talking STEM WITH talkSTEM

SUMMER 2023 NEWSLETTER









talkSTEN Share. Engage. Inspire.™

Dear Friends,

It's been an incredibly busy season at talkSTEM as we seek to understand and address the challenges and learning loss students around the world are facing due to the pandemic. New research from National Center for Education Statistics, found that average math scores fell 7 points since 2020 - the first-ever decline since the 1970s.

We know that engaging students in math learning throughout the day is fundamental to meeting these challenges. We also know that if schools, parents, and community educators are provided with resources that are explicitly designed to help them see math as being tightly connected to community places and experiences, the impact on student engagement is tremendous. We partner with both school-based and out of school educational sites because we want to impact all children, who move through home, school, and out of school settings.

Our key initiative is walkSTEM, encompassing innovative, open-source STEM walking tours highlighting math as the language of STEM. We define math broadly as the science of patterns and as a language allowing us all to describe and to pose our own questions about our environment and our activities. For more information, please visit our website, talkSTEM.org. As we continue to grow, we're always on the lookout for interested partners for these programs, and always welcome collaboration.

In this newsletter, you will learn more about what we are doing here at talkSTEM, and how you can help us continue to create a culture of personalized math and STEM learning for anyone, anywhere. I am grateful for your interest.

Koshi Dhingra

Founder and CEO, talkSTEM



talkSTEM 2023 **Board of Directors**

We are grateful to the following individuals for their service and commitment to talkSTEM.

> Selwyn Rayzor **Board Chair** President Rayzor Company

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Academics Outdoors Program Coordinator Region 10 Educational Service Center

Sejal Desai

Executive Director Akanksha Education Fund

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CityLab High School, Dallas ISD

Claire Haidar

Co-founder and CEO WNDYR and Pattyrn

Lynn McBee

Chief Executive Officer Young Women's Preparatory Network



To view more of our recent partnerships, as well as other information, links, and videos mentioned in this Report, scan the QR code or visit talkstem.org

JOIN OUR COMMUNITY

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RECENT HIGHLIGHTS AND AWARDS



MathFinder: In August, 2021, talkSTEM partnered with the Mathfinder Project, funded by the National Science Foundation to advance STEM learning through math walks at nine different partner sites across Dallas. More information about the initiative can be found at gomathfinder.org.

Collaboration with the Wipro Science Education Fellowship grant project at the University of North Texas at Dallas: talkSTEM provided a professional development series of webinars to District Science Coordinators (DSCs) from 5 partnering Wipro districts; Irving ISD, DeSoto ISD, Cedar I Iill ISD, Lancaster ISD and Grand Prairie ISD. The DSCs and their teacher partners from each ISD designed customized, app-guided walkSTEM lours in English and Spanish at chosen locations in their districts.

Math Power Prize: In November, 2022, talkSTEM won the top prize awarded by the mEducation Alliance, a non-profit organization focused on the evidence-driven and sustainable role of technology in education to advance quality educational outcomes. For more information, visit meducationalliance.org/math-power-prize.

talkSTEM Teacher Fellowship Program powered by Comerica Charitable Foundation: In Spring 2023, we worked with a cohort of middle school math teachers from Dallas ISD. Teachers from underserved schools received stipends to participate in the 5-month program and received professional development while building a community of talkSTEM teacher fellows.

H-E-B Grant for equity in STEM education: In February, 2023, talkSTEM was one of five nonprofits across Texas that received a grant from the H-E-B Grocery Company. These grants were focused on STEM education for underserved and underrepresented groups with the goal of advancing equity and inclusion, and continuing to diversify the tech pipeline.

OUR LATEST PARTNERS

talkSTEM is thrilled to announce recent partnerships with the organizations at right, with whom we've worked alongside this year to create new walkSTEM and MathFinder experiences and educator professional development. Together, we are broadening participation in STEM with our common goals of being inclusive, equitable, and innovative. For the full and current list of our partners, visit talkstem.org/sponsors-and-partners.

If you have partnership ideas you'd like to share, whether with youth organizations, public spaces, or something else entirely, we'd love to hear from you! We want to work with anyone that serves youth and families, or focuses on math, STEM, and STEAM education.





















Our signature program is the walkSTEM initiative. This is the building block for our partnerships, educator initiatives, and creative focus.

One of our most popular tours is the Dallas Arts District. It is our longest tour, consisting of over 20 walkSTEM stops, and touches about 10 different cultural organizations ranging from Booker T Washington High School for the Performing Arts (Dallas ISD) to Klyde Warren Park. It includes the built environment, the natural environment, and fine arts - all at publically accessible locations.







Partner Spotlight

Thank you to these talkSTEM partners for helping us create a culture of STEM learning.



DUSTIN MILLER

Senior Director of Experience and Innovation, Dallas Arboretum

"At the Dallas Arboretum, we partnered with talkSTEM early on because we know that it provides a valuable tool for engaging in the natural world by seeing it through a different lens than the average visitor is accustomed to. Exploring the world around you – in an informal manner but with research-based pedagogy – helps people merge what they've learned with what they experience."



SAMANTHA BRADBURY

Science Consultant, Region 10 Educational Service Center, Texas

"talkSTEM is an invaluable resource, both within and beyond the confines of the classroom. talkSTEM and Region 10 have collaborated on the development of a walkSTEM tour to be installed at the service center. By seamlessly incorporating talkSTEM practices, we can pave the way for a transformative instruction of STEM practices. Region 10 is excited to partner with talkSTEM to reach many of the 58,000 teachers we serve from across North Texas."



MEGAN ACOSTA

4th Grade Math Teacher, Mockingbird Elementary

"We took a field trip on Tuesday to the DMA and students were delighted to find the bowl from the video "What is mathematical about the patterns on this bowl?" The genuine excitement from my 4th graders making connections from the videos and being able to see patterns and math concepts in multiple artwork formats was such a neat culmination to this experience."



TAMASHA GOVAN

Curriculum Director, St. Philip's School & Community Center

"At the Dallas Arboretum, we partnered with talkSTEM early on because we know that it provides a valuable tool for engaging in the natural world by seeing it through a different lens than the average visitor is accustomed to. Exploring the world around you – in an informal manner but with research-based pedagogy – helps people merge what they've learned with what they experience."













22 tour stops across zoos. arboretums. & parks

WHAT WE'VE CREATED:

A COMMUNITY OF 50 TALKSTEM TEACHER FELLOWS

60 IN-PERSON & VIRTUAL EVENTS

150 EDUCATOR RESOURCES & PUBLICATIONS

280 EXPERT-CREATED VIDEOS

50 tour stops and counting have been created by walkSTEM community members

& COUNTING! Over **20**0 tour stops are available as GPS- and

app-guided tours through the FREE Otocast mobile & web app

OUR COMMUNITY THIS YEAR:









Over 40 partnering organizations, through whom we're able to connect with thousands of students

FUTURE PLANS

As we look toward the future, our plans include an expansion of talkSTEM to add critical staff resources to our programming and marketing capabilities.

- Expansion of our talkSTEM Fellowship Program to include Fall and Spring ceherts for 2023/2024.
- Additional partner sites for walkSTEM acress all of Texas, New York, and more.
- Our goal is to reach 250,000 children in Texas by 2024.
- Budget and program expansion to help us scale.

TO ADDRESS THESE NEEDS, WE NEED THE SUPPORT OF DONORS, PARTNERS AND COMMUNITY VOLUNTEERS.

Please visit our website for more information, be in touch if you have suggestions or ideas for growth, and support us at talkstem.org/donate.



