Webinar | Feb. 21 at 3pm ET

Mathing Out Loud:

How Student Talk Can Accelerate Learning for All Students

Co-hosted by: Kevin Dykema, Lindsey Henderson, Jackie Ricks, and Kristen Reuter, and Joseph Hyun

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Meet Your Facilitators

Kevin Dykema
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TeachFX

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Mathematics Teacher
Brighton High School | Canyons SD

Jackie Ricks
Instructional Coach
Brighton High School | Canyons SD

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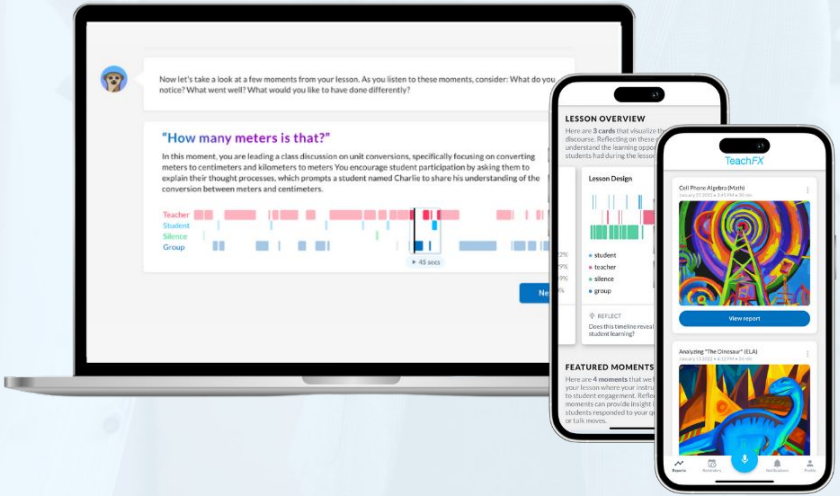
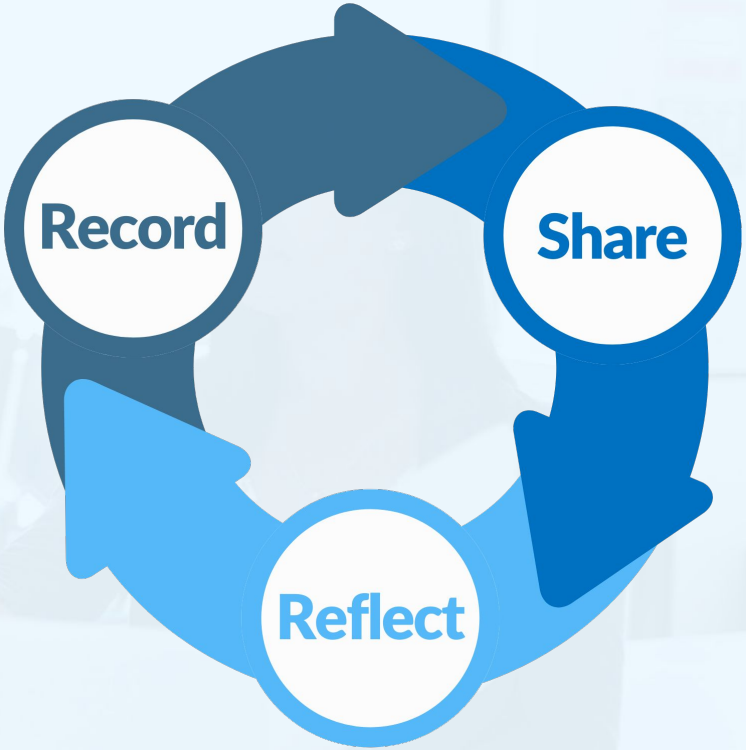
TeachFX helps teachers get students talking.





