

STEM Education Coalition 2018 Annual Report





The STEM Education Coalition has a powerful impact, thanks to the broad and united support of our more than 800 members in the education, business, and professional communities. We strive to assure that every student has access to a great education that will enable them to compete successfully for their own best futures in the increasingly technology-driven global economy.

This report highlights our work in making sure the voice of the science, technology, engineering, and mathematics (STEM) education community are heard – and heeded.



Year in Review

2018 will be remembered as a year of enormous change. Our Coalition recognizes that the pathways into modern careers are changing and that our nation's education system must change too.

The STEM Education Coalition has long been a respected voice in Washington for the views and recommendations of a diverse array of STEM stakeholders. Over the past years, we have also successfully expanded our engagement at the state level where more and more education policy decisions are being made in the wake of the landmark shifts enacted in a couple of the nation's prominent federal education laws, the Every Student Succeeds Act and the Strengthening Career and Technical Education for the 21st Century Act.

In 2018, we met with more than 100 legislators and their staffs. We are proud to have helped shape a number of significant pieces of legislation that were signed into law, including the Strengthening Career and Technical Education for the 21st Century Act, which updated the existing career and technical education law to include more allowable uses of funds for activities with a focus on STEM.

We are engaged in more than 15 states working to prioritize STEM education initiatives in state education plans and budgets and to engage more STEM educators and professionals in the public policy process.

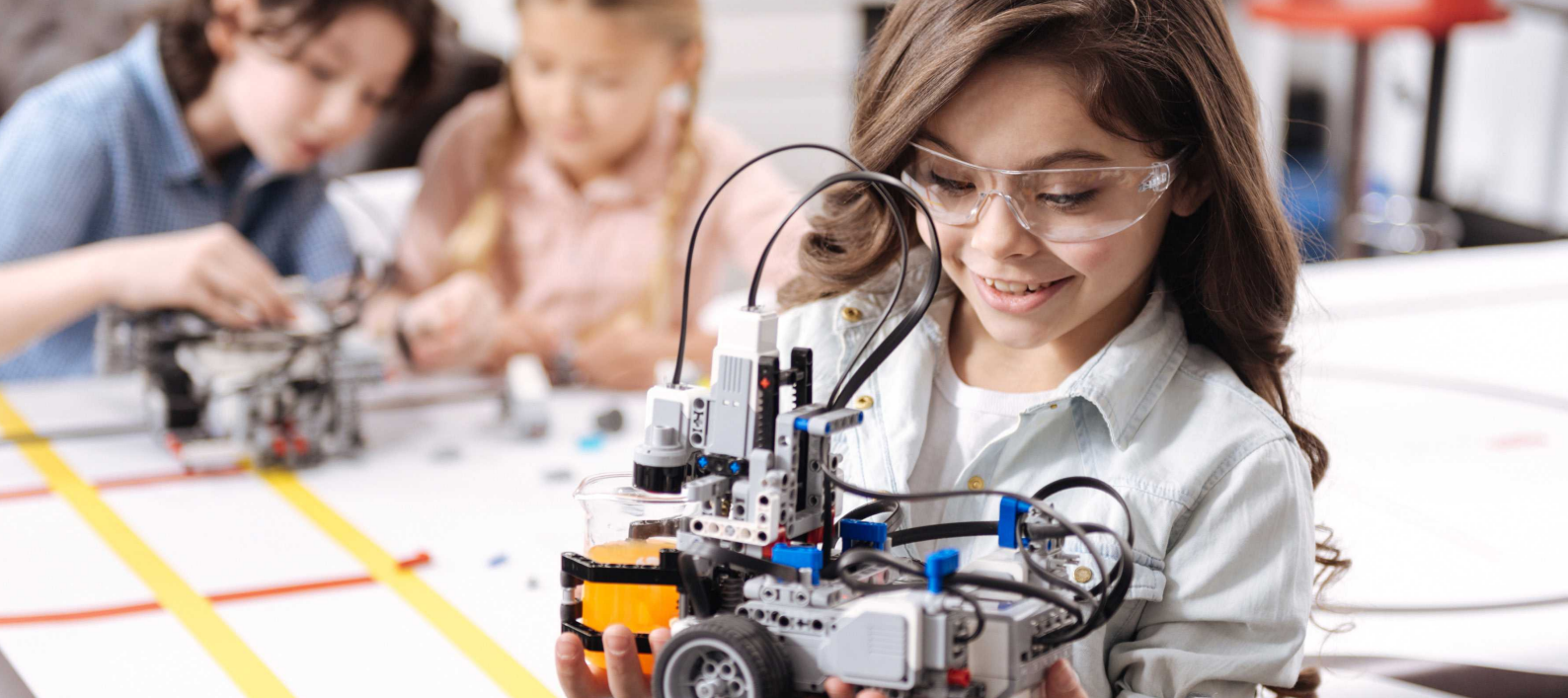
We hosted congressional public briefing events on K-12, higher education, career and technical education, and in-and-out-of-school issues with a collective audience of more than 600 attendees. The Coalition was also invited to testify before both state and federal legislative committees.

