropic foundations
- □ Individual donations
- □ State funding
- □ Parent fees
- □ Other (please specify)

FINAL QUESTIONS

32. How did you hear about the Afterschool STEM Impact Awards? (check all that apply)

    □ Afterschool Alliance communication

        □ Website

        □ Facebook

        □ Twitter

        □ Email

        □ Afterschool Advocate newsletter

        □ Afterschool Snack blog

    □ Colleague

    □ Conference

    □ Other organization (please specify)

    □ Other (please specify)

33. Please type your name below to agree with the following statement, which allows the Afterschool Alliance to use the contents of your application for purposes of promoting our mission.

    I hereby grant the Afterschool Alliance permission to use the name of the applying program and organization as well as the contents of this application to promote the mission and programs of the Alliance. Content may be used in brochures, program profiles, letters, websites and other promotional materials.

    Name: Date: