

# Museum Institute for Teaching Science



Museum Institute for Teaching Science

## 2015 Spring and Summer Professional Development Opportunities

Inquiry-Based, Minds-On, Hands-On Science, Engineering, Technology and Math  
(STEM) Professional Development for K-12 Educators



***Professional Development Institutes & Workshops***  
***Customized School Services***  
***Science By Connections***

# About MITS

**The Museum Institute for Teaching Science (MITS)** is an umbrella organization that brings together museums, nature centers, aquaria, zoos, and other science and cultural organizations to provide professional development programs for formal and informal educators. MITS offers a diversity of programming and resources for K-12 educators through collaboration with partner organizations and institutes of higher education. MITS promotes high quality, inquiry-based, hands-on, minds-on science, technology, and engineering through a variety of programs including:

- **Summer and Academic Year Professional Development Courses for formal educators**
- **Professional Development Seminars for informal educators**
- **SeaPerch Workshops**
- **Customized School Programs**
- **And More!**



## **Contact Information:**

Museum Institute for Teaching Science  
1354 Hancock St., Ste. 302  
Quincy, MA 02169  
617-328-1515  
mits@mits.org  
www.mits.org

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# 2015 Summer Professional Development Institutes

## Infusing Science, Technology and Engineering Practices Into STEM

Join us for an exciting professional development opportunity! Choose between hybrid or one-week institutes.

- **Learn** to use inquiry-based, minds-on, hands-on methods in your classroom.
- **Participate** in classroom and outdoor experiences.
- **Explore** educational resources in your community.
- **Find out** about field trip and classroom resources available from museums, nature centers and other organizations in your region.
- **Become part of a network** of teachers from your region and across the state.
- **Earn** PDPs or PDPs and graduate credit.



## Three Different Models to Choose From

### Hybrid Institutes for Grades 3-8 or Middle and High School Educators

Hybrid professional development institutes combine 16 hours of on-line instruction with a one-week on-site component. During the on-site component, spend a day at each partner institution's site participating in minds-on, hands-on inquiry investigations combined with content sessions.

### One-Week Institutes for Grades 3-8 Educators

These one-week professional development institutes combine content and skill development sessions. Visit each partner institution's site for 1-2 days and participate in both minds-on, hands-on inquiry investigations and content sessions.

### One-Week Institutes for Middle and High School Educators

These one-week professional development institutes for middle and high school educators combine content and skill development sessions taught by scientists, content specialists and professional educators. These courses are based out of the lead institution with field trips to area research labs, field sites and local businesses with product development laboratories.

***All activities are designed to help you meet state and national learning standards!***

# 2015 Summer Professional Development Institutes

## Berkshire Region

### Institute for Middle and High School Educators

#### *Going With the Flow: Using Inquiry Methods to Teach Watershed Science*

Rivers today and throughout history have formed the backdrop of New England communities. What affects water quality in rivers that flow through your community? How do scientists measure watershed health? Come get your feet wet as we visit local rivers and explore a variety of methods you can use with your students to explore a watershed! Build a SeaPerch - a working model of an underwater remotely operated vehicle (ROV) and use it with your students to video underwater ecosystems or collect water quality data at different points along the river. Identify indicator species and learn about local citizen monitoring programs to engage your students. Build on your newly acquired watershed knowledge and construct a miniature urban landscape and aquifer. Using your model, explore and develop methods for remediating runoff and put science and engineering design practices to work. Investigate current research on the rivers in New England, the impacts of dams and dam removal, PCB pollution remediation in the Housatonic River watershed and "low impact development" solutions to remediate non-point source pollution. Through inquiry-based, minds-on, hands-on activities and data analysis, you will develop ways to excite your students about their local rivers!



**Collaborators:** Berkshire Museum, Housatonic Valley Association, Flying Cloud Institute

**Course Dates:** July 6-10; Introductory Session Saturday, June 20th (Fall Callback date will be set during the institute)

**Registration Fee:** \$400/participant; \$375/participant for 2 or more teachers from the same school district (registration cost includes a SeaPerch Kit)

**PDPs and Graduate Credit:** Cambridge College, Massachusetts College of Liberal Arts (3 credits, 67.5 PDPs); 40 PDPs without graduate credit



## Cape Cod Region

### Institute for Grades 3-8 Educators

#### *Whale Tales and Seashore Sagas: Exploring the Marine Environment Through Inquiry and Literacy*

Investigate the connections between marine science, technology, engineering, math, and literacy as you explore Cape Cod's coastal environment. Muck around in a tidal mudflat, sample a saltmarsh, wander through woody upland, and view a vernal pond as you deepen your understanding of our local ecosystems. Learn about local wildlife, coastal habitats, and associated scientific research, then practice making literacy connections with naturalists and educators from Mass Audubon Long Pasture Wildlife Sanctuary and Thornton Burgess Society. Visit science laboratories in Woods Hole and a marine animal hospital in Buzzards Bay and witness some of the science and engineering involved in studying the ocean. Then, practice using literacy skills along with scientific inquiry and engineering design in hands-on investigations that you can take back to your classroom. Invigorate your science curriculum with exciting minds-on, hands-on interdisciplinary STEM investigations.

**Partners:** National Marine Life Center, Massachusetts Maritime Academy, Woods Hole Oceanographic Institution, Thornton Burgess Society, Mass Audubon's Long Pasture Wildlife Sanctuary, Marine Biological Laboratory

**Course Dates:** July 6-10; Introductory Session Saturday, June 13th (Fall Callback date will be set during the institute)

**Registration Fee:** \$350/participant; \$325/participant for 2 or more teachers from the same school district

**PDPs and Graduate Credit:** Cambridge College, Framingham State University (3 credits, 67.5 PDPs); 40 PDPs without graduate credit

**Housing is available for this region.**

# 2014 Summer Professional Development Institutes

## North Shore Region

### Institute for Middle and High School Educators

#### *Research and Resiliency: Exploring the Ways Local Ecosystems are Responding to Our Changing Climate*



Explore coastal habitats along the North Shore and investigate the ecology of these environments. Come learn how scientists and land managers work together to protect and preserve the health of these local ecosystems. Coastal habitats are continually threatened by increased storm events, sea level rise, invasive species, coastal runoff and tidal restrictions. Learn how to determine and evaluate the health of an ecosystem, explore engineering solutions that could minimize the impacts of climate change to local habitats, and investigate how plants and organisms are adapting to life in a continually changing climate. Venture into the field with scientists and use a variety of scientific tools and techniques to collect and analyze

field data. Learn how you can use data collection software to engage your students and introduce them to scientific research and potential career opportunities. Each day will be filled with field trips, hands-on investigations and discussions aimed to highlight the resiliency of our local habitats.

**Collaborators:** Mass Audubon's Endicott Wildlife Sanctuary, US Fish and Wildlife Service, Plum Island Ecosystems LTER, Ipswich River Watershed Association, University of New Hampshire

**Course Dates:** July 13-17; Introductory Session Saturday, June 20th (Fall Callback date will be set during the institute)

**Registration Fee:** \$350/participant; \$325/participant for 2 or more teachers from the same school district

**PDPs and Graduate Credit:** Cambridge College, Framingham State University (3 credits, 67.5 PDPs); 40 PDPs without graduate credit

## Central Region

### Hybrid Institute for Middle and High School Educators

#### *Exploring Energy and Climate Change: Science, Systems and Solutions*

Take a broad view of the connections between energy and climate change as you sharpen your science and engineering design practices. Acquire the skills to make claims about weather and climate changes in your local region based on evidence! Learn about weather/climate changes from the experts, and then identify sources from which you can access and analyze temperature and precipitation data in your own region. Visit a science research center to explore the impacts these changes have on the ranges of plants and animals in the Northeast. Then identify citizen science programs you can engage in with your students to assist scientists with collecting data in species distribution, migration and other indicators of changes in our environment. Learn about connections between the health of the soil, an ecosystem and human populations through regenerative processes and how holistic management can address carbon challenges. Tour an engineering site to view a variety of hydrokinetic turbine designs. Hear how engineers scrub emissions from fossil fuel plant stacks and address carbon sequestration. Design your own wind turbine blades and test their performance. Participate in activities that help you "think like a system" and role play community decision-making about energy policy. Synthesize all you learn both online and on-site by describing how your school system could address climate and energy concepts across the breadth of the curriculum and by creating investigations for your students to hone science and engineering practices while they deepen science content knowledge of energy and climate within Earth's systems.