The Coalition's activities have been covered in major media outlets in the U.S. and internationally, including U.S. News and World Report, the Washington Post, Investor's Business Daily, and Education Week,

We publish a weekly newsletter to an audience of more than 25,000 STEM educators, businesses, and education leaders and our Twitter following has grown to over 45,000.

In 2018, we were happy to welcome the Security Industry Association, the College Board, the Society of Hispanic Professional Engineers, and the American Society of Landscape Architects as the newest members of our Coalition's Leadership Council and we have added more than 50 new local affiliate members to our Coalition as well, which now numbers more than 800 business, professional, and education organizations.

The education landscape is ever-shifting, and as Congress and the White House contemplate major changes to k-12, higher education, and career and technical education policies, our Coalition will be engaged as a forceful and bipartisan advocate for STEM education at every level.



Highlights of Our Work

February 13, 2018: Coalition Executive Director, James Brown delivered a speech at the Second Arkansas STEM Summit about STEM learning pathways and the practical aspects of implementing and leading a STEM program to fostering a deeper ideology of a STEM-oriented environment and adopting a new schoolwide focus that engages all stakeholders.

February 14, 2018: The House of Representatives unanimously passed the Building Blocks of STEM Act (H.R. 3397-115th) to consider age distribution in awarding NSF grants in order to prioritize equitable funding allocations for research studies with a focus on early childhood. The bill also included provisions that award grants to encourage young girls' participation in computer science and update the NSF Noyce Teacher Scholarship program to include informatics. The Coalition was highlighted for its testimony in support of the initiative in the bill's report.

February 2018 – Senate CTE Caucus HEA Briefing – The U.S. Senate CTE Caucus held a briefing, "How Reauthorization of the Higher Education Act (HEA) Can Better Reflect Today's CTE Landscape", where James Brown, Executive Director of the STEM Education Coalition, was a featured panelist. This briefing discussed the reauthorization of HEA and how it could help address the national shortage of CTE educators, how two-year programs are preparing learners for in-demand jobs, and other connections between HEA and CTE.

March 22, 2018: The Coalition responded in favor of the FY 2018 Omnibus proposed by Congress, which prioritized STEM education funding by protecting funding for vital teacher training, afterschool programs, and career and technical education as well as increasing the ESSA, Title IV-A funding by \$700 million.

April 17, 2018: The Coalition officially announced its support for H.R. 5509, the Innovations in Mentoring, Training, and Apprenticeships Act, which eventually passed Congress as one of its final acts before departing for the December holiday break and was enacted into law by President Trump. House Majority Leader, Kevin McCarthy, the bill's sponsor, reached out to the Coalition for a statement of support.

May 21, 2018: The Coalition rallied 100+ education, professional, and business organizations to sign on to a letter to congressional appropriators. The letter thanks appropriators for the \$700 million increase in ESSA Title IV, Part A funding in the 2018 Omnibus and outlines key funding priorities for the FY2019 appropriations cycle. The letter was sent to the chairs of both the Senate and House Committees on Appropriations and the Labor-HHS-Education and Commerce-Justice-Science sub-committee chairs of both chambers.

June 14, 2018: James Brown, Executive Director of the Coalition was invited to the first-of-its-kind State-Federal Science, Technology, Engineering and Math (STEM) Education Summit hosted by The White House Office of Science and Technology Policy (OSTP) on June 25-26, 2018. The attendees participated in the development of a new Federal 5-Year STEM Education Strategic Plan while using the advice from state input.

October 5, 2018: Coalition Executive Director James Brown releases a statement in reaction to the department's release of the FY 2018 Education Innovation and Research awards, highlighting the Coalition's pleasure at seeing the new focus on STEM education.

October 23, 2018: The Coalition welcomed STEM teachers and academics from Ukraine to discuss the Coalition's work, as well as the overall state of STEM education policy at the federal, state, and local levels of government. The Coalition was the group's first stop of their 12 day program in the United States to explore STEM educational programs and the roll of various STEM education stakeholder groups.

December 4, 2018: The Coalition joined in the White House's unveiling of their 5-year STEM Education strategic plan. The plan included a focus on increasing diversity, equity and inclusion for women and racial minorities in STEM, building strong foundations for every American to become STEM literate, and preparing all Americans for the future STEM workforce.



Media Coverage

January 2018 – Afterschool Snack, Overdeck Family Foundation renews efforts to support STEM learning:

Afterschool Snack discusses advancements in after school programs and accessibility to STEM learning. They quote James Brown, executive director of the STEM Education Coalition, saying, “The STEM Education Coalition is proud to continue our partnership with the Afterschool Alliance. Afterschool education provides students, especially underrepresented groups, with innovative, hands-on STEM learning opportunities that have been proven to improve STEM skills and spark curiosity in students.”

February 2018 – CUR Dialogues Conference:

James Brown, Executive Director, STEM Education Coalition, was featured as a key-note speaker at the three-day CUR Dialogue Conference held by the Council of Undergraduate Research speaking on an “Effective Advocacy Course for Federal Research and Education Programs”. The Council works to support and promote collaborative research and scholarship between undergraduate students and faculty.

April 2018 – U.S. News STEM Solutions Conference:

James Brown, with the STEM Education Coalition, was featured as a keynote speaker the U.S. News STEM Solutions Conferences speaking “On the Policy Front: What’s Working at the State and Local Level”. The conference’s goal was to focus on the shortage of STEM-related skills in the workforce and create a collective to fill jobs and advance the future STEM workforce.

Media Coverage

May 2018 - BCTV.org, Statewide Afterschool/Youth Development Network Announces PA STEM Ambassadors:

BCTV.org announced a STEM Ambassadors Program in Pennsylvania and quotes James Brown, executive director of the STEM Education Coalition, providing his support on behalf of the coalition for the program. "The STEM Education Coalition is proud to have such a great opportunity to engage with the Pennsylvania after-school and STEM education communities," said James Brown, executive director of the STEM Education Coalition. "Advocating the need for increased access to STEM education provides students, especially underrepresented groups, with innovative, hands-on learning opportunities that have been proven to improve skills and spark curiosity in students."

BLS, STEM 101: Intro to Tomorrow's Jobs:

The Bureau of Labor Statistics quoted James Brown, the executive director of the STEM Education Coalition, saying "The future of the economy is in STEM. That's where the jobs of tomorrow will be," in 2014. This quote was used many times by multiple sources throughout 2018.

October 2018 – Student Research Foundation, What are the Most Important STEM skills to Teach to Students before College?

James Brown with the STEM Education Coalition was quoted in the Student Research Foundation's article, "What are the Most Important STEM Skills To Teach Students before College?" speaking on STEM skills that educators recommend. He said, "A practicing engineer will tell you, 'I didn't use the calculus I learned to solve the problems on paper, but the way it taught me how to solve problems... was really important'".

October 2018 – SWE, Positive Signs for STEM Education in Federal FY19 Budget:

SWE thanked the STEM Education Coalition for providing data for their legislative reports in their article, "Positive Signs for STEM Education in Federal FY19 Budget."



The Policy Forum

The STEM Education Coalition Policy Forum, launched in 2015, is the public information and analysis component of the STEM Education Coalition. The Policy Forum continues to grow and deepen its focus on developing an in-depth understanding of emerging and critical STEM education policy issues.

