

THE NOYCE FOUNDATION 2013

"Optimism is an essential ingredient for innovation. How else can the individual welcome change over security, adventure over staying in safe places? A significant innovation has effects that reach much further than can be imagined at the time, and creates its own uses. It will not be held back by those who lack the imagination to exploit its use, but will be swept along by the creative members of our society for the good of all. Innovation cannot be mandated any more than a baseball coach can demand that the next batter hit a home run. He can, however, assemble a good team, encourage his players, and play the odds."

Robert N. Noyce

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About the Noyce Foundation

The overriding goal of the Noyce Foundation is to help adults guide young people into productive lives. Research shows that young people are much more likely to try to learn and retain challenging core subjects like math, science, and critical reading if they are exposed to and engaged in these topics in a variety of ways. While these kinds of experiences happen in good classrooms, they also occur outside of school time – whether in the sciences, the arts, or structured “work-based learning.” A wide range of engaging learning opportunities in school, as well as in home and out-of-school environments, should be available to all kids so that they can develop academic and interpersonal skills and competencies. However, since so many kids who do not thrive educationally live in challenging home environments and attend schools that are neither stimulating nor purposeful, they need to have access to learning opportunities in other environments that are engaging, challenging, and interesting.

To develop knowledge, skills, and interests, youth need more than just school time. They also need afterschool and summer time pursuing interests in the company of competent and supportive adults. Engaging summer activities are particularly important as the many kids who simply stop any kind of learning activity in the summer lose both knowledge and habits of mind that engaged learning requires.

We seek to build effective supports in designed environments for adults who are seeking to guide children’s healthy social and intellectual development. A critical experience for young people is significant time with supportive adults in activities that are interesting so they learn the value and pleasure of deep dives into subject matter, whether math, science projects, chess, birding, or the arts. These experiences build habits of work, belief in their own efficacy, and persistence skills that all kids, and especially those from low-income backgrounds, need to develop so they can navigate the range of environments that will face them as they mature.

Our grantmaking focuses on a few key areas: expanding opportunities for students to experience hands-on science in out-of-school settings; supporting human capital efforts to develop effective teachers and principal leaders; investing in models and policy for improving the teaching of math and science; and creating and expanding multiple pathways from schools to careers.

The Noyce Foundation was created by the Noyce family in 1990 to honor the memory and legacy of Dr. Robert N. Noyce, co-founder of Intel and inventor of the integrated circuit which fueled the personal computer revolution and gave Silicon Valley its name. Although he was an individual of daunting talents and intellect who was honored by two presidents as well as his academic and industry peers around the world, Bob Noyce also remained a humble and approachable man who believed fervently in democracy. In everything the Noyce Foundation undertakes, we are committed to promoting the qualities that Bob Noyce embodied: optimism, creativity, risk taking, and determination.

2013 Year in Review

Dear Friends and Colleagues,

At the Noyce Foundation, we strive to make investments that seed field-building efforts in areas that spark curiosity and engage youth to discover the wonder and importance of science, particularly during the middle school years when young people are making choices about their academic interests and becoming aware of career possibilities. We prefer to partner and collaborate with other funders, identify best-in-class organizations to lead efforts, ensure that impacts and outcomes are measured and evaluated, and take calculated risks on high leverage-high yield strategies. We are a learning organization that wants to help organizational leaders mine lessons learned for us and for the field. We are long on up-front vetting and short on bureaucracy. We don't take unsolicited proposals.

In our 2013 annual report, you will find a concentration of grantmaking in informal science and human capital, along with a growing presence in multiple pathways into college and careers and an expansion of our top ranked math multi-media professional development website, www.insidemathematics.org.

