Making the Case for STEM Afterschool

We know afterschool programs are a great way to get children and youth excited about STEM and should be integral partners in STEM education. But far too many of our leaders (and even our neighbors!) think of afterschool programs as child care, unaware of all the incredible learning opportunities programs are creating for our students. They have no idea that innovative and engaging STEM learning is occurring in afterschool programs across our country or how it is inspiring our next generation of scientists, engineers and mathematicians.

This is why educating our leaders and the public through advocacy is so important! It is vital that all of us make the case to a variety of stakeholders about the importance of including afterschool programs in STEM education reform efforts. Working through the following questions will help prepare you to make the case for afterschool STEM learning.

Determining Your Audience

Understanding your audience will help you gather the most relevant material and allow you to create messages that will be most effective. It is important that you think carefully about who you are trying to reach and influence - are you speaking to local business leaders, elected officials, program officers in a philanthropic foundation, community members or parents? They will all have different perspectives on afterschool STEM learning.

What does your audience care about?

Ask yourself what your audience cares about most and how the issue of afterschool STEM learning connects to their pressing concerns and interests. Identifying your audience will allow you to describe the issue in terms that will best resonate with them. Different stakeholders will care about STEM education for different reasons. For example:

**Elected Officials**

- **Elected officials** want to know how investing in afterschool STEM programs will affect high school graduation rates, increase interest in STEM fields and careers, build STEM-relevant skills, and help with workforce development. These are the key issues they worry about for their community.

**Funders**

- **Corporate funders** tend to focus on addressing workforce needs and many STEM industries fund initiatives to build their future workforce.
- **Philanthropic funders** often care deeply about equity and ensuring equitable access to opportunity and are more sympathetic to youth development needs. Many of them are also very concerned about gaps in academic achievement and want to see measureable impacts of their investment.
- **Federal or public funding agencies** are driven by issues of equity and may have a particular desire or need to fund programs that target groups under-represented in STEM fields such as girls, African Americans, and Hispanics.

**Community Partners**

- **Community partners** such as museums, schools, universities and other local institutions often work with organizations that align with their core mission and is important to show them how afterschool fits in with their overall education or STEM mission.
Setting Your Goal

Are you trying to advocate for effective policies and more public investments in afterschool STEM through an elected official? Are you hoping to convince a funder to invest in STEM programs for afterschool? Or maybe you are talking to potential community partners and want to make the case for why afterschool programs make good partners in STEM education? For all these scenarios, you should be very clear about your “ask” and gather the best examples, facts and information to make your case to each audience.

Finding Data to Support Your Case

Having a few key talking points on a piece of paper is a great way to prepare and make sure you have an opportunity to present all of your best arguments. Below are a few to consider:

Impacts of participating in afterschool STEM programs

Evaluations of afterschool STEM programs suggest that there are several positive outcomes that should be highlighted:

- Improved attitudes toward STEM fields and careers
- Increased STEM knowledge and skills
- Higher likelihood of graduation and pursuit of a STEM career

Analysis of science scores from the 2009 National Assessment of Education Progress also showed that students who participated in out-of-school-time science activities had higher scores than their peers who did not.

Often, the most effective tool in convincing others of your cause is to provide them with stories of success. As they say, all politics is local! If you know of programs in your community with a track record of showing impact, tell people about the program and the individual children and families that benefitted. In addition, as a resource on our website, we feature program profiles of high quality and successful STEM afterschool programs. Check these out to see if you can use them as compelling examples to make your case.

Academic research on out-of-school-time STEM experiences

Research shows that early engagement and sustained opportunities throughout a child’s development will yield greater success in STEM fields. This includes experiences outside of the classroom, where participants are given the opportunity to immerse themselves in a hands-on, inquiry-based environment.

For example, a study by Tai et al. found that students (with average academic achievement) who expressed an interest in pursuing STEM careers by 8th grade were more likely to follow through and choose STEM careers than academically high-performing students of the same age who showed no interest in such careers. Wai et al. found that students who had a higher dosage of STEM experiences through additional classes and out-of-school programs such as afterschool consistently performed better than those who had fewer such opportunities.

These research studies reflect the anecdotes that are seen in the science and technology communities. Many Nobel Prize winners and other notable scientists would attribute their interest in science to their experiences outside of school.
Policy Recommendations to Guide Your "Ask"

The Afterschool Alliance released a set of federal policy recommendations including explicit support of STEM education initiatives in afterschool through STEM education funds and general afterschool funds.

The After School Corporation provides a list of policy recommendations that can be implemented on the local, state or national level at the end of their issue brief on Science Beyond the Classroom.

The National Governors Association published an issue brief to get state governments thinking about policies that would encourage and strengthen informal science education.

Finally, you should also get in touch with your local statewide afterschool network as they may have specific afterschool STEM policies they are working to advance. Check out Afterschool in Your State to obtain the contact information for your state’s afterschool network.

Enlisting Additional Advocates

Anyone can be an advocate for an issue they care deeply about, but it will be useful to consider who else might have particular sway over the person you are talking to.

- **Elected officials** are often most influenced by their own constituents - it may be helpful to include a constituent or a student who is benefitting from a program in their region (district, city, or state). It is also compelling to partner with a business or corporation in their region who can make the case about why this issue is important to them and provide practical economic implications for their district or region.

- **Funders** – It is best to have high-level management within your organization initiate the conversation with the funders. It may also be helpful to invite potential partners in the proposed project to accompany you to the meeting.

- **Community partners** – When talking to entities that are primarily interested in how your effort can help with improving student performance, it may be helpful to include a teacher or school leader. They can directly address how a partnership with informal educators helps children and supports the overall goals of the school.

For all audiences, inviting them to visit a program where they can see the children and youth in action and hear first-hand the impact of the program is the most compelling method to make the case. It may be hard to visualize the proposed effort and seeing how it plays out in real life can be worth a thousand words!

And Finally...

\[\text{What is the status of STEM education in YOUR state?}\]

When presenting statistics on the need for STEM learning, use data that is local and puts the “need” within context of your community. The following links provide easy-to-download state fact sheets that you can use to frame your discussion around education inequity and/or workforce needs.

1. Georgetown STEM fact sheets on STEM occupation and education trends in each state.
2. Change the Equation STEM State Vital Signs provides state data on student academic achievements in math and science as well as data on teachers and college prep.
3. STEM Connector K-12 STEM Education State Report Card contains stats on math and science academic scores as well as occupation data by state.
The Next Steps

Now it’s time to start putting your new skills to the test and **start taking action**!

1. Familiarize yourself with compelling afterschool success stories in our [STEM Storybook](#).
2. Practice making your case by writing a [letter to the editor](#) of your local newspaper.
3. Make an appointment to meet with your elected officials. [Find their closest field office](#) in our Policy & Action Center. More information on contacting and developing relationships with elected officials can be found on our [Reaching Policy Makers](#) page.

Finally, the annual *Lights On Afterschool* celebration is an effective way to promote your program and advocate for afterschool STEM programming by joining a network of 1.5 million Americans—parents, educators, kids and elected officials—who support expanded afterschool opportunities. Check out our [Event Planning Kit](#) for helpful tools and materials.