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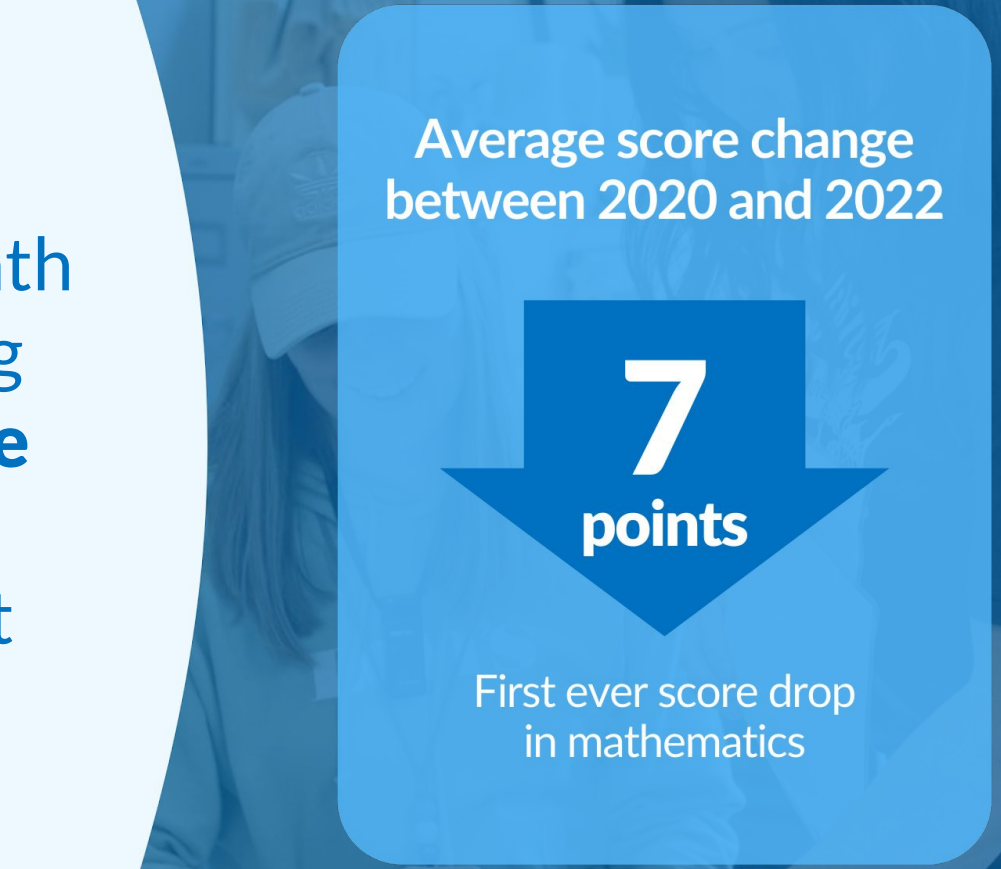
Agenda

1. Inquiry-based math instruction

2. Engagement mindsets

3. Leading indicators of learning

Nationwide, post-pandemic math scores are showing **the largest decline since 1990** (when the NAEP was first administered).



