NEW YORK UNIVERSITY
HELEN AND MARTIN KIMMEL CENTER FOR UNIVERSITY LIFE
JUNE 4th & 5th
Dear OST Providers:

Almost ten years ago Mayor Bloomberg charged us with reshaping the way that government, private philanthropy and non-profits work together to provide Out-of-School Time (OST) services to children across New York City. Today, with your leadership, we are proud to support over 500 afterschool programs serving approximately 56,000 youth in some of the highest need neighborhoods in the city and in communities that were previously underserved.

Your OST program is part of one of the largest municipally-funded afterschool networks in the nation. As leaders and youth work professionals, you play an important role in helping New York City youth realize their potential – particularly in the critical areas of science, technology, engineering and math (STEM).

From the inception of the OST initiative, DYCD has invested in building the capacity of community-based organizations as a strategy for ensuring that youth and families receive high quality, effective services. Capacity building enhances program quality by building front-line and supervisory staff knowledge and skills, and promotes continuous improvement by fostering practitioner learning communities.

Building on our investment in OST and professional development for afterschool leaders, this conference is designed to support meaningful STEM learning opportunities for youth and to:

- Expose you, as leaders in the field and afterschool professionals, to high quality learning experiences that will offer you both inspiration and concrete ideas for programming; increase your exposure to STEM fields; and develop your skills so you can be more effective in helping to prepare our city’s youth for academic success and careers.

- Share with you promising strategies and resources to support STEM activities in your programs, build staff capacity, and foster meaningful collaborations that will increase inquiry-based STEM and learning opportunities.

On behalf of Mayor Bloomberg and the children and families of New York City, thank you for your hard work and dedication to afterschool programs. We hope you enjoy the conference.

Sincerely,

Jeanne B. Mullgrav
Commissioner
welcome to cultivating curiosity

Thank you for being a part of DYCD’s first ever STEM-themed conference for afterschool programs!
At this professional development event, you will have an opportunity to connect with other youth development, education, and STEM experts. Unlike a traditional conference where you may participate as a passive learner, at this conference, we have created a space for you to dive in and experience hands-on, inquiry-based activities firsthand. Conference activities include:

**Executive Summit**
An invitation-only session for executive directors from nonprofit organizations, foundations, and companies that support STEM education.

**STEM LIVE!**
A nontraditional approach to a conference exhibit hall. Visit throughout the day and participate in experiments, demonstrations, and other activities with outstanding STEM-related organizations. You may be able to win prizes for your program!

**Workshops**
Twenty seven fantastic conference workshops! Nine workshops will be offered during each block (A, B, C).

**Learning Tours**
On June 5th, fifteen of NYC’s best institutions are offering you a special tour. They will review programming available to youth in your programs.

**Post-Conference Planning**
We hope you leave the conference with a million ideas and resources to strengthen your STEM programming. To support you with developing and implementing your plans, DYCD is offering a series of workshops this summer. A list of the workshops is in your conference folder.

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**conference schedule at a glance**

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<th>Day 1: NYU Kimmel Center</th>
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<td>8:45am – 9:15am</td>
<td>Networking Breakfast</td>
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| 9:30am – 10:15am         | Keynote Address
  | *Creating Meaningful STEM Learning Opportunities for Youth* |
  | Dr. Milton Chen — Senior Fellow and Executive Director, Emeritus, The George Lucas Educational Foundation |
| 10:30am – 11:45am        | Concurrent Workshops – A |
| 10:15am – 12:15pm        | Executive Leadership Summit: *Leading the Charge of STEM in Afterschool: A Vision for Our Future* |
| 12:00pm – 1:00pm         | Networking Lunch and Midday Stretch with GeoMotion |
| 1:15pm – 2:30pm          | Concurrent Workshops – B |
| 3:45pm – 4:15pm          | Concurrent Workshops – C |
| 4:00pm – 4:30pm          | Closing RemarksDYCD Assistant Commissioner Denice Williams |
| 4:30pm                   | Departure |

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Rosenthal Pavilion
Eisner Lubin Auditorium
Rosenthal Pavilion
Dr. Milton Chen
Senior Fellow and Executive Director, Emeritus, The George Lucas Educational Foundation

Dr. Milton Chen is senior fellow and executive director, emeritus at The George Lucas Educational Foundation (GLEF), a non-profit operating foundation in the San Francisco Bay Area that utilizes its multimedia website Edutopia.org and documentary films to communicate a new vision for 21st Century schools. He served as executive director of GLEF for 12 years from 1998 to 2010. During his tenure, GLEF and its media brand, Edutopia, greatly expanded their editorial publishing efforts, including the award-winning Edutopia magazine. Edutopia.org is known as a destination Web site for educators and others interested in educational innovation and has won numerous honors, including the 2009 Webby People’s Voice Award for best education website. Edutopia.org has grown in traffic to more than 700,000 unique visits per month.

Dr. Chen’s career has spanned four decades at the intersection of preK-12 education, media, and technology. Prior to joining GLEF, he served for 10 years as the founding director of the KQED Center for Education (PBS) in San Francisco. In the 1970s, he was director of research at Sesame Workshop in New York, helping develop Sesame Street, The Electric Company, and 3-2-1 Contact. Dr. Chen has been an assistant professor at the Harvard Graduate School of Education and, during 2007-08, was one of 35 Fulbright New Century Scholars conducting research on access and diversity issues in schools and universities. He received an A.B. in social studies from Harvard College and an M.A. and a Ph.D. in communication from Stanford.

Dr. Chen serves as chairman of the Panasonic Foundation in New Jersey, which supports superintendent leadership and district improvement, and is a member of the board of directors for Sesame Workshop, the San Francisco School Alliance, and ConnectEd: The California Center for College and Career. He chairs the Games and Learning Publishing Council for the Joan Cooney Center at Sesame Workshop, a Gates Foundation-supported activity. He is also a member of advisory boards for the National Park Service, appointed by Interior Secretary Ken Salazar to advance their work in STEM and history/social studies education, and the Fred Rogers Center for Early Learning and Children’s Media at St. Vincent College.

Dr. Chen’s career has been honored by the Elmo Award from Sesame Workshop, the Fred Rogers Award from the Corporation for Public Broadcasting, the Congressional Black Caucus, the Association of Educational Service Agencies, and two science centers in the Bay Area, The Exploratorium and the Lawrence Hall of Science. His 2010 book, Education Nation: Six Leading Edges of Innovation in our Schools, was named as one of the 10 best education books of the year by the American School Board Journal. He is a frequent speaker at education conferences in the U.S. and abroad, presenting close to 100 keynote addresses based on the themes of his book.

Perhaps most importantly, on his 50th birthday, Dr. Chen was named a Jedi Master by George Lucas!
Jim Gordon
Group Vice President, Corporate Brand and Reputation, Time Warner Cable Inc.

Jim Gordon is the Group Vice President of Corporate Brand and Reputation for Time Warner Cable and he oversees Corporate Social Responsibility, Thought Leadership, and Community Investment. He has responsibility for community partnerships and investments, including Connect A Million Minds, a five-year, $100 million philanthropic initiative that was created to inspire youth to pursue careers in science, technology, engineering, and math (STEM). Prior to joining Time Warner Cable in 2009, Gordon has held executive leadership positions with Discovery Communications and Comcast Corporation.

Developing and leading innovative, results-generating communications campaigns and the teams that implement them are Jim Gordon’s expertise and passion. Throughout an 18-year career, Gordon has enjoyed success in creating internal and external communication strategies that achieved goals on many fronts, including new business development, branding, competitive positioning, community outreach, and employee communications.

