Lloyd Center for the Environment 430 Potomska Rd Dartmouth, MA 02748

Museum Institute for Teaching Science

2016 Summer Professional Development Institute
Hybrid Institute For Grades 3-8 Educators

Using Science and Engineering Design Practices to Engage Your Students in Inquiry-Based Learning



Southeast Region

To the Moon and Back: Engaging Your Students in Earth and Space Science Through Inquiry

On-Site July 18-22
On-Line June 18-August 5







| Dartmouth

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Southeast Region

Hybrid Institute for Grades 3-8 Educators
To the Moon and Back: Engaging Your Students in Earth and Space
Science Through Inquiry

Blast off into inquiry-based learning with a journey from Earth to space in this hybrid course! Engage with online content, group discussions, and handson, minds-on inquiry activities, and explore ways to use technology, engineering and math to excite and educate your students about earth science concepts. Examine how tides are controlled by the moon and sun, create earth/moon models, and explain how tidal and weather events are important to local ports and harbors. Dig deep into soil science, collect your own samples, and uncover different properties and patterns of soil formation



through data analysis. Explore ways to bring plate tectonics alive in your classroom while you investigate and explain the geographical features we see on Earth -- above and below the ocean's surface. Take a telescopic view as you investigate the stars and beyond, and bring astronomy into a context that is more accessible for students. Learn how technology and engineering have advanced our understanding of earth and space systems. Throughout the institute, practice a variety of tools, methods and technologies, and tap into your background knowledge to construct inquiry-based activities to explore the realms of Earth and space with your students.

Partners: Lloyd Center for the Environment, Battleship Cove, University of Massachusetts Dartmouth

Course Dates: On-Site July 18-22 (8:30 am - 3:00 pm); On-Line June 18-August 5; Half Day On-Site Introductory Session June 11; Half Day Fall Callback November 5 Registration Fee: \$400/participant; \$375/participant for team of 2 or more teachers from the same school district

PDPs and Graduate Credit: Cambridge College (4 credits, 90 PDPs; \$200), Framingham State University (4 credits, 90 PDPs; \$300); 50 PDPs available without graduate credit. PDPs and graduate credit will be awarded after participation in the Fall Callback.

Participate in content and skill development sessions taught by professional educators and scientists at each collaborating partner organization. Daily activities include indoor inquiry-based classroom experiences and outdoor field experiences. Take home investigations you can use in your classroom and a collection of teaching resources and field trip ideas!

- Learn how to present the Science and Engineering Practices to your students and how they relate to science inquiry.
- Explore STEM resources in your community.
- **Get ready** to meet the revised MA Science and Technology/Engineering Standards.
- **Become** part of a network of teachers from your region and across the state.





Visit www.mits.org for more info on this and MITS Professional Development Institutes in other regions and to register online.

For more information contact:

Rachel Stronach
Executive Director
Lloyd Center for the Environment
508-990 0505
rstronach@lloydcenter.org

Brianna Wilkinson
Assistant Education Director
Museum Institute for Teaching Science
(MITS)
617-328-1515
bwilkinson@mits.org