Year in Review

May 24, 2018: The STEM Education Caucus invited the Policy Forum to join their briefing to discuss how colleges and universities are working with industries to prepare students for current and future STEM jobs. The panel discussed the skills gap between older workers leaving their jobs and the new workers coming in. They also discussed programs which allow employees to pursue their education in relation to the work with tuition reimbursement. Reps. Dan Lipinski (D-IL) and Randy Hultgren (R-IL) gave remarks on STEM issues affecting their districts.

June 8, 2018: James Brown, Executive Director of the Coalition Policy Forum spoke at the Minnesota Youth Policy Forum at the invitation of Ignite Minnesota. The conference, attended by more than 150 educators and state legislators, focused on STEM workforce development to enable youth to prepare for the jobs of the future. Mr. Brown updated the attendees on federal STEM legislation

September 26, 2018: The STEM Education Coalition Policy Forum, in conjunction with the Title IV, Part A Coalition, the College Board, and the National Science Teachers Association (NSTA) held a briefing on the topic of how states and districts are utilizing the Every Student Succeeds Act (ESSA) Title IV, Part A Student Support and Academic Enrichment Grants program to support STEM education and other “well-rounded” education activities.

October 18, 2018: The Policy Forum and the Afterschool Alliance sent a letter to Vermont HHS Secretary AL Gobeille praising the state’s decision to devote \$600,000 from the state’s tobacco settlement to support afterschool programs with a focus on STEM education. This was done to encourage Vermont HHS to adhere to the original vision of the legislature, which was for an afterschool program providing high-quality STEM experiences for students in high-need areas.

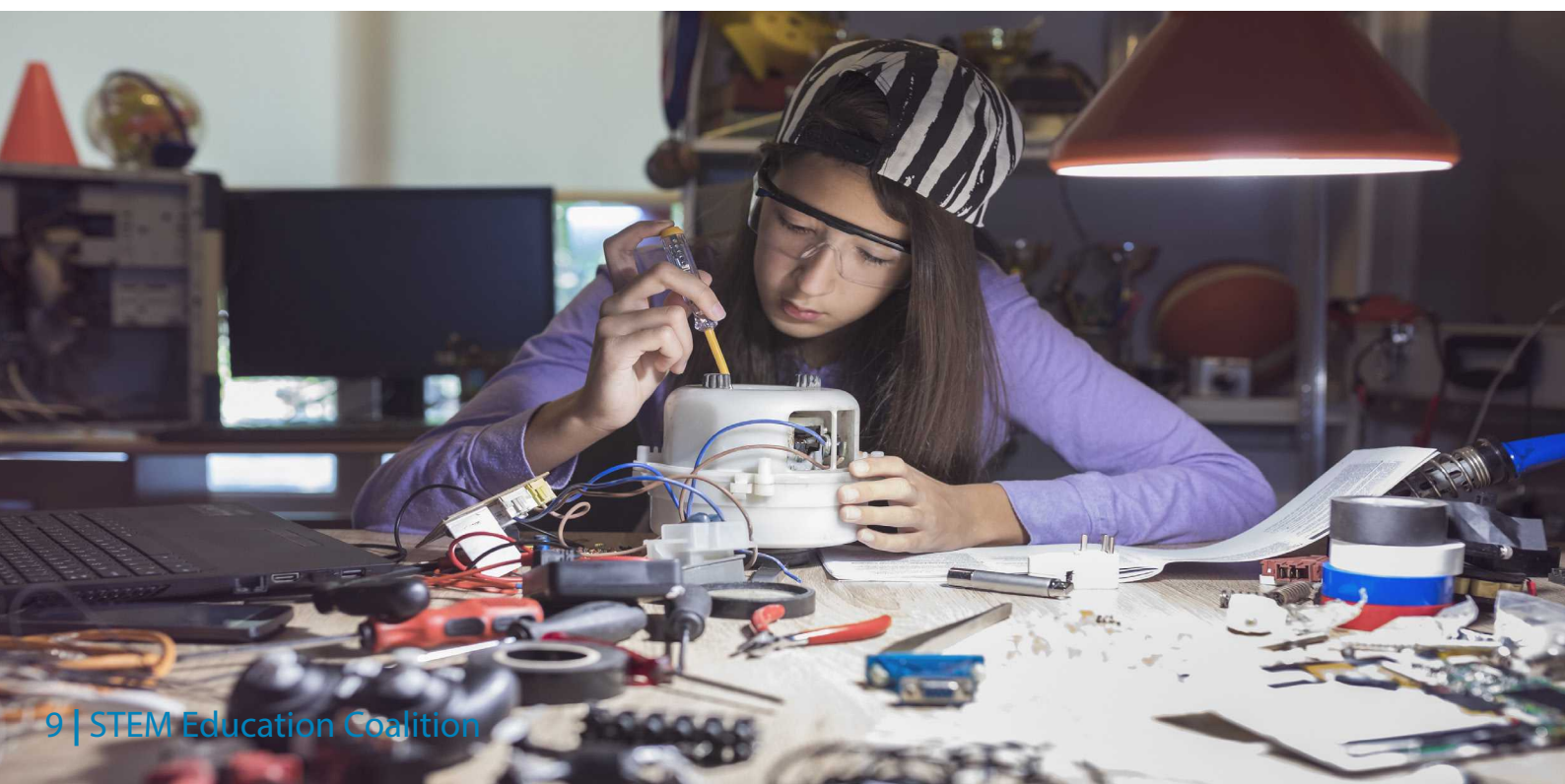
Year in Review (Continued)