**Collaborators:** Alden Lab, Harvard Forest, National Oceanic and Atmospheric Administration

**Course Dates:** June 22-August 7 on-line; July 13-17 on-site; On-site Introductory Session Saturday, June 13th (Fall Callback date will be set during the institute)

**Registration Fee:** \$375/participant; \$350/participant for 2 or more teachers from the same school district

**PDPs and Graduate Credit:** Cambridge College, Framingham State University (4 credits, 90 PDPs); 50 PDPs without graduate credit

# 2015 Summer Professional Development Institutes

## Metro-West Region

### Hybrid Institute for Grades 3-8 Educators

#### *Things That Move: How Scientists, Engineers and Artists Investigate Motion*

The speed, path, and patterns of moving things hold clues to exciting science concepts and practices! Join us as we explore how things move and discover inquiry-based investigations for bringing the science and engineering design practices into your classroom. At The Discovery Museums, we will explore the intersection of science and art as we experiment with things that move - from chemicals and fog, to pendulums and balls. See how artists have been inspired by their observations and try various artistic techniques to capture, interpret, and model these dynamic and often fleeting phenomena. At Mass Audubon, we will study how weather and wind affect living things-- together, we will design and build sculptures to support an understanding of the mechanics of movement with wind as a source of power. Using a kinesthetic approach, we will model the motions of the universe at the Christa Corrigan McAuliffe Center. From planets that orbit their stars, to the collapse and outward bounce of a dying star, to the thermal motion of atoms and molecules, every component of the cosmos engages in a beautifully choreographed dance! Together we will explore what it takes to detect both very large scale and very small scale motions in our world and beyond.



**Partners:** Mass Audubon's Drumlin Farm Wildlife Sanctuary, Christa Corrigan McAuliffe Center, The Discovery Museums

**Course Dates:** June 22-August 7 on-line; July 6-10 on-site; On-site Introductory Session Saturday, June 20th (Fall Callback date will be set during the institute)

**Registration Fee:** \$375/participant; \$350/participant for 2 or more teachers from the same school district

**PDPs and Graduate Credit:** Cambridge College, Framingham State University (4 credits, 90 PDPs); 50 PDPs without graduate credit



## South Shore Region

### Hybrid Institute for Middle and High School Educators

#### *Wind, Water and Robotics: Bringing Together Physical Science, Life Science and Engineering Design*

Dive into learning about the science and technology used to explore the ocean environment and alternative energy resources. Discover connections between the life and physical sciences through a variety of tools, methods and technologies using engineering design and science practices. Build your own SeaPerch - a working model of a Remotely Operated Vehicle (ROV) to take back to your classroom. Then explore how you can *hack* your SeaPerch to perform a wide range of missions that include collecting biological data, observing underwater habitats, taking water samples at various depths and remediating environmental threats such as leaking oil wells. Explore cutting edge research on oil spills and their impact on wildlife, then participate in an inquiry-based investigation to clean up a mock oil spill. Design your own wind turbine blades and test their performance. Learn how you can analyze this data using data collection software to excite your students about their local environment. Using on-line lessons and hands-on activities that demonstrate learning progressions and group discussions, you will explore ways to excite and educate your students about wind, water and robotics!

**Partners:** Lloyd Center for the Environment, South Shore Natural Science Center, Blue Hill Observatory and Science Center, National Marine Life Center

**Course Dates:** June 22-August 7 on-line; July 13-17 on-site; On-site Introductory Session Saturday, June 13th (Fall Callback date will be set during the institute)

**Registration Fee:** \$425/participant; \$400/participant for 2 or more teachers from the same school district (registration fee includes a SeaPerch Kit)

**PDPs and Graduate Credit:** Cambridge College, Framingham State University (4 credits, 90 PDPs); 50 PDPs without graduate credit

# 2015 Summer Professional Development Institutes

## Frequently Asked Questions

### ***How do I register?***

You may register online via our electronic registration form, or by sending the registration form in this brochure to the MITS office. You are not considered officially registered until MITS has received both your completed registration form and your payment.

### ***Where do the Institutes take place?***

The 2015 Summer Professional Development Institutes take place at a variety of partner institutions in 6 regions across Massachusetts. The first and last day of the institutes are usually held at the Lead Institute of your chosen region. During the rest of the program you will follow a schedule that will include spending 1-2 days at each of the partner's sites. Institutes are a balance of both indoor, classroom-based components and outdoor field experiences. Depending on your region, daily activities could include nature walks, behind-the-scenes tours of facilities, introductions to resource centers, modeling of inquiry-based activities and more.

### ***How do I know where to go/what to bring on the first day?***

MITS sends out a Welcome Packet with more information to each registered participant once payment is received. We start sending out these packets in late May/early June.

