



Investing in Out-of-School Time STEM is an Investment in a Robust, Diverse STEM Workforce

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About JFF

Jobs for the Future (JFF) drives transformation of the U.S. education and workforce systems to achieve equitable economic advancement for all. www.jff.org.

About JFF's Language Choices

JFF is committed to using language that promotes equity and human dignity, rooted in the strengths of the people and communities we serve. We develop our content with the awareness that language can perpetuate privilege but also can educate, empower, and drive positive change to create a more equitable society. We will continually reevaluate our efforts as language usage continues to evolve.

About the STEM Next Opportunity Fund

The STEM Next Opportunity Fund is a national nonprofit with a mission to make out-of-school STEM opportunities a reality for millions of young people to help them thrive in STEM and beyond.

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01. Introduction

Careers in science, technology, engineering, and math (STEM) are considered a hot ticket to advancing in today's economy. Jobs in STEM pay substantially more than those in other fields and are growing more than two times faster than all other occupations, according to the [U.S. Department of Labor](#). Furthermore, research has found that deciding to pursue a STEM career isn't always about earning a big paycheck; in a [Vanderbilt University study](#), students of color pursuing degrees in STEM fields expressed a desire to help others and integrate social justice into their careers. And there's a reason K-12 robotics clubs have proliferated across the country: Students and their families want to engage in learning that's fun, relevant, and future-forward. As both science and technology advance ever more rapidly, STEM literacy and fluency are needed to understand the world.¹

And yet it is just as evident that the United States is falling short in developing and supporting the talent to satisfy demand for STEM skills from the labor market and from young people.

It is equally concerning that Black and Latine workers, and women of all races, remain the most underrepresented populations in the [highest-paying](#) STEM career pathways, which is exacerbating the already vast wealth gap between Black and white workers in particular.²

This brief, developed in collaboration by the [STEM Next Opportunity Fund](#) and Jobs for the Future (JFF), shares replicable examples and lessons aimed at helping to move the needle for the young people who represent future STEM employees, leaders, innovators, and consumers. The focus is on the out-of-school time (OST) field, in particular OST programs with high-quality STEM programming (hereafter called OST STEM). Such programs play a crucial role in broadening access to STEM outside of the K-12 school day and in reaching students in communities that are underrepresented in STEM jobs that offer family-sustaining wages. Providing high-quality STEM opportunities to youth when they are not in school—[80 percent of a child's day](#)—is essential to diversifying STEM talent pools and contributing to equitable economic advancement for individuals and the country as a whole. OST STEM is so critical to the economic equation because, as will be detailed further, it has proved to be effective in enabling youth to begin developing an occupational identity in STEM, which is often the key impetus for pursuing a STEM career.

JFF and STEM Next share the vision of OST STEM as a core, integrated component of federal- and state-level strategies for closing

stubborn STEM education and workforce gaps.³ Hence, a central objective of this brief is to urge federal and state policymakers from multiple departments—including education, labor, and commerce—along with funders, employers, and other workforce development stakeholders, to be explicit in including OST STEM in all efforts to close STEM workforce gaps. This means OST STEM should be an allowable and encouraged use of funding and be part of the metrics and accountability measures of strategic plans for building a diversified STEM economy.

The Breadth of Out-of-School Time

In this brief, we use the term out-of-school time (OST) because it encompasses the wide range of programs that serve students during non-school hours, including comprehensive afterschool programs, summer learning and enrichment programs, vacation academies, work-based learning programs, youth development programs, experiential or service-learning programs, and other expanded learning programs.

Source: "[Building and Using Evidence in Summer, Afterschool and Other Out-Of-School Time Settings.](#)" Institute of Education Sciences, accessed September 25, 2023.

Meeting the Rising Demand for OST STEM: The Need to Grow and Sustain OST Intermediaries

The Afterschool Alliance has helped capture the rise in the availability of and demand for OST STEM along with “troubling inequities in access,” including the lack of OST STEM in low-income communities with the biggest gaps in technology and engineering activities.⁴ Fortunately, the OST field overall is undergirded by the [50 State Afterschool Network](#), with funding from the Charles Stewart Mott Foundation. This national infrastructure is made up of a diverse group of organizations dedicated to fostering “partnerships and policies to develop, support, and sustain quality afterschool and summer learning opportunities for children and youth.”⁵ These state afterschool networks serve as one of the primary—if not the primary—OST intermediaries for their states. In this role, they “work with a broad range of stakeholder groups—from state policymakers to local leaders in education—on a range of issues, including youth development, STEM, juvenile justice, health and wellness, social and emotional learning, and college and workforce readiness.”⁶