In informal science, we continued and increased our field-building efforts to integrate quality science programming into existing national out-of-school-time (OST) networks and youth development organizations. Major initiatives intensified with the Mott Statewide Afterschool Networks (16 states engaged in STEM system building), the Every Hour Counts urban intermediaries (6 major cities involved), and 5 of the largest national youth development organizations who have come together in a collaborative initiative around STEM programming (Big Brothers-Big Sisters of America, Boys and Girls Clubs of America, Girls Inc., National 4-H Council, and YMCA of the USA). These efforts are promoting and integrating science in existing OST settings and structures across the country, including the development and use of the instruments to assess impacts on youth interest and engagement in science.

To support the professional development of OST staff and volunteers as they learn to facilitate STEM activities, we worked with a number of leading OST organizations to conduct the market research for Click2SciencePD and selected the University of Nebraska-Lincoln to serve as the lead for this blended professional development initiative. Click2SciencePD developed and successfully tested the prototype, with the site going live at the end of the year. And we continued and expanded our involvement with private and corporate funder colleagues in the STEM Funders Network to coordinate efforts around major field-building initiatives.

Our human capital investments helped build out the core strategies of several major national organizations that are leading the thinking and development of work on teacher, principal, and district leadership effectiveness. Education Resource Strategies, New Leaders for New Schools, and The New Teacher Project are at the vanguard of national efforts to recruit, train, compensate, and evaluate teachers, principals, and central office managers of schools. These three leading organizations joined forces with the Noyce Foundation and local Baltimore city foundations to help Baltimore City Schools launch a three-year initiative to develop a principal pipeline focused on the identification, training, and mentoring of teacher leaders. The initiative concluded its second year in 2013. Additionally, we supported Teach Plus to help build its capacity to interject the teacher voice into local and national policy around issues of teacher quality and effectiveness.

In multiple pathways to college and careers, we supported Jobs for the Future in continued field-building efforts for its national Pathways to Prosperity Network of states and in a pilot effort focused on

middle school students. Concurrently, we worked with YouthBuild and Jobs for the Future to help them develop the concept and build the prototype for an online blended guidance system called MyBestBet to help low-income youth determine viable paths for their work futures.

We continued to make targeted investments in math and education reform nationally and in Silicon Valley with the Charles A. Dana Center and Agile Mind, the Silicon Valley Community Foundation, Innovate Public Schools, and cutting-edge educational technology with Silverback Learning. Our multimedia website, www.insidemathematics.org, continued to grow and develop, offering tools for math professional development and coaching, best-in-class videos, Problems of the Month, and performance assessment tasks aligned to the Common Core mathematics standards. The site's users have grown to 15,000 teachers and other educators on average per week.

Our signature Noyce Leadership Institute program to help senior science center leaders rethink the role of science centers and children centers in their communities entered its 6th cohort, bringing the total number of Fellows to 105 from 80 institutions and 25 nations.

We invite you to review our initiatives, grants, and resources, and send us your comments, at our website, www.noycefdn.org.

Sincerely,

A handwritten signature in black ink, appearing to read 'Ron Ottinger', written over a faint, larger version of the same signature.

Ron Ottinger
Executive Director

Grants Made in 2013

Major Grants

American Association for the Advancement of Science (Mass Media Science & Engineering Fellows Program) <i>Washington, DC</i> Further public understanding of science and technology by cultivating more accurate and extensive coverage of science and technology in the news.	\$20,000
Afterschool Alliance (Advancing STEM in Afterschool, year 2 of 2. Total amount is \$800,000.) <i>Washington, DC</i> Field-building efforts, including working with National Summer Learning Association and National Afterschool Association; continuing to map needs and opportunities for STEM in afterschool; providing technical assistance to the state afterschool networks around their own STEM education initiatives; defining youth outcomes and disseminating the research to practitioners and policy makers; and increasing advocacy and communications to ensure that afterschool STEM education remains a critical part of conversations within the STEM, general education, and afterschool fields.	\$400,000
Baltimore City Schools Leadership Pipeline initiative (Year 2 of 3. Total amount is \$3,300,000.) <i>Baltimore, MD</i> Collaboration among the Baltimore City Schools, Education Resource Strategies, New Leaders for New Schools, and The New Teacher Project to focus on Baltimore City Schools' human capital strategy, its organizational capacity to support its strategy, and its allocation of federal, general and philanthropic funds to advance its efforts. A priority for the initiative is to build a school leadership pipeline.	\$1,209,218
Collaborative for Academic, Social, and Emotional Learning (CASEL) and Dana Center, University of Texas at Austin	
CASEL/Dana Center Retreat on Productive Persistence. Determine opportunities for collaboration that would benefit the field and the school districts and schools each organization serves.	\$17,000
Connecting Mathematics Content and Social Emotional Learning to Instruction (Year 1 of 2, total amount is \$750,000.) Create a vision of what classrooms focused on mathematics content and social-emotional learning should look like, and develop tools that help educators assess instructional practice and student competencies.	\$380,694