### ***Can I bring my child with me to the Institute?***

MITS Institutes are graduate level programs for adults, thus the activities and learning environment are inappropriate for children. Day care is not provided, so please make other arrangements for child care.

### ***Are the Introductory Sessions optional?***

The Introductory Sessions are considered an integral part of the course and are not optional. If you know you will absolutely be unable to attend your Introductory Session, please contact the MITS office to discuss other arrangements.

### ***How can I pay for registration and/or graduate credit?***

You may pay for registration either via our electronic registration form, or by sending a check or Purchase Order in to the MITS office with your printed registration form. You are not considered officially registered until MITS has received both your completed registration form and your payment/PO. You may also pay for graduate credit this way. Graduate credit forms are sent out with Welcome Packets, and must be completed and returned to the MITS office by the due date on the form.

### ***What is the 2015 Summer Professional Development Institute cancellation policy?***

Registration payment includes a \$75 non-refundable deposit. ALL refund requests must be submitted a week prior to your region's Introductory Session. (See below for regional refund deadlines) No refunds will be given after that date.

### ***Refund Deadlines:***

Berkshire, North Shore and Metro-West Regions: June 13th (June 20th Introductory Sessions)

Cape Cod, Central and South Shore Regions: June 6th (June 13th Introductory Sessions)

### ***Can the Summer Professional Development Institute graduate credits be applied to a Master's Degree program?***

You need to check with the college or university in which you are enrolled to find out if the graduate credits are transferable to your Master's Degree program.

### ***When will I receive my college grade?***

MITS Summer Institutes are part of each college/university's summer session. You will be given information on how to access your transcript for the course. Depending on the institution you choose to receive credit from you will be able to access your grade during the last few weeks of August.

**If your question wasn't answered on this list, please contact the MITS office at 617-328-1515 or [mits@mits.org](mailto:mits@mits.org)!**

# Customized School Services

Working with its partner institutions and organizations throughout Massachusetts, the Museum Institute for Teaching Science (MITS) offers customized, site-based services for K-12 schools and school districts to develop or improve inquiry-based STEM education in your school district. Customized School Services connects experienced science education specialists with schools/school districts that have professional development and curriculum development needs. MITS Staff will work with your school(s) to develop professional development sessions that address both STEM content and pedagogy, and connect effective STEM instruction with literacy and math standards. MITS staff and partners are also available to work alongside teachers in the classroom to model and assist with incorporating inquiry and science and engineering practices into the classroom.



## **MITS' Customized School Services Can Provide:**

### **Customized Professional Development**

MITS collaborates with school and/or district representatives to design professional development that addresses local needs and interests. These offerings may be customized with respect to grade level, focus, scope and frequency of meetings. MITS' staff can structure programs to fit the district's professional development schedule in order to enable full staff participation. In particular, professional development offerings may be designed to support science educators as they transition to the newly revised Massachusetts Science and Technology/Engineering Standards or the Next Generation Science Standards (NGSS) for schools outside of Massachusetts.

### **Customized Curriculum Development and Implementation**

MITS works with school and/or district representatives to create science and technology/engineering curriculum units that address local needs and the MA State learning standards or NGSS. The scope of the curriculum development project may range from a particular grade level and one or more Framework Strands to multiple grade levels and Framework Strands. Curriculum development projects will include a professional development component as well as implementation resources and support.

### **MITS Designed Workshops**

MITS' staff members and collaborating partners have developed programs to address common areas of interest in K-12 schools. All of these programs are adaptable to specific grade levels/grade level ranges.

These Professional Development workshops include:

*Inquiry-Based Science*

*Science & Literacy Connections*

*Science and Engineering Practices*

*Innovate with Interdisciplinary Connections*

*Transitioning to the Revised Massachusetts Science and Technology/Engineering Standards*

*Got Questions? Map It!*

*Developing a SeaPerch Program for Your School*



**For more information or to arrange a customized program for your school(s) contact the MITS office.**

# SeaPerch Workshops

## SeaPerch

- A hands-on educational tool
- Fun and challenging
- A curriculum that meets national learning standards
- Integrates STEM (Science, Technology, Engineering, Mathematics)
- Builds teamwork and inspires young minds
- Develops engineering design skills and science practices
- Brings STEM career discussions into the classroom



SeaPerch is an innovative underwater robotics program that equips teachers and students with the resources they need to build a working model of an underwater Remotely Operated Vehicle (ROV). SeaPerch programs can become part of the classroom curriculum or after-school enrichment programs. Students who participate in SeaPerch programs become engaged in learning engineering concepts, problem solving, teamwork and technical applications.