Gordon received his Master of Modern Studies from Loyola College and his bachelor of science degree in communications from Towson University. He also graduated from CTAM University at Harvard Business School. He has numerous awards to his credit and his professional affiliations include; ACC, PRSA, CTAM, and WICT.

Adventurous in spirit, Jim also enjoys exploring the many areas he travels and often seeks the road less traveled to hike, kayak, or ride his mountain bike.

Dr. Meghan Groome
Executive Director of K12 Science Education Initiatives, New York Academy of Sciences

Dr. Meghan Groome is the Executive Director of Education and Public Programs at the New York Academy of Sciences which includes the Academy’s K12 Science Education program for students and teachers, Science Alliance for scientists-in-training, and Science & the City, the Academy’s programming for the general public.

Dr. Groome is an Adjunct Assistant Professor at SUNY Environmental Science and Forestry and the Principal Investigator and Co-Investigator on a $2.95M collaborative grant between the Academy and the State University of New York (DRL 1223303). Dr. Groome joined the Academy after serving as a consultant to the American Museum of Natural History. Previous to her work at AMNH, Dr. Groome was a Senior Policy Analyst with the National Governors Association and worked on Governor Janet Napolitano’s Innovation America initiative and co-authored Building a STEM Agenda, a framework for state’s and large organizations to improve their science education pipelines from birth through graduate school.

Dr. Groome completed her PhD at Teachers College Columbia University in science education with a focus on urban science education. During graduate school, Dr. Groome co-founded uPublic, an education consulting company focused on local, national, and international education reforms including large-scale policy reforms in developing countries and school design. In addition, Dr. Groome was an Education Policy Fellow for the Institute for Educational Leadership.

Dr. Groome graduated from The Colorado College with a major in biology and theater and is a certified science teacher. She has taught chemistry, physics, and biology.

Dr. Cindy Moss
Director of Global STEM Initiatives, Discovery Education

As Director of Global STEM Initiatives for Discovery Education, Dr. Cindy Moss designs, develops, and implements initiatives to inspire students’ curiosity in STEM. Prior to joining Discovery Education, Dr. Moss taught high school biology and chemistry in Syracuse, NY and Charlotte, NC for 20 years before taking over as the Director of STEM for the 145,000 students and 10,000 teachers in the Charlotte Mecklenburg Schools (CMS). As the Director of STEM, Dr. Moss increased science achievement scores from 40% of 5th and 8th graders on grade level to 84% in 4 years. During this time, the state of NC scores increased five points. This accomplishment helped CMS win the Broad Award, often considered the Superbowl of Urban Education. Along the way, Dr. Moss earned a masters in science teaching from Syracuse University and a PhD in Science Curriculum and Instruction from Curtin Institute of Technology in Perth Western Australia.

She has won numerous awards for her work in education and was selected by STEM Connector as one of the “100 Women Leaders in STEM” in 2012.
**workshops**

**A: 10:30am – 11:45am**

**Skyscrapers: Structure and Strength**  
*Catherine Teegarden, Director of Education, Center for Architecture Foundation*

*Room 808*

Learn about the structural systems that hold up tall buildings and the forces that they must resist in order to stand up. Experiment with building your own skyscraper structural frame using marshmallows, toothpicks, and spaghetti to see how geometry and design affect the strength of buildings.

**WINNING with Web 2.0!**  
Shawn C. Petty, Technical Assistance Manager, Edvance Research, Inc.

*Room 903*

Get an intensive introduction to the new Web 2.0 technologies that are beginning to transform the field of youth development! This hands-on workshop will not only teach you how to use these tools, it will also put participants well on the way to implementing them in their work with youth.

**Citizen Science**  
Lisa Mielke, Manager of Science Programs, TASC

*Room 805*

Citizen Science allows the public to contribute to scientific research by collecting and submitting data and is emerging as a way to engage youth in science in ways that are real and relevant. This workshop will focus on examples that can be readily implemented in NYC (for example, SquirrelMapper).