Both STEM Next and JFF have recently written about how intermediaries have become increasingly crucial actors—part of a broad trend within our economy and society—in working to solve problems and fulfill unmet needs by:

- Actively engaging and educating a diverse, cross-sector set of key decision makers and stakeholders (e.g., K-12 and postsecondary education systems, workforce organizations, industry, and government) in support of effective school and community-based afterschool programs, particularly in underserved communities.
- Linking and brokering resources, money, expertise and more with the needs of an organization, population, community or region.⁷

To uplift the contributions of OST networks, this brief spotlights grant programs in Georgia, Minnesota, and Washington that are benefiting from support and resources channeled by each state’s OST intermediary (also referred to as a network). Led by the OST intermediary, the grant programs are models for how to enable more Black, Latine, and female youth, as well as young people experiencing poverty, to gain relatable role models and exposure to STEM while building skills and experiences that imbue a sense of belonging and possibility in those career pathways. These examples also demonstrate that partnerships between state education agencies and OST intermediaries are a fortuitous outcome of crucial efforts to efficiently and equitably distribute American Rescue Plan Act (ARPA) funds—[which must be committed by the end of 2024 and spent by the end of 2026](#). These alliances have resulted

in more flexible, less onerous grant programs that have helped address the immediate needs of OST programs while building their future capacity to provide support, especially among populations that are underrepresented in high-earning STEM careers.

The following pages provide further framing on our core message of OST STEM as indispensable to building the STEM economy that we need and where our young people can thrive.

In addition, an overall premise of the brief is a sense of urgency around key funding sources like ARPA and the [CHIPS and Science Act of 2022](#) (CHIPS + Science). Foremost, as the ARPA funds sunset, we should not allow the lessons learned from these SEA-OST intermediary partnerships to fade away as well. Instead, let's harness the key insights for how to be intentional with federal and state policies and systems, particularly in leveraging OST STEM as a powerful force for reaching communities that might not otherwise have potentially life-changing STEM experiences. Likewise, CHIPS + Science, which includes many STEM education provisions and authorized investments, provides a tremendous opportunity to leverage OST STEM.⁸ (This is discussed in more detail in the Policy Recommendations section.)

ARPA and 21st Century Community Learning Centers Funds: Falling Short

Nearly 25 million children are not in an afterschool program due to lack of access (e.g., cost or transportation issues) or availability. Meanwhile, in a national survey conducted by the Afterschool Alliance in 2022, 85% of parents agreed that afterschool and summer programs are an absolute necessity for their community, and 88% would like their federal, state, and local leaders to provide more funding to afterschool programs.

Although ARPA funding for afterschool and summer programs is a clear acknowledgment of the value of OST, not only will it soon run out, but the Afterschool Alliance shared in June 2023 that less than 1 in 5 afterschool and summer program providers report these funds as a current source of funding.

Additionally, the public investment in 21st Century Community Learning Centers, the only sustained federal funding dedicated to afterschool and summer programs, has largely stalled and has not kept up with the cost of inflation, which has increased 29% over the past decade. After adjusting for inflation, the current funding level is approximately \$80 million below the 2013 level. This has resulted in only 1 in 3 requests for funding being awarded and \$4 billion in local grant requests being denied over the span of 10 years because of intense competition and a lack of adequate federal funding.

Source: "21st Century Community Learning Centers," Afterschool Alliance, June 2023

02. STEM for Everyone, Everywhere

Below, we briefly cover the need for realizing the vision of STEM for everyone, everywhere; the key challenge of meeting this need with limited resources; and the opportunity to support OST STEM through policies that allow for partnerships, alignment, access, and sustainability.

Need

An increase in and diversification among STEM workers to meet demand from the labor market and from students and their families.

Public awareness of STEM education as a ticket to a lasting, well-paid career is probably at an all-time high. Most students and their families today are hearing a growing chorus of voices telling them to trust in STEM for their futures, and many are hungry to engage in STEM learning. Data from the U.S. Department of Labor shows that STEM occupations, which already employed nearly 10 million workers in 2021, are [projected to grow by almost 11 percent by 2031](#), significantly outpacing the total for all occupations. The pay differential is also significant: Median annual wages as of May 2021 were \$95,420 for STEM occupations,

compared with \$40,120 for non-STEM occupations.⁹ Demand from students and families is high, with 73 percent of parents in a nationwide survey reporting that their child is participating in STEM learning opportunities in their afterschool program.¹⁰

