Talking Points

These talking points were carefully crafted based on tested framing strategies and message research to make the case for STEM programming across a broad set of audiences. You can use this document to prepare for meetings and expand on these points in emails, blogs, and other formats.

WHY

STEM literacy is an essential part of every young person’s education.

- Young people who learn science, technology, engineering, and math—the subjects called STEM—are better equipped to understand and solve issues that affect them and their communities.
- Learning STEM helps youth build the knowledge and skills they need to tackle problems systematically, including the abilities to sift through information, draw reasonable conclusions, make decisions based on evidence, and come up with creative solutions.
- Everyone benefits when we empower young people to become engaged citizens, critical thinkers and problem-solvers who understand how STEM can be used for public good.

Inspiring children to engage in STEM is key to building a prosperous economy for us all.

- Our global economy will increasingly depend on a workforce fluent in STEM.
- Not only are jobs in STEM growing faster than jobs in other areas, we all need a greater level of literacy in science, technology, engineering, and math to understand and improve the systems that power our economy and advance our society.
- We can inspire and empower the next generation of change-makers by expanding STEM programming.

HOW

Learning STEM subjects is like becoming fluent in another language: It’s best accomplished by immersing young people in STEM experiences in and outside of the classroom.

- Children benefit from regular opportunities to work through interesting and practical challenges using STEM methods, tools, or ways of thinking—just as language learners need to experience different real-world situations to become conversationally fluent.
- To be immersed in STEM and gain enough exposure to develop fluency, students need different places in their communities where they can engage in hands-on learning and have time to practice STEM skills in an informal space, like afterschool and summer programs.
- Afterschool STEM provides new opportunities for youth to solve real-world problems, work on project-based activities, and explore careers. These experiences help young people build confidence, teamwork, communication, and other important life skills.

Afterschool and summer programs spark children’s interest in STEM and activate learning by letting youth experiment in a creative setting and helping them connect STEM to their lives.

- Afterschool and summer programs have the flexibility to respond to young people’s interests and cultures, and these hands-on, exploratory experiences help young people get excited about learning and discover new passions.
- Such opportunities help spark curiosity, especially for those who might not think of themselves as “math and science kids,” and foster a sense of belonging by helping youth feel heard, seen, and recognized as contributing members of a community.
- For example, in a community garden, all kids can find a way to connect to STEM, whether by conducting scientific observations on how the environment affects plants, practicing their math skills by calculating rainfall, or thinking like engineers to build structures for the garden plot.
WHAT’S NOT WORKING
Learning opportunities are like charging stations. Every child needs them, but many communities lack these resources.

- All children need access to STEM charging stations so they can plug in and power up their STEM skills. Currently, access to these stations varies greatly from one place to the next.
- Some communities are filled with opportunities for STEM learning: great libraries and museums, vibrant community gardens, science centers, technology companies, and a variety of high-quality afterschool and summer programs.
- Other communities lack these opportunities or have barriers, such as cost or transportation issues, that make them harder for learners to access. This uneven, patchy network of STEM charging stations is hindering our progress toward widespread STEM fluency.

We are not fully tapping into the pool of available STEM talent. We need to expand our reach, and we can’t leave anyone out.

- **Forty-five percent** of high school seniors aspire to a career in STEM, but of those, only 28% are women.
- **Forty percent** of Black and Latinx high schoolers say they enjoy STEM courses and aspire to go to college, but less than 3% enroll in advanced placement STEM courses.
- **Women** make up a very small percentage of the workforce in STEM fields—just 16% of engineers and 26% of computer science professionals are women, and less than 4% of all engineers are Black and Latinx women.
- **Racial and ethnic diversity** is also lacking in STEM professions: 67% of the STEM workforce is White, 13% is Asian American, 9% is Black, and 8% is Latinx.

WHAT CAN WE DO?

Tap afterschool and summer programs to immerse students in STEM.

- By investing in and partnering with afterschool programs, we can build a robust STEM learning environment in every community that will expand access for all young people.
- Supporting statewide and city-level afterschool networks and their partnerships with STEM-focused organizations will help expand opportunities, make sure that good programs keep getting better, and ensure that fledgling programs can learn from more experienced sites.

Ensure that all children, no matter where they live, can access afterschool and summer STEM.

- Let’s make sure every child—in urban, suburban, or rural communities—can be connected to powerful STEM charging stations. We can do this by building new partnerships between out-of-school time programs, schools, and STEM-focused community organizations.
- Afterschool and summer programs are an underutilized resource that communities and businesses can leverage to engage more girls and students of color in life-changing STEM learning experiences.
- It’s up to us, working together, to forge a new future where every child is cared for, included, educated, and inspired.