The Nation's Report Card, 2022

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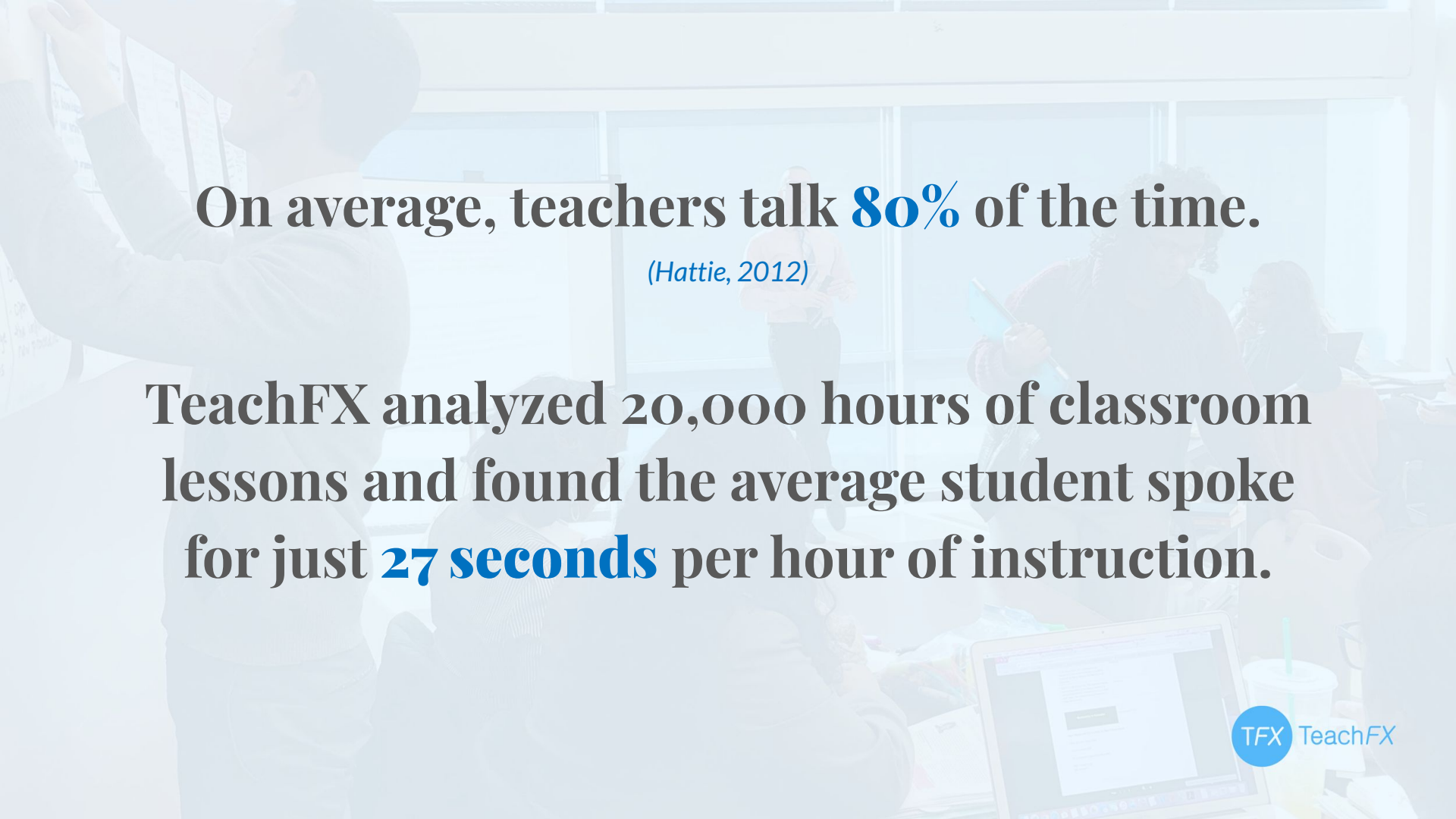

On average, teachers talk **80%** of the time.

(Hattie, 2012)

TeachFX analyzed 20,000 hours of classroom lessons and found the average student spoke for just **27 seconds** per hour of instruction.