While the unstoppable growth and myriad benefits of STEM careers are clear, it's also apparent that our education and workforce systems are not meeting the labor market demand for STEM workers. This is surely exacerbated by the nearly 25 million children who aren't able to access afterschool programs, especially those from low-income households.¹¹ Furthermore, STEM fields are rife with [occupational segregation](#): Black and Latine workers remain underrepresented in STEM jobs relative to their share of the U.S. workforce, and women make up [only 34 percent](#) of the nation's workforce in STEM.¹² If the status quo persists, millions of students will be missing out on some of the fastest-growing and [highest-paying](#) careers, and the STEM workforce disparities will continue to grow. This is a need that must be addressed not only to drive economic mobility for all but also to ensure that the United States has the skilled workforce that is essential to the tech-based economy of the 21st century.

Mackenzie Hill, a member of the 2022 Flight Crew of STEM Next's [Million Girls Moonshot](#) initiative to increase the quality of OST STEM learning opportunities for girls, won the [Congressional App Challenge](#) for her database of national STEM programs. She described how the lack of resources she experienced motivated her to develop an app that will help others explore STEM:

The idea came from my own experiences—not being able to find STEM opportunities living on a farm in the middle of nowhere. All of these programs are typically hosted in big cities, and that was just not accessible. Also, the price tag on some of the programs is not accessible to the average person, so I wanted to create something that compiled and filtered programs in a way that was accessible. It also highlights programs all over the country and not just in one city. The goal was to create something similar to what I wish I had when I started looking for programs. It's made a huge difference, even for me, being able to research new afterschool programs, and I hope that it makes a huge difference for everyone who's had the chance to use it.¹³



Mackenzie

Challenge

Lack of hands-on STEM, career exploration, and other opportunities to develop STEM occupational identity.

The lack of diversity in STEM fields is a result of many factors, with occupational identity being one of the most pernicious. As defined by [NAF](#), occupational identity development is a student’s “vision of their future selves in the workforce—what they like to do, what they believe they are skilled at, and where they feel they belong.” Because they lack access and opportunity, many students—particularly those who are Black, Latine, and/or female—are often unable to perceive themselves in STEM fields; they lack opportunities to explore careers, relatable role models, and exposure to other activities that contribute to developing occupational identity.¹⁴ As **Elly**, a member of the [2023 Flight Crew](#) of the Million Girls Moonshot initiative, shared:

Afterschool STEM is place where I can learn about things I don't learn in my usual math and science classes. I was often the only Black girl . . . so I hope to let other Black girls know that they do belong in STEM.¹⁵

Jihan, another 2023 Fight Crew member, found her afterschool program, Future Solution Now (Project FUSON), which focuses primarily on robotics and entrepreneurship, through her local public library in St. Paul, Minnesota. Project FUSON is a program of [Restoration for All](#), which offers a variety of services for immigrant and refugee communities, including STEM programs for African immigrant and refugee girls. Jihan shared that working with like-minded girls on hands-on projects has built her confidence tremendously, and she now plans to pursue a career in neuroscience because she is fascinated by the brain and how it works:

I joined . . . with other girls that wanted to learn more about STEM just like me. Some girls wanted to start a business; others just wanted to do something different after school. I used to be really quiet in school and turn down opportunities that came to me. I'm not that person anymore. I've made new friends in my program, especially with girls that are similar to me and want to pursue some of the same things.¹⁶



Elly



Jihan

[Occupational segregation](#) begets a lack of occupational identity and vice versa—it’s a vicious cycle in which Black, Latine, and female students and workers are unable to perceive themselves in STEM fields and thus often don’t pursue those careers. As the most recent data shows, Black and Latine college graduates hold a smaller percentage of STEM degrees than other types of degrees.¹⁷ And even though the STEM degree gender gap is closing overall, certain fields still face a large gender and/or race and ethnicity divide. For example, there is a great disparity between men and women in the field of engineering; only 15 percent of women with postsecondary degrees work in the field in the United States despite the fact that women account for more than half of postsecondary degree-holders.¹⁸

Opportunity

Leverage OST STEM.

OST and STEM have a strong association with each other. They’re a natural pairing, in large part because the best way to experience STEM learning is through hands-on and project-based activities, and OST settings offer the time, space, and curricular freedom needed to experiment, play, and go deep with STEM. As previously noted, OST STEM has proved to be effective in creating STEM occupational identity, which is an effective motivator for entering STEM career pathways. Adding to the evidence base is a [2021-22 evaluation of the Million Girls Moonshot program](#) in which 7 in 10 students from a sample of 300 agreed that their afterschool program helped them to feel more engaged with STEM, and half said they were

Evidence Base for OST STEM

Recent evaluations have documented how OST STEM learning spaces are a proven and effective means of developing hands-on and career-connected learning that promotes STEM career pathways.

