



BY TEACHERS, FOR TEACHERS, ABOUT TEACHING

Modeling Instruction™ uses hands-on paradigm experiments to help students form mental models of key scientific concepts. In work-shops, teachers perform experiments in "student mode," then discuss how they work in classrooms in "teacher mode." Modeling is a key practice in the Next Generation Science Standards.

Crisis in STEM Education

- US students perform below the 65-country average in science, behind students in 22 countries.
- A US workforce with the Science, Technology, Engineering and Math skills needed to engineer our future is in short supply.
- There is a national shortage of qualified STEM teachers.
- Teachers are on the front lines of addressing this crisis

STEMteachersNYC's Response

- A grass-roots community of teachers who teach and learn from each other in a passionate commitment to their teaching practice.
- 550 teacher-members who will impact 500,000 students over the course of their careers.
- Professional development for 1500 middle school and high school teachers teaching in public, charter and independent schools across the Tri-State Area of NY, NJ and Connecticut.
- A focus on Modeling Instruction™, a pedagogical approach that supports deep student understanding and proven student performance.
- A culture of continuous improvement.
- A national training center to prepare Modeling Instruction™ leaders to lead workshops across the country.
- A national model and active support for local grass-roots communities of teachers in Arizona (STEMteachersPHX), Texas (STEMteachersDFW), South Florida (STEMteachers SoFL) and Bridgeport, Connecticut (STEMteachersCT).
- A strong partnership with the American Modeling Teachers Association (AMTA)
- The expansion of curricular materials to infuse computer science into 9th grade physics classrooms in a 100Kin10 initiative recently announced at the White House.



@STEMteachersNYC



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 A Member of the American Modeling Teachers Association



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STEMteachersNYC Workshops

TOPIC	TOPIC	TOPIC	TOPIC
Physics/ Mechanics Modeling Workshop	Black Box Mystery	Workshop Brainstorm Party	Experiments First!
Chemistry I Modeling Workshop	Photoelectric Effect Make-N-Take Workshop	The iPad as a Mobile Learning Tool	Particle Models of Matter for Middle School
Middle School Science Modeling Workshop	Strategies for Teaching Science to English Language Learners	Standards-Based Grading--Strategies	Make!Sense--A Cool New Hardware Interface
Chemistry II Modeling Workshop	Preparing for AP Physics Exam	Intro to Computer Programming	Leadership Development in Modeling Instruction
Introduction to Modeling	Maker Science Forum	Metacognitive Skills Through Reflective Journaling in Science and Math	Kid Talk & Teacher Talk in Elementary Science
Graphical Problem Solving in Physics	Interactive Simulations + CER = Effective Biology	Expanding Your Resource Bank	Black Box Modeling/Balanced Forces
Curriculum Development Camp	Enliven Your Science Course With Tech!	Whiteboard as a Verb	Design Your Own Measuring Apparatus
Modeling Leadership Session I Workshop	Generating Inquiry from Cookbook Labs in Chem	Introduction to Electrical Circuits	Visual Python Programming for Physics & Chemistry
Modeling Leadership Session II Workshop	Making Sense of the Gas Laws	Chemistry: A Modeling Approach to Energy & Bonding	An Innovative, Inexpensive Acceleration Experiment as an Introduction to Modeling



OUR MISSION

STEMteachersNYC is dedicated to interchange and interaction among teachers of STEM. Our general purpose is to cultivate excellence in STEM teaching and to promote learning, self-confidence and success for our students. STEMteachersNYC is a 501 (c)(3) non-profit organization.