<p>Dana Center, University of Texas, Austin (Fourth-Year Mathematics Course/Dual Enrollment Project, year 1 of 2. Total amount is \$500,000.) <i>Austin, TX</i> Introduce a new breed of fourth-year high school courses that provide students with an additional pathway to college readiness in mathematics, including courses in which students receive college mathematics credit while in high school.</p>	<p>\$250,000</p>
<p>Editorial Projects in Education (Core operating support) <i>Bethesda, MD</i> Sustain Editorial Projects in Education’s services, build on its technology infrastructure, develop business intelligence products, and enhance storytelling with multimedia approaches.</p>	<p>\$500,000</p>
<p>Education Resource Strategies <i>Watertown, MA</i></p>	
<p>Capturing the Moment: Scaling ERS’ Organization and Reach to Accelerate the Pace of District Transformation, year 2 of 3. Total amount is \$1,850,000. Implementation of the “Tough Times” campaign to convince decision makers nationally to take difficult but necessary actions to transform how school districts use talent, time, technology, and dollars to support their educational goals; increase organizational capacity to scale more quickly; and fill in gaps in product and tool offerings.</p>	<p>\$748,900</p>
<p>Building Scale and Infrastructure to Accelerate the Pace of Change in Urban School Systems, year 1 of 3. Total amount is \$4,500,000. Expand ERS’ organizational capacity in development, knowledge management, evaluation, recruiting and training, partner support, research and analytics, and tools and outreach.</p>	<p>\$1,125,000</p>
<p>Envision Excellence in STEM Education (STEM Funders Network) <i>Cleveland Heights, OH</i> Advance STEM education by leveraging the collective voice, resources, and strategies of its members to increase STEM grantmaker knowledge and engage in high-impact projects no grantmaker could undertake alone.</p>	<p>\$25,000</p>
<p>Experience Corps (DC Learning Lab, year 3 of 3. Total amount is \$450,000.) <i>Washington, DC</i> Test and evaluate innovations in literacy interventions to improve student outcomes among students in high-need Washington, DC elementary schools.</p>	<p>\$150,000</p>
<p>FrameWorks Institute (Informal Science Communications Research) <i>Washington, DC</i> Develop communication frames for STEM and informal learning to increase their visibility and value among federal, state, and local policy makers, school district and out-of-school time officials, and public and private funders.</p>	<p>\$230,000</p>