[Afterschool Learning Is a Powerful STEM Solution](#), a research study by a team from the PEAR Institute at Harvard University and McLean Hospital, and the Institute for Measurement, Methodology, Analysis & Policy at Texas Tech University, included the finding that OST STEM enables youth to create a STEM identity: “I think of myself as a STEM person.”

[STEM Ready America](#) is a compendium from 40 authors presenting bold and persuasive evidence—as well as real-world examples of effective practices, programs, and partnerships—on how STEM knowledge and skills are preparing young people to be successful in school today and in the workforce tomorrow.

more likely to think of themselves as a “person who does STEM.” These early indicators are linked to longer-term outcomes like majoring in a STEM field in college or pursuing a STEM-related career. Combine the effectiveness of OST STEM with the fact that well over half a child’s day is spent outside the classroom, and the importance of OST STEM is undeniable.




03. Initiative Spotlights

In 2021, JFF collaborated with STEM Next, a leader in the out-of-school STEM learning field, to begin working directly with five networks interested in supporting OST programs to integrate early career exploration into STEM programming. Key strategies were a train-the-trainers series based on JFF's free [Possible Futures career exploration curriculum](#), followed by professional learning community sessions and resource sharing on related topics, including [labor market information](#), [work-based learning](#), and [biotech careers](#). In 2022, JFF and STEM Next expanded the partnership to eight networks and included practitioner-informed policy discussions to learn about navigation support and barriers to—and opportunities for—career exploration.

Meanwhile, 2022 proved to be a year in which both OST and STEM garnered well-earned recognition. There was the [Bipartisan Safer Communities Act](#), which boosted funding for the [21st Century Community Learning Centers \(21st CCLC\)](#) and CHIPS + Science programs. In addition, the [National Partnership for Student Success](#) and the [Engage Every Student](#) initiative were both launched—two unprecedented calls to action by the U.S. Department of Education to direct ARPA funds toward universal access to high-quality afterschool and summer learning. As a result of these programs, and with the

deadline to use the funds fast approaching, state education agencies began looking to OST intermediaries to help distribute the Elementary and Secondary School Emergency Relief (ESSER) III funds available through ARPA. The express intent was to reach the communities most impacted by the pandemic—communities with OST programs that had been completely or largely overlooked by other federal funding sources.

Based on input from the networks, JFF and STEM Next selected the following three grant programs to spotlight. Each one is designed and administered by a statewide OST intermediary in partnership with its state education agency and uses ARPA-ESSER III as the primary source of funding:

-  Building Opportunities in Out-of-School Time (BOOST) grants program, Georgia Statewide Afterschool Network (GSAN)
-  Believe and Build Afterschool, Ignite Afterschool Minnesota
-  King County Best Starts for Kids (BSK) Expanded Learning Initiative, School's Out Washington (SOWA)

The three states' education agencies tapped the three networks as trusted statewide intermediaries able to provide a bridge to the OST field. Additionally, these networks, along with many of the others in the [50 State Afterschool Network](#), have long track records of supporting OST STEM, including their participation in the [Million Girls Moonshot program](#). Each network also uplifts STEM using

its own blend of policy and advocacy work, resource sharing, peer learning, professional development, and technical assistance. Through the grant programs spotlighted here and the practices embedded throughout much of their work, these networks are vital contributors to the solution highlighted in this brief: **expanding access to and the quality of opportunities for young people to develop occupational identity through OST STEM.**

Each spotlight includes the following three practitioner-informed policy implications to help carry forward valuable lessons learned from ARPA and take advantage of new STEM education provisions and authorized investments:

- 1 Modeling how to reach communities that have the fewest resources
- 2 Demonstrating the need for adequately resourced intermediary organizations
- 3 Encouraging the integration of OST STEM as a career pathway and workforce development strategy

Georgia Statewide Afterschool Network Spotlight

GSAN at a Glance

Established in 2004, [GSAN](#) is a public-private collaborative that focuses on helping to create and scale high-quality afterschool and summer programming throughout Georgia. GSAN has a threefold strategy: (1) professional development within existing programs, (2) policy priorities and advocacy strategies at the local and state levels, and (3) engagement of a broad array of stakeholders around the positive impacts of afterschool programming.

