

Montgomery Township School District



# K-4 Transition to NJSLS-Science

From Kits to Creation

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## Unpacking the Boxes:

- Years in the making
- 2 Teachers from each grade-level, Kindergarten to 4th grade
  - Piloted 2016-17
  - Full K-4 implementation 2017-18
- From FOSS to MTSD
  - Kit Buy-Back
    - Good-bye rotations!
  - Teacher training
    - 2017-18 PD Days





# Claim, Evidence, and Reasoning

Claim: *The answer you consider the most valid and acceptable*

Evidence: *All relevant data that supports your claim*

Reasoning: *A statement that explains why your evidence is important or relevant and why it supports the claim*



# Montgomery Township School District



## Claim:

Our Professional Development series has improved K-4 Science instruction.

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# Evidence in Training:

- Started 2 years ago as a district
  - March 2016 District PD
    - Led by district supervisors, teacher leaders, and guest speaker - Mike Heinz, NJ DoE Science Coordinator
- Piloting with in-district lessons tiered for our students, designed by our teachers
- Teachers are the trainers
  - Extensive training for our teachers from in- and out-of-district partnerships
    - Summer SOAR
    - KT3 and STEM Teachers NYC
    - RVCC and Rider
  - 2 teachers from each grade-level piloted these lessons in their own classrooms, made revisions, and then taught the remaining grade-level teachers
  - Making connections between buildings
    - High School teachers helped in the trainings
    - Continual communication between supervisors.



# Montgomery Township School District Evidence in Professional Development:



## Year Round In-District PD



Summer  
SOAR with  
Science



District  
Partnership  
Program



Summer  
Institutes with  
RVCC & Rider



KT3 & STEM  
Teachers NYC

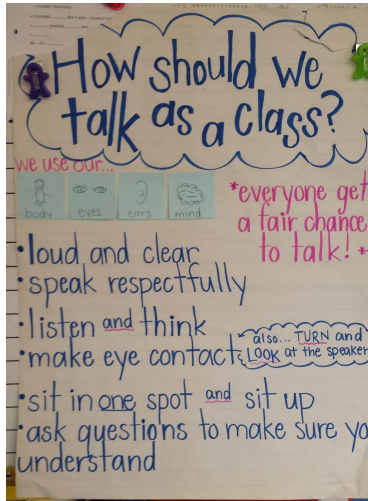




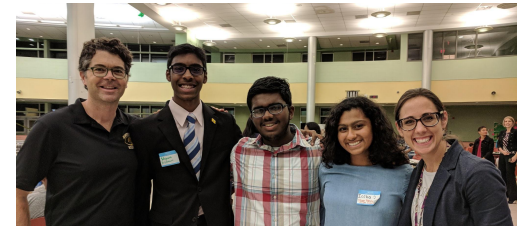
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## Evidence in the classroom:



**HESS STEM Activity**



**Family STEM Nights K-12**



**Students use evidence to support claims**



**Students talking Science is the norm**



**Franklin Institute Travel Science Shows**

# Montgomery Township School District



## Claim:

Our Professional Development series has improved K-4 Science instruction.

## Reasoning:

- Taught by teachers for teachers
- Multiple Professional Development opportunities
- Support from K-12 administration, and beyond
- Students and teachers use evidence to communicate their claims to each other.
- Science directly connects to our district, making it meaningful to all.
  - Students make meaningful connections to Science
- Science is more engaging for not only the teachers, but especially the students.



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## Classroom Examples:



HESS STEM Activity



Family STEM Nights K-12



Students use evidence to support claims



Students talking Science is the norm



Franklin Institute Travel Science Shows



Exploring energy transfer through sound



Testing water and wind on "land"



Investigating stream life

## Professional Development Examples:



Summer SOAR with Science

District Partnership Program



Summer Institutes with RVCC & Rider

Year Round In-District PD



K13 & STEM Teachers NYC



Unpacking Kit Boxes