Inside Mathematics	\$161,250
Expansion and refinement of the Noyce Foundation’s Inside Mathematics website (www.insidemathematics.org) to add more videos of classrooms, lesson plans, and Problems of the Month to support teaching and coaching of mathematics aligned to the Common Core standards.	
Innovate Public Schools (Silicon Valley Start-Up Schools Fellowship, year 1 of 2. Total amount is \$400,000.)	\$100,000
Support public education reform for low-income children through launching new schools, parent organizing, district/charter partnerships, and strategic use of data.	
Jobs For the Future (Pathways to Prosperity, year 1 of 2. Total amount is \$920,000.)	\$650,000
Expand and deepen the work of the Pathways to Prosperity Network in supporting states and regions by building systems of career pathways from grades 9-14.	
Mass Insight Education (Mass Math & Science Initiative)	\$50,000
Use a multi-year research agenda to leverage and enhance Mass Insight Education’s reputation as a state and national leader in innovative and evidence-based efforts to close achievement gaps.	
Mott-Noyce collaboration for STEM in statewide afterschool networks	
The STEM in OST initiative, a collaboration between the Mott and Noyce foundations, is leveraging Mott’s national network of 40 state-level afterschool intermediaries by introducing science programming into statewide networks, with a goal of reaching 19 states over 3 years. Implementation is underway in 11 states, and a new cohort of states will launch systemwide work in Fall 2014. The total is \$1,413,200 over 3 years for the collaborative effort. Preceding the formal collaboration with Mott, the Noyce Foundation began support of major work in 7 statewide afterschool networks -- California, Missouri, Kansas, Michigan, Nebraska, Oklahoma, and New York.	
Arizona (planning)	\$5,000
California (implementation, year 2 of 3)	\$400,000
California evaluation supplement (PEAR)	\$70,961
Indiana (implementation, year 2 of 2)	\$60,000
Kansas (implementation, year 3 of 4)	\$50,000
Maryland (implementation, year 2 of 2)	\$60,000
Massachusetts (implementation, year 2 of 2)	\$60,000
Michigan (implementation, year 3 of 4)	\$50,000
Minnesota (planning)	\$5,000
Nebraska (implementation, year 3 of 4)	\$50,000
Oklahoma (implementation, year 3 of 4)	\$50,000
Pennsylvania (implementation, year 2 of 2)	\$60,000
Rhode Island (planning)	\$5,000
South Carolina (planning)	\$5,000
Washington (planning)	\$5,000
Technical assistance	\$18,700

National 4-H Council

Chevy Chase, MD

CEO STEM Roundtable.

\$100,000

Support collaboration among the nation's six largest youth development organizations – National 4-H Council, Boys & Girls Clubs of America, Big Brothers Big Sisters of America, Girls Inc., Girl Scouts of the USA, and YMCA of the USA – to reach 4 million under and unserved youth with quality STEM in out-of-school time programming.

\$46,148

Conference on Longitudinal Study of Out-of-School Time Science Programs.

Shape a robust longitudinal study on the impact of youth participation in out-of-school time science programs. The conference was co-sponsored with the Gordon and Betty Moore Foundation.

New Leaders for New Schools (Core operating support, year 3 of 3. Total amount is \$2,500,000.)

\$500,000

New York, NY

Development of capacity, tools, and knowledge to help districts change their approach to recruiting, training, and supporting principals, including launching the Emerging Leaders Program and Principal Institute as well as a policy team.

National Center for Science and Civic Engagement (SENCER-ISE Civic Engagement Partnership Support Awards Program, year 1 of 3. Total amount is \$396,108.)

\$132,036

Washington, DC

Create durable partnerships between higher education and informal science education professionals around compelling civic issues in order to bring about a transformation in STEM educational practices.

National Governors Association Center for Best Practices (STEM Agenda for Governors and States, year 3 of 3. Total amount is \$300,000.)

\$100,000

Assist states to include informal science education within comprehensive, equity-based and accountability-driven STEM education policy agendas. Identify best practices in informal science education and work to ensure integration of informal science within state education policy agendas.

New York Hall of Science (Museum Design Collaborative, year 1 of 2. Total amount is \$500,000.)

\$334,706

Foster and enhance design-based STEM learning in museums and other out-of-school time settings in collaboration with The Tech Museum of Innovation in California, the Museum of Science in Boston; the Science Museum of Minnesota; TELUS Spark Science Centre in Calgary, Canada; and Explora in New Mexico. The end result will be a set of comprehensive online resources for informal science institutions and other out-of-school learning settings.