TARGET POPULATIONS: Youth receiving free or reduced-price lunch, youth with disabilities, youth experiencing homelessness, youth in foster care, English learners, and migratory youth.

Initiative Spotlight: Building Opportunities in Out-of-School Time

BOOST is a collaborative partnership between the Georgia Department of Education (GaDOE) and GSAN to administer \$85 million in ESSER III funds for afterschool and summer learning programs in Georgia. Starting in 2021, the funds began to be distributed as three-year grants, renewed annually, to community-based organizations that operate OST programming year-round, over the summer months, or after

school during the academic year. Overall, the intended impact of BOOST is to:

- Expand OST programming access to more youth, especially in the communities most impacted by the pandemic.
- Reduce barriers, such as a lack of transportation and enrollment costs, to ensure access for all.
- Improve programmatic quality and expand or enhance services and supports provided.

Practitioner-Informed Policy Implications: Lessons From BOOST

1 MODELING HOW TO REACH COMMUNITIES THAT HAVE THE FEWEST RESOURCES

GSAN worked with GaDOE to design BOOST to reach sites—primarily CBOs, but also four statewide organizations—serving the populations most significantly impacted by the COVID-19 pandemic. Priority was specifically given to communities not currently receiving government funds through the 21st CCLC program or the Afterschool Care Program. BOOST has been especially intentional in targeting outreach and technical assistance to programs in rural communities and those serving the target populations listed above.

2

DEMONSTRATING THE NEED FOR ADEQUATELY RESOURCED INTERMEDIARY ORGANIZATIONS

BOOST would not be possible without the capacity of GSAN as a trusted intermediary. GSAN has the expert knowledge of the OST field and the infrastructure to manage a grants program that identifies eligible grantees and supports an application process designed to bring in first-time recipients of government funding. However, it is important to acknowledge that managing the grant program funds is a big lift. To ensure that it is casting the net strategically as intended, GSAN has gone above and beyond GaDOE's ability to administer grants, by conducting outreach, providing technical assistance, and helping new applicants understand and complete the application. GSAN also had to draw upon other funding to hire additional staff members and consultants to complete this mission-critical work.

3

ENCOURAGING THE INTEGRATION OF OST STEM AS A CAREER PATHWAY AND WORKFORCE DEVELOPMENT STRATEGY

By supporting OST STEM, BOOST is contributing to the development of STEM occupational identity. For example, Georgia Parks and Recreation Association sites throughout the state increased STEM and STEAM (science, technology, engineering, arts, and mathematics) options during their academic-year programs. BOOST funds allowed the sites to purchase engaging, quality materials, such as Lego BricQ sets, Snap Circuits sets, architecture kits, STEM career boxes, and science and math games. Another example is enabling STEM Atlanta Women to engage more students in its mission to “educate and empower women and girls to take advantage of the global opportunities in [STEM] and to acquire the skills needed to compete and succeed in the 21st century and beyond.” In addition, BOOST is supporting other services that are key to career pathway development, including job/career readiness, college readiness, and career exploration.

Ignite Afterschool Spotlight

Ignite Afterschool at a Glance

Founded in 2004 as Youth Community Connections after recognizing the demand for afterschool programs for youth statewide, the network became [Ignite Afterschool](#) in 2013. Its mission is to unite and strengthen Minnesota's afterschool community through partnership, education, and advocacy.

TARGET POPULATIONS: Students/youth who qualify for free and reduced-price lunch, youth with disabilities, youth in foster care, youth in correctional facilities, LGBTQIA+ youth, and rural youth disproportionately impacted by the COVID-19 pandemic.

Initiative Spotlight: Believe and Build Afterschool

Ignite Afterschool's [Believe and Build Afterschool](#) grant program was launched in 2021 to further enhance statewide access to and the quality of afterschool programs, namely by distributing the 1 percent ARPA-ESSER III federal funding specifically dedicated to afterschool programming. The intended impact of Believe and Build Afterschool is to:

- Assist 21 youth-serving organizations through a combined total of \$12.5 million in grants ranging from \$125,000 to approximately \$1.25 million over two and a half years, starting in 2022.
- Award grants designed to support organizations serving youth who have been disproportionately adversely affected by the pandemic, with at least 50 percent of funds directly supporting community-based, culturally specific organizations.