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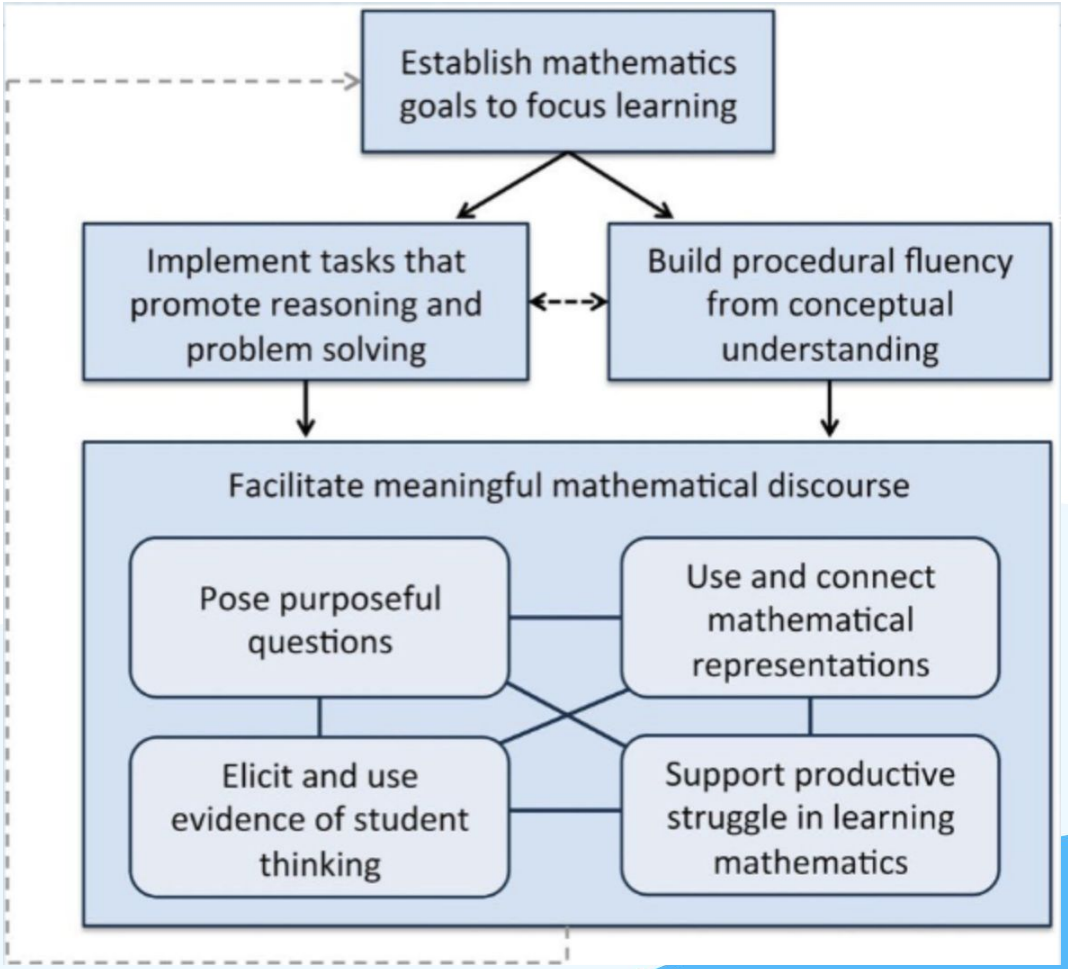
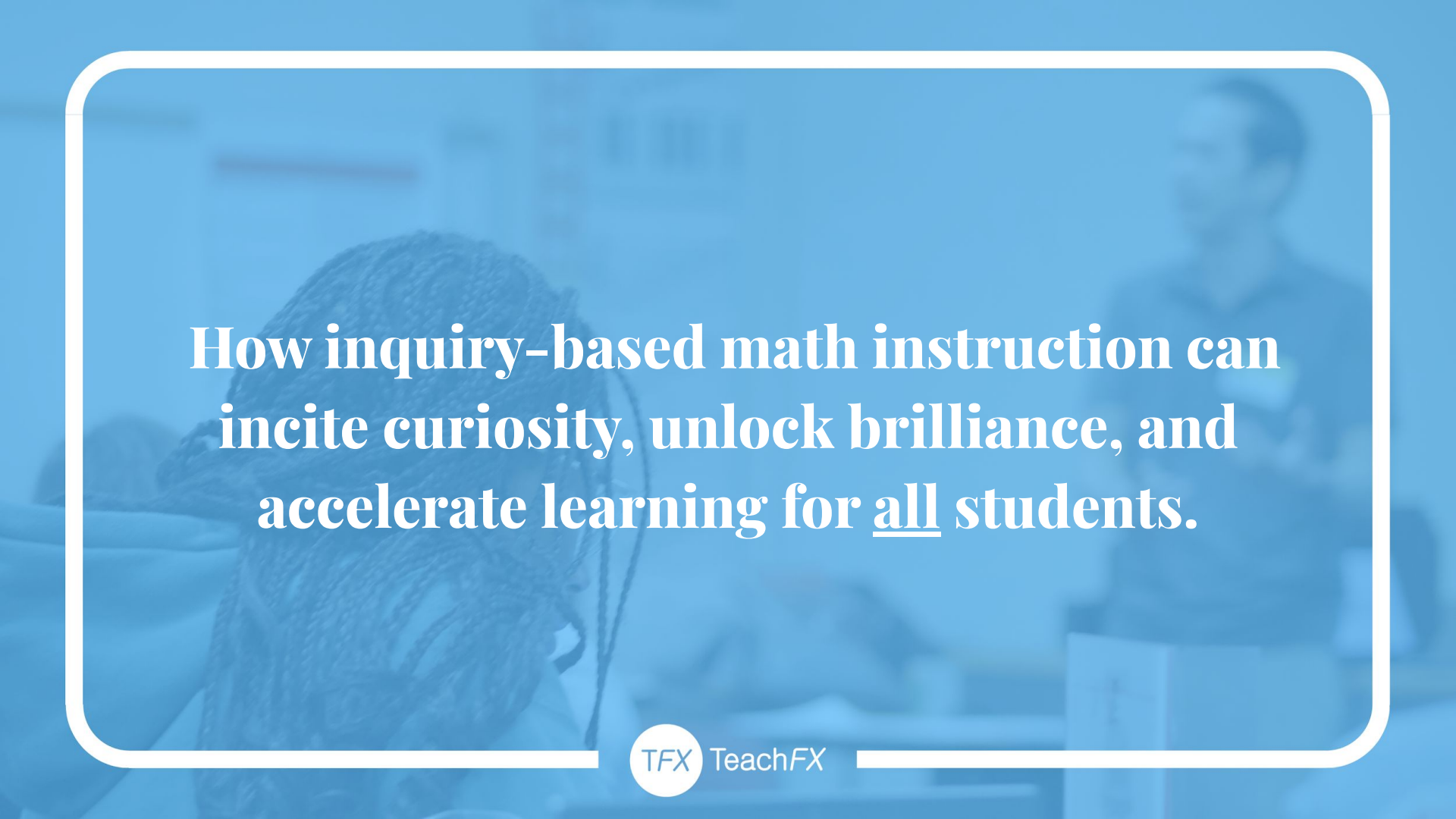