**Co-Inquiry Based Computer Engineering with TASCasaurus**  
Rachel Chase, Program Director, Hunter FUSE  
Sunset Harris, Training Coordinator, TASC

*Room 804*

Learn to use free, beginner-friendly, open source web-making tools that teach students how to code real websites. Participants will learn how to use web-based Mozilla Thimble and Hackasaurus, and learn HTML and CSS coding languages in the process.

**Discovering Inquiry with Nature**  
Andrew Snyder, Environmental Educator I, New York State Department of Environmental Conservation

*Room 910*

From ocean trenches to mountain peaks, nature captivates youth’s curiosity. Join NYS Department of Environmental Conservation in several inquiry-based lessons with an environmental focus. Each lesson engages participants in the scientific process and spurs further inquiry.

**Girls Go STEM!**  
Maggie Vasquez, Director of Programs, Girl Scouts of Greater New York

*Room 802*

Through a series of hands-on activities, learn about the numerous, age-appropriate Girl Scout programs developed specifically to engage and excite girls in grade 2 through 8 about STEM fields and careers. The case for gender-specific programming for girls as it relates to STEM will also be provided.

**Improving Program Quality: The STEM Program Quality Assessment Tool**  
Ravi Ramaswamy, Training Coordinator, David P. Weikart Center for Youth Program Quality

*Room 908*

Learn about STEM PQA. This point-of-service, observation-based quality assessment tool was developed to be part of a program quality intervention process. The tool involves front-line staff and managers in improving the experience of youth in STEM program settings.

**Look Closely: Investigating the Artwork of Artists of African Descent**  
Erin Hyton, School Programs Coordinator, Shanta Scott, Education Manager, The Studio Museum in Harlem

*Room 903*

Explore how visual inquiry and art-making skills are transferable across STEM disciplines. This workshop will model discussion techniques and hands-on activities that can be used in afterschool programs to encourage students to look, discuss, and ask questions in response to works of art.

**Shake Things Up: Adding Engineering Activities to Your Program**  
Michelle Dilesa, Senior Curriculum and PD Assistant, Museum of Science

*Room 909*

Engage in hands-on engineering activities from the free, research-based Engineering Adventures curriculum. Participants will complete an earthquake engineering challenge, discuss the 21st century skills supported through engineering, and learn about the research and evaluation behind these engineering activities.

**B: 1:15 pm – 2:30 pm**

**Wonderopolis®**  
Melissa Edwards, Instructional Technologist for Winston-Salem/Forsyth County Schools

*Room 803*

Wonderopolis® is a resource offered free-of-charge that activates our innate curiosity to grow our understanding of and excitement about the world around us. Fresh, daily content is delivered in the form of Wonders of the Day® that introduce an intriguing question and consider it in a variety of ways. Multidisciplinary activities around each Wonder provide opportunities to expand learning into related areas and have relevance to all learning levels. Originally created with an eye on family learning, Wonderopolis has been embraced by educators across K-12. Acclaimed as a valuable resource that inspires creativity in the classroom and during Out of School Time (OST), Wonder content purposefully aligns to the Common Core State Standards (CCSS), Bloom’s Digital Taxonomy, and the STEM Educational Quality framework. In this session, Wonder Lead Melissa Edwards will discuss the many ways Wonderopolis can be used to connect the learning we do in our schools, in our homes, and in our communities.

**Don’t Call it Dirt! The Wonders of Soil**  
Marnie Rackmill, Professional Development Coordinator, Queens Botanical Garden

*Room 804*

Like to dig and get dirty? Wonder why some soils turn to mud and others let water run through? Take a close up look at soils and answer these questions and much more. Examine the various properties of soil and discover how various soils support plant growth.
workshops continued

**Ethics of the World: Inquiry-Based Learning Through Physics Simulation Games**
Devin Dillon, Director of Community Programs, Kevin Miklasz, Director of Digital Curriculum, Iridescent

**Room 805**

Get introduced to Ethers of the World, a series of open-ended physics simulation games. The games showcased in the workshop feature a level-editor, allowing kids to create and share their levels with other students. These games will give participants an intuitive feel for how a complex system operates through experiential play.