Practitioner-Informed Policy Implications: Lessons From Believe and Build Afterschool

1

MODELING HOW TO REACH COMMUNITIES THAT HAVE THE FEWEST RESOURCES

The grant program aims to address equity gaps in afterschool programming. Specifically, it prioritizes funding for organizations/programs that are focused on equity, are dedicated to closing opportunity gaps for youth least likely to have access to afterschool programming, and are serving youth disproportionately affected by the pandemic. Grant applicants are encouraged to submit creative ideas for funding uses and outline how they will form partnerships with CBOs, schools, and other stakeholders to maximize youth outreach.

2 DEMONSTRATING THE NEED FOR ADEQUATELY RESOURCED INTERMEDIARY ORGANIZATIONS

Ignite Afterschool ensured that Believe and Build wouldn't be business as usual by prioritizing getting the grant funds to where they are most needed. Part of its strategy was to be realistic about needing to partner with an experienced nonprofit familiar with OST to manage reimbursement requests and track grantees in accordance with federal requirements. In addition to Believe and Build, Ignite Afterschool is active as the state intermediary for Million Girls Moonshot, most recently helping to launch the STEM Justice Afterschool Cohort with the Science Museum of Minnesota's Kitty Andersen Youth Science Center in 2021. Over the course of five months, STEM Justice cohorts comprising girls and students of color engage in a program that embeds social justice within STEM learning, shaping them to be tomorrow's STEM-literate leaders. Participants explore STEM opportunities that are meaningful and relevant to their daily lives, recognize Indigenous and non-Western STEM perspectives, and speak to harmful norms experienced by people of color and women in STEM fields.

3 ENCOURAGING THE INTEGRATION OF OST STEM AS A CAREER PATHWAY AND WORKFORCE DEVELOPMENT STRATEGY

A large contingent of Believe and Build Afterschool grant recipients provide STEM/STEAM programming to youth who are the least likely to have such opportunities in the classroom or an OST program. One grantee, Afro American Development Association, is using the funds to launch a two-part afterschool program focused on students' academic needs, and STEAM-based learning for middle and high school students from families with low incomes, particularly Somali and East African youth who have recently arrived in the United States. Overall, Ignite Afterschool maintains a dedicated approach to helping its target populations explore early-career pathways and apply the power of STEM to stimulate their general creativity and their critical-thinking and problem-solving skills.

School's Out Washington Spotlight

SOWA at a Glance

Since 1987, SOWA has been working as an intermediary to ensure high-quality, equitable access to youth development programs for youth of color and those experiencing poverty. SOWA's threefold strategy is one of policy and advocacy; professional learning partnerships with schools, tribes, and nonprofit CBOs; and grant funding and/or federal funding disbursement to a wide array of youth-serving organizations and communities. This work is underpinned by a commitment to racial equity and cultural responsiveness in programming.

TARGET POPULATIONS: All youth ages 5 through young adulthood, with a focus on youth who identify as a person of color or a member of the LGBTQ community, and those who are immigrants/refugees and/or experiencing homelessness.

Initiative highlight: 2022-2025 King County Best Starts for Kids Expanded Learning Initiative

In 2015, voters in King County, Washington's most populous county, approved a property tax levy to fund programs and services for children, youth, and families, from prenatal development to age 24. SOWA and King County partnered to launch the BSK Expanded Learning Initiative, which is dispersing \$16,102,303 to 56 awardees over the course of three years. As it

has done in past [BSK](#) grant programs, SOWA prioritizes organizations led by people of color and place-based collaboratives. Organizations led by people of color must demonstrate a commitment to racial equity and/or culturally specific or cross-cultural communities of color. Place-based collaboratives must consist of three or more entities working together, in schools or housing communities, to accomplish a common goal. Programs typically overlooked or ineligible for 21st CCLC learning grants are encouraged to apply, including community-based and religious organizations, tribes/tribal affairs organizations, and public/governmental agencies serving King County residents. Overall, the intended impact of BSK is to:

- Fund 30 organizations led by people of color and nine place-based collaboratives for three years, expanding services to 5,305 youth annually.
- Increase access to afterschool and summer programming, including STEM programming, academic support, and cultural/health/art enrichment for those youth.
- Increase and improve the granting of awards for programs in underinvested communities and geographies, for capacity-building and advocacy supports, and for robust professional development supports focused on continuous quality improvement.

