A School’s Journey:
The Difference Space Grant Can Make

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“We had so many other things to teach that I just could not get to teaching science. We had to teach reading and math, so there was no time for science.”

Mrs. Bolton, First Grade Teacher
The Journey Begins
Inquiry : the Heart of STEM Education
True Inquiry: Authentic Student Research

SSEP
Student Spaceflight Experiments Program
Student Questions

Does microgravity effect muscle systems of *C.elegans* when given the supplement Creatine?

Does Algae grow more rapidly in Space or on Earth?

Does parathyriod hormone affect bone loss in a microgravity environment?

Will a microgravity will change the density of the liquids?

How does microgravity affect the production of synthetic insulin?

Does calcium carbonate in a microgravity environment decrease bone loss in osteoblasts?

How does microgravity affect the bioluminescence of *E. coli* genetically modified with GFP?
Career Choices
“Inquiry has changed my teaching. I used to not like teaching science, but now I love it. Just look how excited my students are!

Mrs. Bolton, First Grade Teacher
Nationally Award Winning School

- MSA School Excellence
- MSA School of Distinction
- National Blue Ribbon School

94% proficiency on science CMT
Where Did This Teacher Get Her Start?

- 2 NASA Achievement Awards
- AIAA Aerospace Educator of the Year
- CAP National Aerospace Teacher of the Year
- National Space Club National Aerospace Educator of the Year
- Selected as a TIS Pathfinder Commercial Astronaut

This Year:
Scott Crossfield National Aerospace Educator of the Year by the National Aviation Hall of Fame
Commercial Astronaut Training

Teachers in Space
Teacher Workshops
Tremendous Opportunity on the Horizon
You are transforming STEM Education.