

Request for Proposal for STEM Strategy Support

Proposal Deadline: Monday June 14, 2021

Proposal Contact: Phil Kim (pkim@kipp.org), Senior Director of STEM Achievement at KIPP Foundation

Organizational Overview:

Great education transforms lives. KIPP, the Knowledge is Power Program, is a non-profit network of 242 college-preparatory, public charter schools educating nearly 100,000 early childhood, elementary, middle, and high school students. KIPP schools are tuition-free, public charter schools open to all students. KIPP schools, KIPP regions, and the KIPP Foundation – are united by a common mission, a commitment to excellence, and a belief that if we help children develop the academic and character strengths they need for college and choice filled lives, they will be able to build a better tomorrow for themselves, for their communities, for us all.

The non-profit KIPP Foundation trains and develops outstanding educators to lead KIPP schools, provides tools, resources, and training for excellent teaching and learning, promotes innovation, and facilitates the exchange of insights and ideas within the KIPP network and with partners including: other charters, districts, colleges and universities, and non-profit organizations across the country.

Our Context

The KIPP network has recently adopted a new 2025 strategy. As part of that strategy, we are striving to make significant progress within our learning experience, alumni success, community engagement and advocacy and growth. We aim to deliver a consistently excellent learning experience for our students with college and career-ready academics in joyful schools that affirm student's identities.

The Initiative

Black, Latinx, and Native American persons make up 32% of the US population, but comprise just 13% of the Science, Technology, Engineering, and Math (STEM) workforce¹. Further highlighting the inequities within STEM fields, research shows that the rate of innovation in America would quadruple if women, people of color, and children from low socio-economic backgrounds were afforded the same opportunities as high-income families². Every student must have the opportunity to engage in rigorous, joyful, academically excellent STEM experiences Kindergarten through High School. At KIPP, we are on a mission to become a network that sets a bar of excellence in K-12 STEM education.

Over the past 5 years, KIPP Foundation has led network-wide initiatives across STEM in service of this vision. Our successes in STE can be broadly attributed to the meaningful work of the original STEM Guiding Coalition, which convened a cross-section of leaders across KIPP in 2015 to search and recommend core science curriculum. Today, all but 4 regions have adopted Amplify Science, and our partnership with FIRST Robotics has developed into a program of over 60 competitive teams. We have grown our Computer Science program to 35 high schools offering AP CS Principles and AP CS A, in addition to pilots in Environmental Literacy and Elementary Computational Thinking. The K-8 Master Teacher program successfully created thousands of Amplify-aligned core instructional planning and daily lesson materials to meet the needs of our teachers and

¹ ...as compared to white men who make up 31% of the US population and 51% of the STEM industry. https://wayback.archive-it.org/5902/20160211081202/http://www.nsf.gov/statistics/wmpd/2013/pdf/nsf13304_digest.pdf
² http://www.equality-of-opportunity.org/assets/documents/inventors_summary.pdf

leaders who asked for high-quality, KIPP teacher-created instructional materials especially during distance learning. We have seen that students in regions with Regional Content Leaders on average score 10 points higher on curriculum assessments³, emblematic of the value and impact of regional investment in academic systems.

We are now over 6 years out from our initial push to adopt Eureka Math and a majority of regions continue to use Eureka as their core curricular resource. We know from research and experience across the network that content knowledge for teaching is essential for making the shift to pursuing deep conceptual understanding along with procedural fluency, so we have built tools supporting that learning, structures and protocols for developing that content knowledge, and trainings for supporting the use of those tools and systems across the network. We know that building and maintaining a strong math program and developing excellent math teachers and coaches requires dedicated and persistent work, so we have built a thriving community of math leaders from across the network supporting the development of new regional leaders and collaborating to share in addressing new challenges as they arise.

While we've built incredible momentum in our STEM program adoption, the KIPP network is not seeing the impact on student outcomes that our success in adoption would suggest. We must work to have a clear definition of what excellence in STEM teaching and leading means at KIPP and craft an aligned strategy to realize that vision. We must shift our focus towards developing a comprehensive data and assessment vision and working with regional partners to ensure high-quality curriculum implementation. We must continue to broaden our strategies for current Design, Computer Science, and Engineering (DCE) adoption and establish new offerings for initiatives we know are meaningful for a holistic STEM experience, such as a focus on instructional technology, outdoor learning, environmental education, and an intentional investment in core elementary science. In Math, we lack a nationally shared vision of excellent K-8 math instruction and aligned academic systems that support it, resulting in inconsistent academic outcomes across the network. Our work thus far has meaningfully shifted mindsets in math teachers and leaders, however we know our student achievement has stagnated and the success of specific schools and regions are not representative of the network at-large.