Practitioner-Informed Policy Implications: Lessons From the BSK Expanded Learning Initiative

1 MODELING HOW TO REACH COMMUNITIES THAT HAVE THE FEWEST RESOURCES

Grounded in SOWA's racial equity framework, BSK vets awardees using a peer-review process: Eighty-seven percent of reviewers identify as people of color, while 96 percent share lived experiences or identities with target populations. To ensure that grantees have the capacity to provide quality programming, BSK uses a dual-investment model. This means that grantees receive both financial support and professional development support, which entails a [Quality Improvement Pathways](#) experience. In its first funding cycle, from July through December 2022, BSK provided OST and afterschool programming to 3,848 underserved youth in King County.

2 DEMONSTRATING THE NEED FOR ADEQUATELY RESOURCED INTERMEDIARY ORGANIZATIONS

In addition to its role with BSK, SOWA's work as a statewide intermediary includes a wide range of grant awardees and partner support for otherwise unmet needs affecting people of color and youth in poverty. These include connecting schools, CBOs, and tribes to federal funding for summer meals and summer literacy programs and administering Refugee School Impact Program (RSIP) funds in several school districts across Washington. (RSIP provides federal funds to schools and CBOs

to ensure that refugee students are strongly supported academically and with school integration.) SOWA also partners with STEM Next to increase funding and other supports for youth development programs to expand STEM engagement and career pathways.

3 ENCOURAGING THE INTEGRATION OF OST STEM AS A CAREER PATHWAY AND WORKFORCE DEVELOPMENT STRATEGY

BSK has a specific mandate to increase STEM programming. One example of BSK's work is its funding of place-based collaboratives that engage in STEM-infused partnerships, such as Seattle Parks and Recreation and the STEM Paths Innovation Network; the Multimedia Resources and Training Institute and Seattle University; and Geeking Out Kids of Color and Southwest Youth and Family Services. These partnerships are providing opportunities for young people to develop the STEM occupational identities that could launch them into STEM career pathways. SOWA offers a strong example of dispersing multiyear, equitable federal/state/charitable funding to CBOs and related institutions supporting youth. SOWA also provides quality-improvement systems linked to programmatic outcomes, demonstrating the imperative that OST STEM be high quality.

04. Policy Recommendations

The following policy recommendations reflect the strategies gleaned from the initiative spotlights and, in particular, build on lessons from the ARPA implementation period that are worth carrying forward to opportunities like CHIPS + Science and other STEM workforce vehicles. They are also informed by group policy discussion sessions with statewide OST networks focused on enhancing STEM career exploration in OST spaces (convened by JFF, as described earlier) and conversations with the Afterschool Alliance, STEM Next, and others. In addition, they are grounded in the following guiding principles drawn from JFF's Policy & Advocacy unit:

- Center policy actions around the individual and encourage place-based best practices and partnerships that support individual choice and agency.¹⁹
- For both people-centered and place-based approaches to be viable, strengthen infrastructure at the federal and state levels to enable high-quality localized solutions.²⁰
- Consider how to better align the various policies and systems—including those of K-12 education, higher education, and workforce development—needed for strengthening college and career pathway systems to build equitable pathways.²¹

Reaching communities that have the fewest resources

RECOMMENDATION

Efforts to distribute federal, state, and local resources, including grant initiatives, can and should be designed intentionally to reach the communities that have the fewest resources. This can be done through partnerships between government entities (such as state education agencies) and intermediaries (such as statewide OST networks) that have the knowledge, trust, and expertise to engage and build the capacity of programs in those communities that, in turn, have the knowledge, trust, and expertise to support youth in the hours outside of school. (These could be OST programs, including many STEM program providers.)

This is not only about getting the money to where it is most needed; it's also about breaking a cycle of programs being excluded based on factors such as geography, lack of fundraising expertise, and size that results in targeted programs as opposed to comprehensive initiatives. Policymakers can draw on statewide OST networks and their core strengths. These networks can help break the cycle through the combination of simplifying application processes; conducting the outreach and providing the technical assistance required to bring in new and overlooked applicants; helping applicants create a winning application; offering supports to help programs stay accountable for providing high-quality services; and **developing programs' grant application and management skills** so they're better positioned to apply to reoccurring or new opportunities.



WHAT THIS CAN LOOK LIKE

- Title I: Provide more careful guidance and support in Title I of the Elementary and Secondary Education Act to ensure that OST STEM is reaching the communities that have the fewest STEM assets (e.g., museums, aquariums, STEM employers) and can use high-quality OST STEM to boost both academic skills and STEM engagement.²²
- 21st CCLC: Further lift up STEM in nonregulatory guidance and/or encourage the prioritization of STEM in state 21st CCLC competitions.
- Continue to engage intermediaries, such as those described in the spotlights, that can reach students who haven't previously been reached. (More on intermediaries below.)