SeaPerch are built from a kit comprised of low-cost, easily accessible materials. Curriculum resource materials are provided which support Science and Technology/Engineering Standards bringing together basic engineering design skills and the science practices. Concepts incorporated into the curriculum resource materials include basic engineering and science concepts, marine science, oceanography, biomimicry, ocean engineering, physics, robotics, mathematics and marine related careers.

## Bringing SeaPerch into Your School or Institution

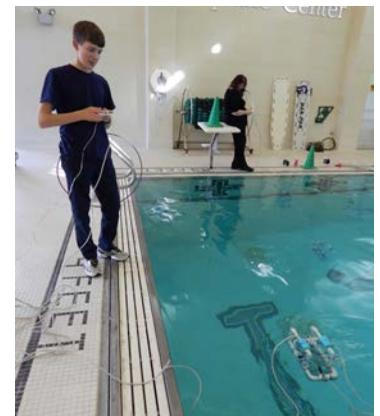
### *Professional Development Workshops*

Throughout the year MITS offers SeaPerch Educator Workshops for middle and high school educators in different regions of Massachusetts. In these 2-day workshops, classroom teachers and informal educators build their own SeaPerch and explore how this ROV can be used in the classroom and field. As part of the workshop, educators receive their own kit to use in the classroom along with the SeaPerch curriculum guide. For many of the workshops, teachers are encouraged to bring along 2 students who can then become SeaPerch team leaders for their school.

MITS partners with the national SeaPerch program, the AUVSI Foundation (Association for Unmanned Vehicle Systems International), the Office of Naval Research, MIT Sea Grant and the Woods Hole Oceanographic Institute to provide the SeaPerch workshops.

### *SeaPerch and Customized School Services*

SeaPerch Programs for your school or school district can also be developed with the assistance of MITS staff through our Customized School Services. We will assist you with developing a SeaPerch curriculum and professional development sessions designed to meet your school or school district's specific needs.



**Check the MITS website at [www.mits.org](http://www.mits.org) for upcoming SeaPerch Workshops or contact us at [mits@mits.org](mailto:mits@mits.org) to discuss a Customized School Services SeaPerch program.**

# Science By Connections and Professional Development Seminar Series

## Science By Connections



Are you looking for STEM field trips, in-school programs or on-line resources for your students? Would you like to create a STEM program for your school that uses a diversity of resources? Do you want to find out more about organizations in Massachusetts that provide STEM resources?

*Science By Connections*, our interactive web platform for teachers, is a hub for STEM resources including in-school programs, field trips and professional development opportunities. *Science By Connections* provides teachers easy access to coordinated, standards-based enrichment programs, field trips, on-line resources and professional development opportunities from

multiple service providers through one easy-to-use website, searchable by grade level, region, program-type and content standards.

- Find STEM resources from museums, science centers, cultural institutions, zoos and other organizations serving Massachusetts schools.
- Learn about the latest STEM initiatives and services provided by your regional STEM Network.
- Use our "Search Resources" tool to find programs that meet your specific needs.
- Begin the registration process for the programs of your choice.

Visit [www.sciencebyconnections.org](http://www.sciencebyconnections.org)

## Professional Development Seminar Series

Professional Development Seminars are designed for staff, volunteers and other professionals from science, environmental, natural history, technology, art, history and other cultural institutions and centers in New England. Seminars are designed as professional development opportunities to provide content and teaching resources as well as networking opportunities for professionals in informal education settings. The mornings are spent exploring STEM content areas with scientists, researchers and policy makers. Afternoon sessions are skill-based, focusing on turning real-life science into exciting, inquiry-based, minds-on, hands-on lessons and activities for K-12 students and teachers.

