

Endeavor

Science Teaching Certificate Project



Sponsored by:
National Aeronautics and Space Administration
(NASA Award: NNX08BA63A)



WELCOME ALL!

★ STEM Leadership Seminar ★

TONIGHT:

Leadership Distinction

- **DEFINITION**
- **EXPECTATIONS**
- **PROJECT**
- **IDEAS**





★ Leadership Distinction ★



“systemic change beyond school walls”

GOAL from EDUCATORS:

“I like this... I want to include this in my curriculum.”



★ Leadership Distinction ★



“systemic change beyond school walls”

Implementation of a project that shares what you have learned through Endeavor, that will most likely reflect a **change in practice** in other teachers.



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“systemic change beyond school walls”



- short-term PD project
- change in practice
- measurable impact





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CONCEPT

- Design, develop, implement, and evaluate “STEM” for other teachers and colleagues.
- Intervention is “new and different” to affect change or examine student work.
- Measure progress toward the objectives with teachers, and, perhaps, students.



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WHAT WILL I DO?

Develop, Implement a mini- “pick-up” unit

[*e.g.*, 5-10 day, standards-based unit featuring NASA assets/data, STEM pedagogical strategies, assessment]

Include pre-and post- *teacher* measurement
(optionally, students)





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WHAT WILL I DO?

NASA assets/STEM pedagogy to meet standards

- (i) professional development workshops
- (ii) integration in/of an existing curriculum
- (iii) other

FOCUS IS ON CLASSROOM USE



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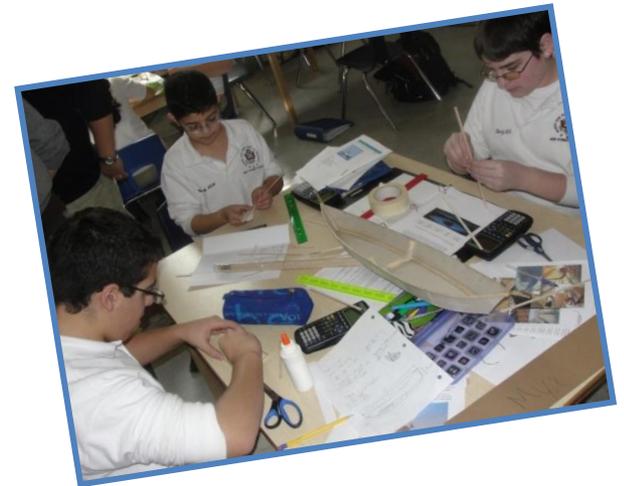


Discussion Questions Online

-Light Readings

-Idea Exchange

“Pick-Up Project”



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** IDEAS

Conduct a week-long, **district-wide** Engineering Design Challenge in 5th grade classes. This will include:

- Pulling together NASA Engineering Design resources and activities for use by teachers
- Coordinating with District Administrators to conduct district-wide challenge/contest
- Conducting a thorough professional development session for all 5th grade teachers
- **offshoot**: Invite “winning” student teams from each school to present their work at the high school science expo.



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*** IDEAS

- 8th grade science classrooms in the district perform a 10-day unit that uses Mars data to teach Earth science (or 5-day unit for Chemistry)
- 9th grade classes track solar storms during all of May
- 5 elementary schools in the district participate in the *Fit Explorer*, “Train Like an Astronaut” challenge in Physical Education classes.