Establish mathematics goals to focus learning
Implement tasks that promote reasoning and problem solving
Build procedural fluency from conceptual understanding
Facilitate meaningful mathematical discourse
Pose purposeful questions
Use and connect mathematical representations
Elicit and use evidence of student thinking
Support productive struggle in learning mathematics



How inquiry-based math instruction can incite curiosity, unlock brilliance, and accelerate learning for all students.

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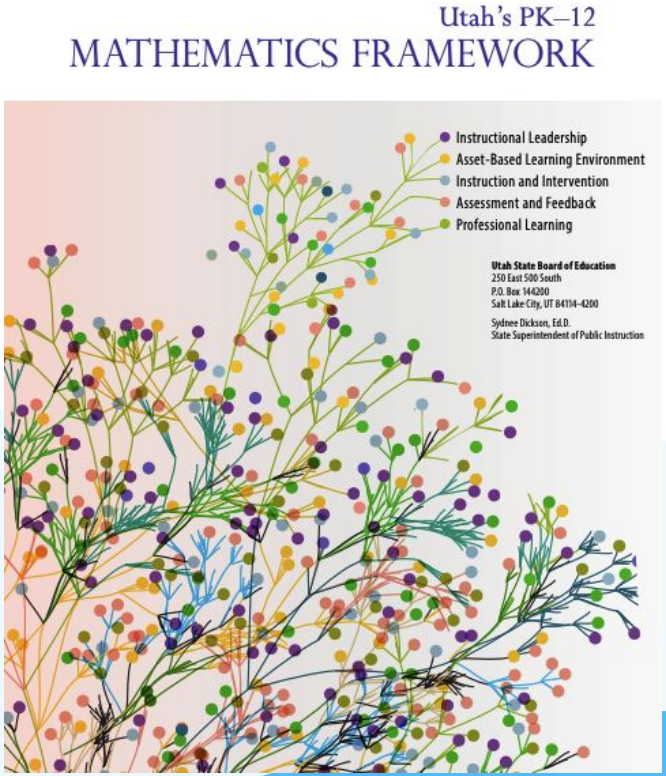
Utah's state-level resources like the Mathematics Framework, Evidence-Based Practices Menu, and more, support teachers' adoption of inquiry-based teaching.



How **engagement mindsets** of instructional leaders and teachers can foster student talk in math classrooms

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How a focus on leading indicators of learning can help pave the way for *mathing out loud* in every classroom...