<p>Oregon State University (Synergies Research Project, year 3 of 4. Total amount is \$1,216,177.) <i>Corvallis, OR</i> Researchers John Falk and Lynn Dierking’s four-year study of Portland area students to determine why and how they seek and use learning resources in their communities (both in and out of school), over time to develop interests, engage with and learn about STEM.</p>	<p>\$307,500</p>
<p>PEAR (Program in Education, Afterschool and Resiliency) at McLean Hospital/Harvard (Noyce Foundation Common Assessment Instrument, year 2 of 2. Total amount is \$249,612.) <i>Belmont, MA</i> Research and evaluation project for the Common Instrument, a survey for youth age 10 and up, which measures interest and engagement in science. The two-year project includes improving validity and reliability of the Common Instrument with 600 students; collecting feedback on how the reports are interpreted and used by programs; conducting a longitudinal study of 2,000+ students to track their growth trajectories of science interest; and publication of journal articles.</p>	<p>\$131,063</p>
<p>Pineland Farms and Association of Science-Technology Centers (ASTC) (Noyce Leadership Institute, 2012-13 and 2013-14 Fellows programs) Continued development of the Noyce Leadership Institute to provide executive leadership programs for new chief executives and senior managers, primarily in the science center field.</p>	<p>\$1,442,300</p>
<p>Policy Analysis for California Education (Core Operating Support and Matching Grant) <i>Stanford, CA</i> Expand PACE’s funding base and ensure its financial sustainability.</p>	<p>\$50,000</p>
<p>Rennie Center for Education Research & Policy (Sustaining and Advancing the Work of the Rennie Center, year 1 of 3. Total amount is \$700,000.) <i>Cambridge, MA</i> Maintain the Rennie Center’s preeminent voice in Massachusetts education reform; develop new products and strategies to engage federal policymakers; and pursue policy work with national implications.</p>	<p>\$300,000</p>
<p>Schmahl Science Workshop (Expanding Afterschool Science, year 3 of 3. Total amount is \$282,962.) <i>San Jose, CA</i> Implement Schmahl Science Workshop’s afterschool training model using its workshops adapted for afterschool settings, provide on-site coaching for afterschool staff, and continue to improve business operations to grow and sustain the program.</p>	<p>\$50,000</p>
<p>Science Friday Initiative (Matching Grant Support to Ensure Financial Sustainability, year 1 of 3. Total amount is \$750,000.) <i>New York, NY</i> Matching grant for Science Friday to continue to expand its donor base and examine revenue-generating possibilities, continue production of the radio series, and expand its educational offerings.</p>	<p>\$250,000</p>

<p>Silicon Valley Community Foundation (Implementing the Common Core State Standards for Mathematics in Silicon Valley, year 1 of 3. Total amount is \$700,000.) Support participating Silicon Valley school systems to align and articulate curriculum, instruction and assessment practices and policies to the Common Core State Standards for Mathematics, and build sustainable capacity to help their students master the content described in the standards.</p>	\$250,000
<p>Smithsonian/National Science Resource Center (Expanding the LASER Program to High Poverty Urban and Rural Schools, year 4 of 5. Total amount is \$150,000.) <i>Washington, DC</i> Matching funds to expand and validate the LASER program in high-poverty urban and rural schools in Texas, North Carolina, and Indiana over five years to reach 75,000 students and 3,000 teachers, and to test its impact with a rigorous, randomized control study.</p>	\$30,000
<p>SRI International (Assessing Outcomes of Informal Science Learning) Determine the availability, fit, and appropriate uses of potential common measures for informal science education, and disseminate findings to the field.</p>	\$10,000
<p>Teach Plus (Expanded Research Capacity, year 2 of 2. Total amount is \$250,000.) <i>Boston, MA</i> Expansion of Teach Plus' research capacity to identify and support teachers with a strong track record of helping students learn, and to analyze data from its database of more than 4,000 teachers and survey teachers beyond its current base to draw out themes and trends for the field.</p>	\$125,000
<p>Techbridge (Techbridge and Girl Scouts of the USA Partnership, year 1 of 2. Total amount is \$616,762.) <i>Oakland, CA</i> Build STEM capacity in Girl Scouts councils by developing, piloting, and evaluating Planners and professional development that align Girls Go Techbridge Programs-in-a-Box to GSUSA's <i>Journeys</i> program.</p>	\$307,119