November 29, 2018: The Policy Forum hosted STEM industry experts to discuss implications from a new report, “New Approaches to Engaging Middle and High School Students in Science and Engineering.” Panelists highlighted the education inequality and lack of diversity in the STEM field. They also recommended that teachers encourage students to ask and research questions to better prepare them for college rather than memorizing facts. Their solution is that schools should implement the kind of modern, culturally relevant learning discussed in the report because it would allow students to see the relevancy of STEM in their own lives and in their communities.

On November 15, the Policy Forum co-hosted the “Veterans in STEM: Innovations in Recruiting those Who Serve” briefing with Student Veterans of America. The briefing featured Chairman of the House Committee on Veterans Affairs Phil Roe, who talked about the importance of the new STEM scholarship program in the Forever GI Bill and the need to get information about innovative learning programs to veterans through social media and the internet.

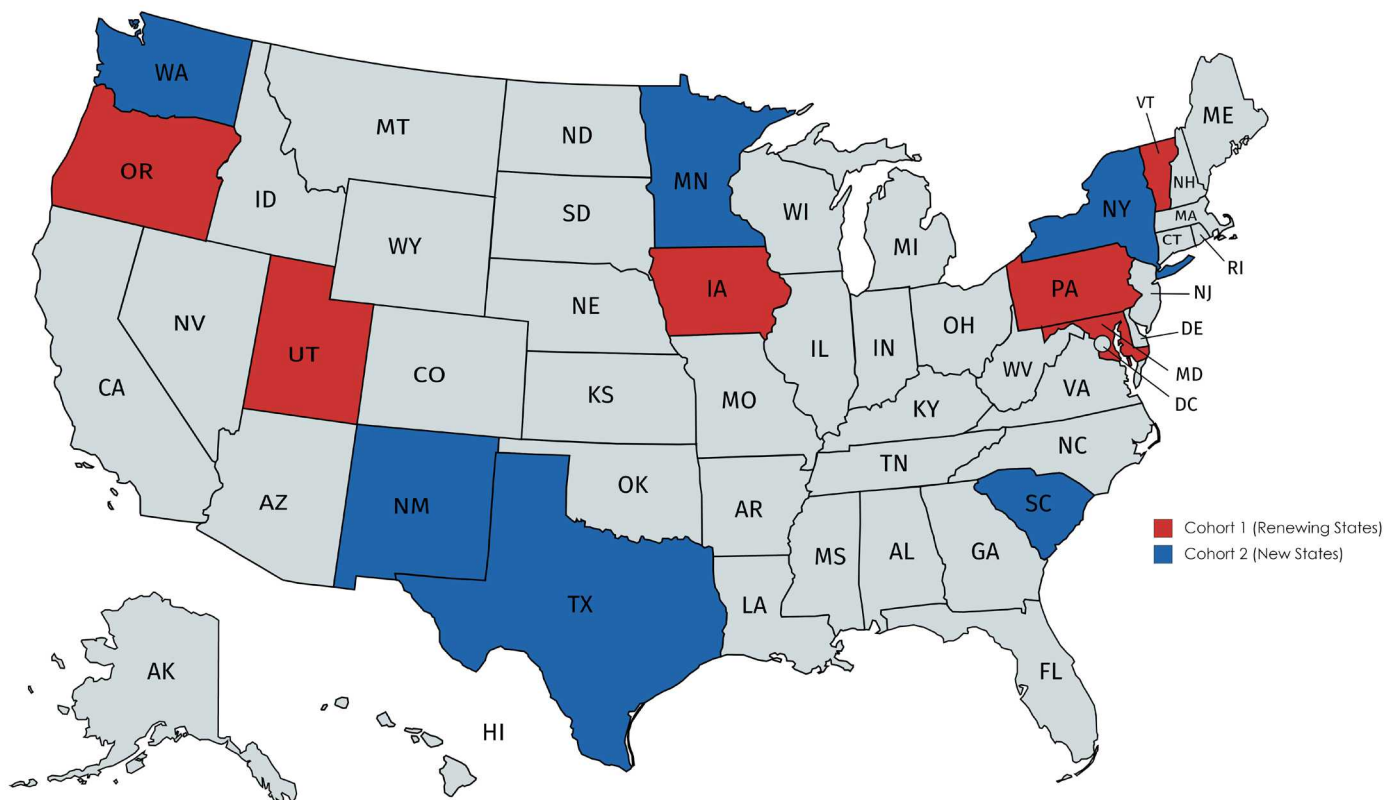
Afterschool STEM Hub

In 2018, the STEM Education Coalition Policy Forum continued our involvement in the Afterschool STEM Hub, which is supported by STEM Next Opportunity Fund (previously the Noyce Foundation). The Afterschool STEM Hub produced coordinated messaging and advocacy tools so local advocacy efforts can harmonize with the efforts of afterschool STEM advocates across the United States. The Afterschool STEM Hub is supported by a diverse collaboration of afterschool leaders and stakeholders and is led by the Afterschool Alliance.