Adequately resourcing existing key intermediary organizations

RECOMMENDATION

Recognize and support the necessary intermediary organizations to ensure their sustained capacity to play critical roles in supporting OST STEM. In the policy equation, intermediary organizations are ecosystem enablers that foster strong partnerships with K-12, higher education, employers, funders, and others.²³ Intermediaries come in many shapes and sizes, including the 50 statewide OST networks. But they all share the need for adequate and stable funding, which can be accomplished if they are included in policy strategies that go beyond short-term grants to establish a long-term or permanent funding solution that allows for continuous high-quality staffing, services, and partnership development.

WHAT THIS CAN LOOK LIKE

- ARPA funding: In the final phase, use ESSER III and other ARPA funds to directly support intermediaries, such as [statewide afterschool networks](#), [Every Hour Counts communities](#), [StriveTogether network communities](#), and [STEM learning ecosystems](#).
- Beyond the ARPA funds and time-bound initiatives such as National Partnership for Student Success and Engage Every Student create a dedicated funding stream at the federal and state levels for statewide afterschool networks as a core OST STEM intermediary.

Integrating OST STEM as a career pathways and workforce development strategy

RECOMMENDATION

Include OST STEM (and other important STEM players, such as [STEM ecosystems](#)) in pathways-friendly policies and partnerships for advancing equitable outcomes among K-12 education, higher education, business and industry, and the workforce that are focused on career pathways and workforce development. When states are investing in closing STEM equity gaps, integrating experiential work-based learning, and providing all students with career coaching and navigational supports, it doesn't make sense to leave OST out of this equation.

WHAT THIS CAN LOOK LIKE

- As part of CHIPS + Science initiatives, strongly encourage companies and other eligible grantees to work directly with OST career exploration and career programs. This could be part of the strategy for increasing early and ongoing exposure to STEM, which, as discussed, is a highly effective way to develop STEM occupational identity among diverse student populations.
- Mandate OST representation on federal and state task forces, committees, and other policy bodies focused on career pathways and workforce development. For example, [Vermont Afterschool](#) is another statewide OST network tapped to distribute ARPA funds because of its extensive knowledge and understanding of the needs of programs, families, and students in the afterschool field. The network is an important voice on the state's [Task Force for Universal Afterschool Access](#), along with representatives from HireAbility Vermont (focused on vocational rehabilitation), the Vermont Department of Labor, the state's Agency of Commerce and Community Development, and the offices of Sen. Bernie Sanders and Gov. Phil Scott. With Vermont Afterschool's input and its leadership in a subcommittee on youth employment, the task force approved the designing and piloting of a STEM-infused career exploration course. This course is intended for statewide use by OST programs to provide young people with foundational

career exploration and navigation skills and to broaden their awareness of STEM career pathways within and outside of the state.

- Continue the trend of collaboration between departments at the federal and state levels by increasing partnerships across agencies, including the departments of Education, Labor, Commerce, and Transportation, given the connection between education and workforce development. One example is the U.S. Department of Labor is participating in the U.S. Department of Education's [Engage Every Student](#) initiative. Another is [Unlocking Career Success](#), a joint effort across the departments of Education, Labor, and Commerce to support public- and private-sector leaders, government agencies, and other CBOs to help students earn postsecondary degrees and industry credentials that employers need, and our economy demands.



05. Conclusion

The policy recommendations point to short- and longer-term tactics.

In the short term, the opportunity to spend down the remaining ARPA funds using the lessons highlighted in this brief as a guide are tremendous: Partner with trusted intermediaries, be intentional about targeting the hardest-to-reach communities, and leverage OST STEM as a way to both expand economic growth and spread joyful, engaging learning to students during the times they aren't in school. As states articulate their priority strategies for workforce development now and in the years to come, OST STEM should be one of those stated priorities, with goals and metrics to support the investment.

In the mid- to longer term, federal and state policymakers need to rectify the glaring lack of direct federal and state support for intermediaries, including the 50 statewide OST networks. Investing in a national network of critical intermediaries is a huge area of opportunity. Think of all the students who would not have been reached—and the OST STEM they would be missing—if the three OST networks highlighted in this brief hadn't been ready, willing, and able to partner with their state educational agencies.

Lastly, as departments like Education, Commerce, and Labor continue to work toward shared goals in unprecedented ways, they should look beyond the school day to the many hours spent by students that can be harnessed to ensure the workers that are needed and their futures in family-sustaining careers with longevity.

Endnotes

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