The After-School Corporation (TASC)

New York, NY

<p>Study of informal STEM in NYC (Year 1 of 3, total amount is \$225,000.) Determine what conditions (e.g., professional development, curriculum, agency commitment) lead to high-quality STEM offerings within out-of-school time programs and ultimately, positive student outcomes. This work will allow TASC to assess the changes in New York City’s informal STEM education landscape since the 2007 launch of Frontiers in Urban Science Exploration and identify strategies for strengthening local and national policy and practice.</p>	\$67,220
<p>National FUSE Expansion, Phase 2 (Year 2 of 3, total amount is \$781,950.) In partnership with the Collaborative for Building After-School Systems, expand the Frontiers in Urban Science Exploration initiative to build nationwide momentum and capacity for high-quality informal science learning in afterschool hours. Sites include Boston, MA; Palm Beach County, FL; Baltimore, MD; and Chicago, IL.</p>	\$234,224
<p>Next Generation FUSE (Year 1 of 2, total amount is \$380,000.) Build the capacity of community educators and teachers to deliver rigorous and engaging instruction aligned to the Next Generation Science Standards; demonstrate that explicit instructional focus on the development of social-emotional skills will improve competency as defined by the Next Generation Science Standards; and build city/district and community support for school-community partnership as a necessary ingredient in science education.</p>	\$190,000
<p>The New Teacher Project (TNTP) (Produce & Support Effective Teachers, year 2 of 2. Total amount is \$2,700,000.) <i>Brooklyn, NY</i> Support to produce the most effective and dedicated teachers in the country, at reasonable cost; to prove that strategically managing teacher effectiveness improves student outcomes; and to become the nation’s most authoritative voice on effective teachers.</p>	\$1,325,000
<p>Thomas B. Fordham Institute (High Achievers on the International Stage) Learn from other countries’ approaches to policy, programs, and resources supporting education, including STEM education, for talented, highly motivated and/or high-achieving students, and distill lessons for American educators and policymakers.</p>	\$70,000
<p>University of Colorado Boulder (CU Teach, year 2 of 2. Total amount is \$150,000.) <i>Boulder, CO</i> Matching funds to support the CU Teach program, which aims to increase the number of highly qualified math and science majors recruited into secondary math and science teaching.</p>	\$75,000

<p>Urban Schools Human Capital Academy (Human Capital Leadership Development Initiative) <i>Reston, VA</i> Conduct the planning phase for an initiative to build and source the pipeline of talent for district Human Resources and Human Capital leadership.</p>	<p>\$30,000</p>
<p>University of Nebraska-Lincoln (Click2SciencePD, year 1 of 3. Total amount is \$1,634,212.) Develop, test, and expand the Click2SciencePD website as an online/blended model of professional development in science for afterschool program staff; engage with partners to develop videos and other content; develop a business plan for sustainability.</p>	<p>\$573,400</p>
<p>YMCA of the USA (STEM Integration, Phase II.) <i>Chicago, IL</i> Strategy and action planning for a multi-year effort to integrate STEM into the YMCA’s traditional youth development programs and Signature Programs.</p>	<p>\$397,388</p>
<p>YouthBuild USA (STEM Pathways Lifting Opportunity Youth) <i>Somerville, MA</i> With Jobs For the Future, develop, pilot, and evaluate an online student guidance platform to open pathways for low-income youth to enter STEM careers.</p>	<p>\$1,000,000</p>

Other grants

<p>Afterschool Alliance (Science Subgroup) <i>Washington, DC</i> Support for the Noyce Foundation science subgroup with advice and feedback on proposed and current projects.</p>	<p>\$10,000</p>
<p>Cushman Foundation (School-to-career work) <i>San Diego, CA</i> Support for school-to-career programs.</p>	<p>\$8,700</p>

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