Overdeck Family Foundation Grant

In 2018, the Policy Forum expanded our partnership with the Afterschool Alliance and Overdeck Family Foundation on a multi-state initiative providing technical assistance to the Mott Statewide Afterschool Networks (SANs) to engage in state-level out-of-school-time STEM policy. Activities during the 2017-18 grant cycle centered on providing the SANs with an online toolkit for STEM policy advocacy and regular one-on-one technical assistance as well as coaching the SANs on the development of their individual advocacy plans. The SANs also participated in polling, which indicated significant improvements in their confidence and effectiveness in advocating for afterschool-STEM thanks to the supports received from the Policy Forum.



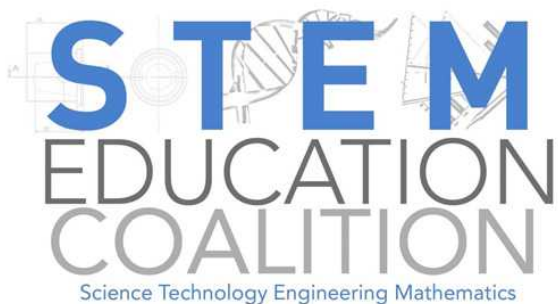
Five Fast Facts

- 41 of 50 Statewide Afterschool Networks (SANs) were reached
- 100% of SANs recognize Afterschool Alliance and the Coalition as trusted STEM Policy Sources
- 70% of SANs report more engagement in STEM Advocacy
- 5/6 direct grantees influenced ESSA or other state policies
- 100% of direct grantees increased their influence

Our Members



To our Leadership Council and over 850 affiliate members, thank you for your continued support in the mission of the STEM Education Coalition and our shared vision for a better future!



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