**Finding Math**
Dr. Mark Saul, Director, Center for Mathematical Talent - New York University

**Room 802**

Explore *Finding Math*, games and puzzles with accompanying lessons that show the surprising ways we use mathematics in our thinking. Participants will discover how logic and strategic thinking are the foundations for math.

**Identifying Quality STEM Learning in Youth Programs**
Jeff Buehler, Director, Project LIFTOFF

**Room 910**

Quality learning experiences often look very different across youth programs. Participants will examine the essential elements of high quality STEM learning while sharpening skills to assess and improve STEM activities.

**Inquiry-Based Learning through the Arts**
Holly Fairbank, Arts Education Consultant, Dr. Jerry James, Director of Teaching & Learning, The Center for Arts Education

**Room 908**

Join the Center for Arts Education (CAE) staff for an engaging and participatory workshop that highlights how the arts can be used for effective inquiry-based teaching and learning.

**The Artist Studio As a Laboratory**
Sarah Meyer, Program Director, New Urban Arts

**Room 808**

The dynamic learning environment of an art studio promotes inquiry, experimentation, risk taking, collaboration, self-directed learning, and youth leadership, where participants are both students and teachers. Through this workshop, discover how to embrace the possibility of unanticipated results, cultivating curiosity and lifelong learning.

**The Bridges of New York City**
Matthew Patrick, Assistant Coach, Thor Snilsberg, Executive Director, CityScience

**Room 803**

New York City relies on bridges more than any other city in the world. Learn how to lead investigations of different bridge types, build models with your students, and test the engineering principles behind each type of bridge. A wonderful introduction to the principles of engineering, these hands-on activities are a great foundation for deep project-based investigations into how bridges have contributed to the development of NYC.

**Making Meaning of Outcomes: What Can We Learn from the Sneetches on the Beaches about how to Recognize Outcomes in Practice?**
Leslie Goodyear, Principal Research Scientist, Education Development Center

**Room 909**

Develop an understanding of what outcomes look like in practice, how they connect to program activities, and how to use this understanding to communicate with evaluators about measuring program success. The workshop will include a presentation, small group discussion, and reflective activities. Participants will leave with a better sense of the thinking behind a logic model, how to identify outcomes in daily practice, and ideas for making afterschool STEM practice and its evaluation better.

**C: 2:45pm – 4:00pm**

**STEM in My Neighborhood: Middle School Youth Leadership Development and Civic Engagement Through STEM**
Kim Svoboda, National Accounts Director, Education, USA TODAY

**Room 910**

Middle school programs will learn how to use a 8- to 10-hour summer STEM curriculum developed by USA TODAY Education for DYCD programs. The focus of this curriculum is investigating STEM topics in neighborhoods across NYC. Youth will select topics based on their interests and neighborhoods (for example, environmental justice in the South Bronx), connect with local resources, and develop projects.

**Summer Pathways for Innovation Ignite with Hive NYC!**
Peggy Espada, Director Professional Development, National Summer Learning Assoc.

**Chris Lawrence, Director, Hive Learning Network**

**Room 808**

Get a sneak peek into the fantastic resources for out-of-school time programs that Hive NYC has to offer. Experience a maker space up close and personal. Explore some of the research that has led the National Summer Learning Association (NSLA) to define domains and indicators that comprise a high quality summer learning experience. Finally, learn about an exciting partnership between Hive NYC and NSLA that helps to bring quality STEM programming back into the classroom.