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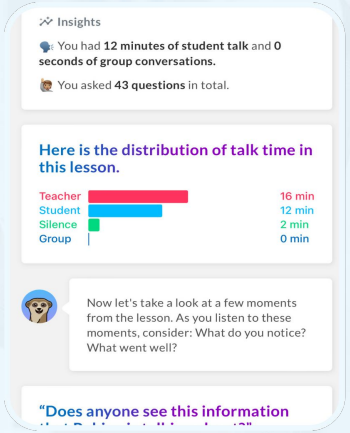
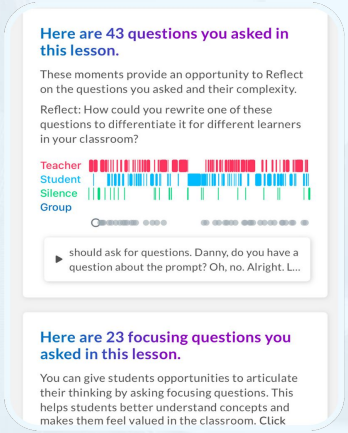
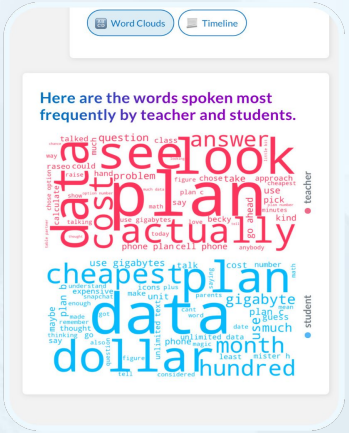
TeachFX empowers educators with data-informed feedback



The amount of student talk and teacher talk



Teachers' use of questioning



Use of standards-aligned academic vocabulary

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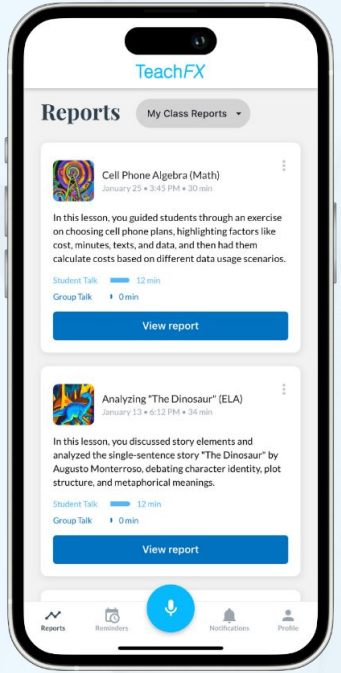
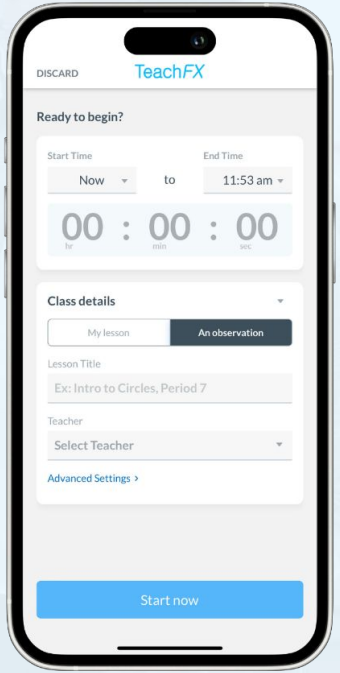
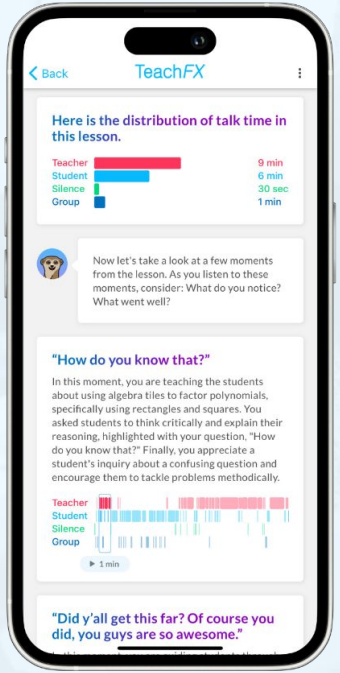
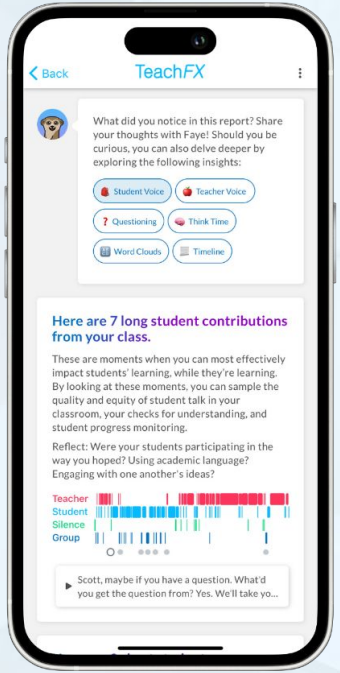
Simply press record.