Furthermore, we know that building equitable systems means that we must acknowledge that we don't have all the answers, that co-creating a shared vision is necessary for structural change, and that we intentionally center the voices of our student and regional communities while tapping into a network of experts and leaders in STEM fields outside of KIPP. Therefore, the KIPP Foundation plans to revitalize the STEM Guiding Coalition as our primary lever to bring together Foundation teams, network leaders, STEM experts, and our various student/family communities to strategize together.

To realize this vision, KIPP Foundation's STEM Team plans to revive a new iteration of KIPP's original STEM Guiding Coalition. As our science program matures from adoption to focusing on achievement and given math's variability across the network, we will use KIPP's 2025 Strategy as an opportunity to reflect, refine, and reposition as necessary to ensure we are on track to delivering an exceptional STEM experience for our KIPPsters. The purpose of the STEM Guiding Coalition is to develop a concrete strategy by Spring 2023 to move the work of STEM at KIPP forward for K-8 Science, K-8 Math, and K-12 DCE in alignment to our 2025 Plan Imperatives. It will seek to:

- Align - Invest our schools and regions in a shared Aspiration (what do we want to see by 2025) and Direction (what are the major conditions to get us there) for STEM at KIPP
- Recommend - Articulate common and comprehensive network-wide recommendations for STEM at KIPP

³ Data from the 18-19 school year, regions with dedicated STE Regional Content Leaders saw an average of 10% higher student outcomes on end-of-unit Amplify assessments

- Strategize - Develop a clear strategy to invest in and sustain high-quality STEM in every region

The new Guiding Coalition will build upon the recommendations of the original Guiding Coalition (Amplify Science will remain the core recommended science curriculum, and we will continue to explore and expand our Design, Computer Science, and Engineering (DCE) programming).

Year 1 SY 20-21	Year 2 SY 21-22	Year 3 SY 22-23	Years 4-5 SY 23-25
<p>Planning and Establishing Phase</p> <p>Establish a process and vision for the project</p> <p>Invest key and early stakeholders</p> <p>Build a Core Team</p> <ul style="list-style-type: none"> • 6 members: 3 STE and 3 Math Regional Leaders 	<p>Develop the Aspiration and Direction of STEM at KIPP</p> <p>Develop Aspiration (what do we want to see by 2025) + Direction (what are the major conditions to get us there) for 2025</p> <ul style="list-style-type: none"> • Invite content experts within the KIPP community and beyond to continue learning about best practices, new ideas, and what the education space has seen work in TK-12 math and STE landscape to define STEM at KIPP <p>Conduct an in-depth program analysis of our K-8 math and STE programs.</p> <ul style="list-style-type: none"> • Align KIPP Foundation’s STEM priorities, specifically for math and science but inclusive of literacy and DCE programs. 	<p>Pressure Test, Invest Stakeholders, and Analyze</p> <p>Craft Common and Comprehensive Network Recommendations</p> <p>Prioritize, set goals, develop a budget, and provide a clear path to guide our future work.</p> <p>1-3 Lab Regions partner with KF to early adopt and pressure test programs, models, and/or curricula.</p>	<p>Implementation and Execution; Evaluation and Reflection</p> <p>Once the work of the Guiding Coalition is complete, the KIPP Foundation STEM Team will then incentivize, operationalize, and sustain our growth as we set on a path to achieve our 2025 plan.</p>

Vendor Requirements Overview

KIPP Foundation is seeking a vendor to support the STEM Guiding Coalition and, specifically, the Core Team over the course of the 21-22 school year. While this initiative is set to carry us through to the 2025-26 school year, this specific RFP is seeking a partner vendor to support in the priorities aligned to school year 2021-22, with potential to grow the partnership beyond the initial contract.

The Core Team comprises of 6 network leaders and is directly supported by the KIPP Foundation K-8 STEM Team. In service of the Guiding Coalition's broader goals, the 21-22 priorities outlined above include two major work products:

1. Establish the STEM Guiding Coalition and Core Team
2. Develop Aspiration (what do we want to see by 2025) + Direction (what are the major conditions to get us there) for 2025
3. Conduct an in-depth program analysis of our K-8 math and STE programs.

