

**The US Education system is massive and complicated. *We need improvements at scale.***

**\$800000M**

Total US spend on  
K-12 Education<sup>1</sup>

**\$475M**

FY2023 NSF EDU budget  
request on “research”<sup>2</sup>

1. In 2020-21 dollars, per <https://nces.ed.gov/fastfacts/display.asp?id=66>.
2. From FY2023 budget request at [https://www.nsf.gov/about/budget/fy2023/pdf/08\\_fy2023.pdf](https://www.nsf.gov/about/budget/fy2023/pdf/08_fy2023.pdf). Lach analysis.

# 1 Is the NSF **investment** generating the **best possible answers** to the **most important STEM** education research questions for our country?

**Does NSF's current PreK-12 research spend reflect the right priorities?**

*Science, mathematics, engineering, technology?*

*PreK, elementary, middle, high?*

*Pre-service, in-service?*

*Demographic identifiers of students and teachers?*

*Classroom, school, district, state?*

*Early stage? Exploratory? Large-stage? Scale-up?*

**Are NSF-funded researchers asking the right questions for the country?**

*To what degree do funding mechanisms (e.g. solicitations, Dear Colleagues, etc.) shape the questions proposers consider?*

*Are questions for further study pursued?*

*In education, contexts matter most. How can we help research translate different contexts and schools?*

*What proportion of panelists are school leaders or teachers? What proportion of PIs?*

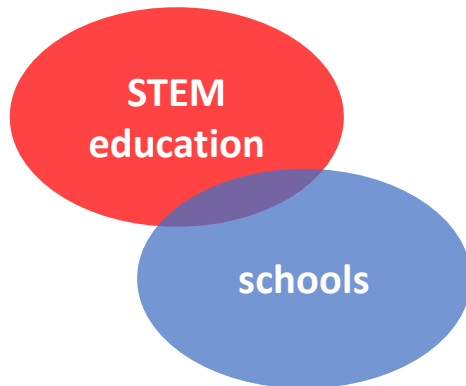
## 2 How is the NSF using **positional authority**, **resources**, and **reputation** to drive changes in the PreK-12 education system to benefit the country?

**For PreK-12 people, think leaders.**

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Every great school has a great leader.

Leaders translate research into their context.



**A theory-of-action, perhaps.**

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**Teachers matter most.** We must enable ordinary people to become extraordinary teachers in great schools.

**States, districts, and schools** are accountable for improving PreK-12 STEM education. Co-creation of research agendas is rare, difficult, and essential.

The NSF **contributes funding** for people and research to **help states/districts manage schools** where **teachers** can do extraordinary things **for students**.