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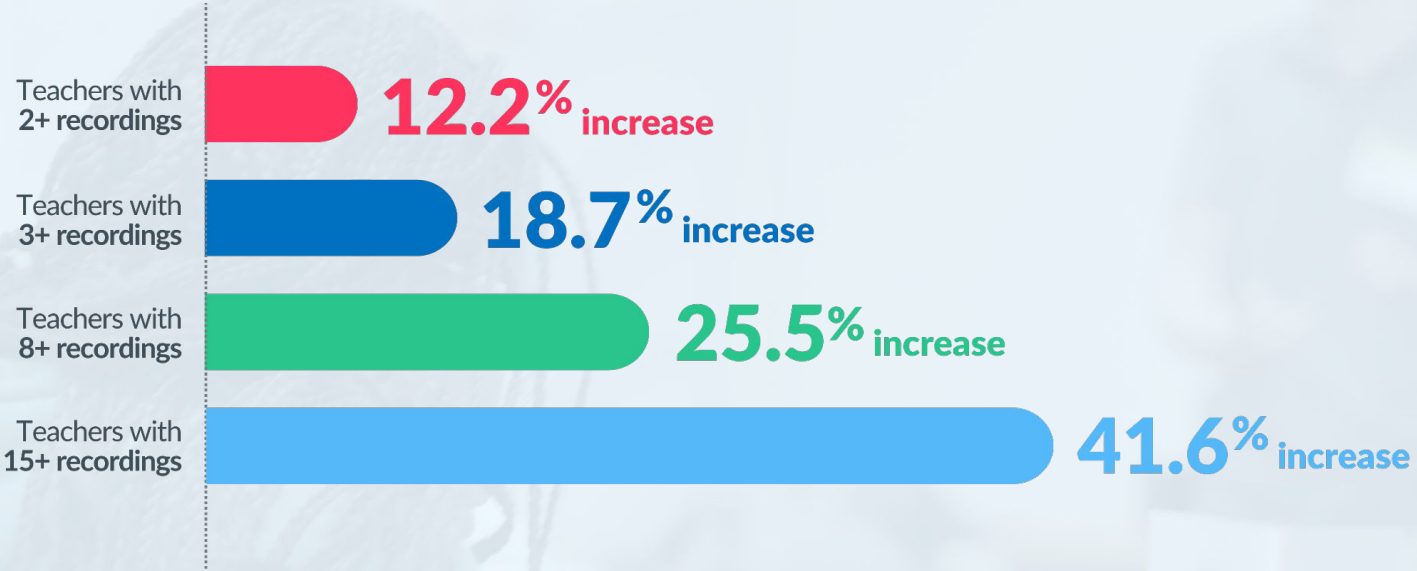
Student talk is increasing overall, with the greatest change observed among the highest usage teachers.



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Alpine teachers increase their use of Wait Time the more they use TeachFX.

18%

increase in using
Wait Time 1

pause after a teacher speaks

27%

increase in using
Wait Time 2

pause after a student speaks

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Additional Resources

Utah Talent MAP

Utah Mathematics Framework

Inquiry Based Teaching

Instructional Approaches: Explicit and Inquiry-Based Instruction

Evidence Based Practice Menu

Article - Utah a 'bright spot' in a gloomy post-COVID national math and reading report card

Article - Are Students Getting All the Math They Need to Succeed?

Concept-Based Mathematics

Student Questioning Cards

TeachFX - Utah

TeachFX - Research

Secondary Math Professional Learning Opportunities

OER Commons - Mathematics

NCTM - Messages from the President

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