The vendor must be able to work across multiple contexts given KIPP regions vary in size (number of schools), regional team expertise, per pupil funding, and multiple other factors. In addition, the vendor will need to support the KIPP Foundation and STEM Guiding Coalition Core Team with:

- Frameworks and strategies for developing equitable planning process and organizing structures
- Support in building deep understanding of excellent, equitable, joyful STEM instruction to inform our Aspiration and Direction planning
- Guidance in developing excellent curriculum, coaching, pedagogy, and school systems leadership to support effective instruction
- Connections to industry leaders and field experts to inform the work of the Core Team
- Identify meaningful opportunities for collaboration and learning across regions and stakeholders inside and outside of KIPP

Proposal Contact: Phil Kim (pkim@kipp.org), Senior Director of STEM Achievement at KIPP Foundation

Vendor Requirements

1. Dedicated point of contact to work closely with KIPP Foundation's STEM Team and STEM Guiding Coalition's Core Team
2. Desire for close partnership with and feedback from KIPP Foundation to co-create the systems, processes, and development of work products.
3. Capacity to manage partnerships with multiple regions of differing contexts
4. A commitment to flexibility and responsiveness
5. A diverse and experienced team that respects and considers KIPP's mission and has prior experience in working with comparable organizations
6. A clear foundation, direct access to, and/or deep knowledge in excellent, joyful, rigorous, and culturally affirming STEM instruction

Vendor Deliverables

1. Organizing Structures for the Guiding Coalition
 1. Professional development or shared learning for KIPP Foundation leaders and Core Team members to develop a common vision for equitable STEM instruction
 2. A plan for robust evaluation, impact measurements, project plan, and reflection opportunities
 3. A multi-year strategic plan co-created with KIPP Foundation and the Core Team, aligned to the audit and inclusive of change management recommendations
2. Program Analysis of K-8 Math and STE Programs
 1. Historical narrative and data of our programs and initiatives, done in partnership with other teams at KIPP Foundation
 2. An audit of our current systems and practices with Foundation and KIPP regions to gain a deeper context of the current state of programming in math and STE
3. Aspiration and Direction aligned to 2025 Priorities
 1. A clearly articulated vision/mission for excellent STEM instruction, aligned to KIPP's overall mission and vision
 2. "Aspiration" that defines what is possible by 2025
 3. "Direction(s)" that name the broad conditions and structures for KIPP to consider in enabling us to reach our Aspiration by 2025

Relevant Dates and RFP Deadline:

1. RFP Release – May 17
2. RFP Submissions – June 14
3. Initial Foundation Review – June 14-18
4. Follow Up Interviews with Relevant Vendors – June 14-25
5. Selection of vendor – June 28

Proposal Elements

Vendors are not required to submit for all components. Please submit for areas of the project that you are best able to support. We will not eliminate vendors who only propose partnership for a subsection of the project.

1. Cover Page to include:
 1. Name of Vendor
 2. Contact information for the proposed project lead
2. Vendor capacity: Please describe the following briefly (no more than a sentence is needed for each bullet).
 1. Describe capacity to provide dedicated staff to this project to support KIPP Foundation and the STEM Guiding Coalition
 2. Describe capacity to operate on timeline described above
3. Approach
 1. Approach, including key milestones
 2. Multi-year vision

3. How would you measure impact and progress?
4. How would you measure impact of programming?
4. Research Base informing your approach
 1. What is the research base that informs your approach? How has that research informed your approach?
5. Impact Data
 1. What impact data do you have to support your programming?
6. Assumptions
 1. The set of assumptions the vendor is operating under in order to drive successful implementation and completion of the project
7. Pricing: Please provide costs for the 21-22 school year, in addition to projected costs for future partnership. If there are other costs that would be associated with this project that are not explicitly listed here, please specify them as well. Please also provide an overview of any economies of scale that we might achieve in project pricing by working across multiple regions. In addition, if you have suggested a multi- year approach, please outline high level costs for future years in alignment with the set of activities.
8. References: Provide references, with contact names and telephone numbers, from two organizations with which the applicant has worked recently on a similar/relevant project

RFP Submission: Please electronically submit proposals to Phil Kim (pkim@kipp.org) and cc procurement@kipp.org by 5 pm EST on Monday, June 14.