### February 26th

#### ***3 Websites and 2 Small Pieces of Glass = 1 Easy Introduction to Astronomy***

J. Kelly Beatty, Senior Contributing Editor, Sky and Telescope, Faculty Astronomer, Dexter Southfield, Brookline, MA

#### ***Making Science Accessible Through Inquiry***

Dr. Susan Rauchwerk, Assistant Professor, Lesley University

### March 19th

#### ***Creating Exciting Programs and Exhibits to Develop Environmental Literacy: Connecting National Environmental Education Standards, NGSS and the Revised MA Science, Technology and Engineering Standards***

Bora Simmons, Director, National Project for Excellence in Environmental Education

Sandra Ryack-Bell, Executive Director, Museum Institute for Teaching Science

### April 7th

#### ***Changes in Bird Populations in Massachusetts and Opportunities for Educators***

Joan Walsh, Director of Bird Monitoring, Mass Audubon

#### ***For the Birds: Investigating Engaging Experiences to Use in Your Programs***

Rachel Stronach, Executive Director, Lloyd Center for the Environment

Liz Moniz, Education and Outreach Director, Lloyd Center for the Environment

***For more information and to register for the PDS, visit [www.mits.org](http://www.mits.org).***

# Summer Professional Development Institutes Registration Form

First and Last Name: \_\_\_\_\_

Grade Level(s) and Subject(s) Taught: \_\_\_\_\_

School District: \_\_\_\_\_

School Name: \_\_\_\_\_

School Address: \_\_\_\_\_

Home Address: \_\_\_\_\_

Contact Phone: \_\_\_\_\_ Mobile Phone: \_\_\_\_\_

Email: \_\_\_\_\_ Alternate Email: \_\_\_\_\_

## Course Selection

\*Registration discount applies to 2 or more teachers from same school district. Each teacher must fill out their own registration form.

### One-Week Course Selection

- Berkshire Region** (\$400; incl. SeaPerch kit)
- Cape Cod Region** (\$350)
- North Shore Region** (\$350)

### Optional One-Week Graduate Credit

- Cambridge College (3 credits, 67.5 PDPs, \$150)**  
*Available for Berkshire, Cape Cod and North Shore Regions*
- Framingham State University (3 credits, 67.5 PDPs, \$225)**  
*Available for Cape Cod and North Shore Regions*
- Massachusetts College of Liberal Arts(3 credits, 67.5 PDPs, \$150)**  
*Available for Berkshire Region*

### Hybrid Course Selection

- Central Region** (\$375)
- Metro-West Region** (\$375)
- South Shore Region** (\$425; incl. SeaPerch kit)

### Optional Hybrid Graduate Credit

- Cambridge College (4 credits, 90 PDPs, \$200)**  
*Available for Central, Metro-West and South Shore Regions*
- Framingham State University (4 credits, 90 PDPs, \$300)**  
*Available for Central, Metro-West and South Shore Regions*

### Type of Registration

- Individual (full price)
- Team (deduct \$25 from registration fee)

**Do you have a laptop or tablet you can bring to your Institute?**  
(Y/N) \_\_\_\_\_

If Team, provide name of other teacher(s) attending:

\_\_\_\_\_

### Optional Cape Cod Region Housing

- Yes, I will need housing at the Massachusetts Maritime Academy

### Payment (Enclose Check or Purchase Order)

**Total Enclosed \$** \_\_\_\_\_

*Note that you will not be considered registered until payment has been received. Registration includes \$75 non-refundable deposit.*

*Remit payment and form to MITS :*

*1354 Hancock St., Ste. 302, Quincy, MA 02169*

*On-Line Payment Option: Register and pay on-line at [www.mits.org](http://www.mits.org).*

*See page 7 for Cancellation Policy.*



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Go mobile! Scan the QR code with your smartphone or tablet to visit the MITS website and learn more about our programs and offerings!

## What Educators Are Saying About MITS

*“From a teacher’s perspective, the opportunity for open inquiry was priceless. It inspired wonder, curiosity and increased the students’ investment in learning.”*

*“Once again, I feel as though we are walking away with a wealth of knowledge and practical ideas to implement in our own classrooms.”*

*“Today made me feel excited about teaching again. My curiosity was sparked and a sense of flexibility and adventure was there to help me learn so much.”*

*“I am exploring science in an entirely different way than the manner in which I was taught.”*

*“This class has certainly opened my eyes. I’m looking forward to really opening the eyes of my students and encouraging them to be curious, observe, and know that they can find the answers and be lifelong learners...This is by far the best course I’ve ever taken. I learned so much and I feel so much more confident teaching science to my students. Excellent! “*

*“Kudos. Thank you so much--over the years, I believe my experiences with MITS has made me a better teacher. ”*

*“I am thrilled to be learning the levels of inquiry and the engineering design practices to help foster a love for the sciences in my own students; and I never thought I would say this. . . .but engineering too!”*

## Summer Professional Development Institute Collaborators and Partners