**Level Up Learning: Engaging Youth Through Games and Game Design**
Criswell Lappin, Creative Director, Eliza Spang, Learning Director, Institute of Play

**Room 805**

Join us for an exploration of how play and game design can engage kids in learning in exciting and innovative ways. Participants will take on the roles of players and designers as they learn about using games and game design tools to engage kids in learning. By using Gamekit, an Institute of Play resource for game design challenges, participants will leave the workshop with techniques and tools to be able to integrate game design into their afterschool programs.
workshops and STEM Live!

Meaningful Movements: Learning While Moving
Barbara English, National Account Manager, GeoMotion Group/Flixercise
Room 803
Learn about Meaningful Movements: Learning While Moving that features movement-based academics focused on movement, music, and academics that directly relate to movement, social behavior, and actively engaging children in a small setting. Using the latest research, the Learnercise curriculum focuses on children's learning by including multi-sensory integration strategies with children jumping, singing meaningful lyrics to music, and learning academic concepts.

Spectacular Science: How to Make Science Fun!
Don Luistro, Science Instructor, New York Hall of Science
Room 804
Explore methods and strategies for engaging students in hands-on inquiry-based activities that foster STEM learning. NYSCI instructors will model easy-to-replicate interactive activities that promote science inquiry, reinforce science concepts and critical thinking skills, and empower youth to be creative and inventive.

STEM Play for K1/K2 Inspired by Curious George
Gay Mohrbacher, Educational Outreach Director, WGBH/Boston's PBS Station
Room 909
Learn why science inquiry for young children is important, consider the role TV might play in inspiring STEM explorations, and share strategies for using the PBS series, Curious George, and its free resources to extend children’s direct investigations of their world.

Stoking Curiosity: Discovery Education’s STEM Camp Challenge
Patti Duncan, Manager, Science Instructional Implementation, Discovery Communications/Discovery Education
Room 802
Learn practical strategies and participate in interactive experiments to bring inquiry-based STEM learning to life over the summer.

Discovery’s STEM Camp is a series of standards aligned curricula available at no cost for use as part of summer camps, afterschool learning opportunities, and other educational programs. The STEM Camp combines hands-on and virtual labs, engineering challenges, digital investigations, and career connections.

Strengthen Basic Skills for Learning with KenKen Puzzle
Robert Fuhrer, Founder/President, KenKen Puzzle LLC
Room 908
What is the KenKen Puzzle, the most popular logic math puzzle since Sudoku? How do I use KenKen Puzzle? What are the benefits of using KenKen puzzles? Participants in this workshop will learn all about KenKen Puzzles.

Discovering Energy
Sarah Pidgeon, K-12 NYC Education Director, Solar One
Room 903
Delve into hands-on activities from Solar One’s Green Design Lab™ (GDL) curriculum that looks at buildings as both laboratories for learning and tools for environmental change. Using a creative approach to problem solving, GDL activities incorporate STEM to explore sustainability. The GDL curriculum is based on five units: Energy, Air Quality, Water, Food, Materials, and Recycling.

STEM Live!
All-Day / 9:00am – 4:00pm
NYU Kimmel Center: Rooms 405 and 406

Learning on the Next Level with Institute of Play
Criswell Lappin, Creative Director, Eliza Spang, Learning Director, Institute of Play
Explore how resources from Institute of Play can bring games and game design into your afterschool program to engage kids in learning and foster creativity, collaboration, and innovation.

3D Printing and Video Game Design
Mike Fischthal, Chief Executive Officer, Pixel Academy
The Pixel Academy provides afterschool and in-school programming that focuses on educating youth in the use of modern technologies. Through 3D Printing and CAD Design, Pixel Academy teaches math and engineering skills in a fun and interactive way that allows students to create their own physical “things.” Youth can design and print anything from toys to tools.

CityScience: Inspire Exploration
Thor Snilsberg, Executive Director, CityScience
Meet CityScience staff and learn how CityScience utilizes the natural and built environment of New York City as laboratories for active learning. See examples of student-led projects and learn about CityScience’s catalog of over 50 courses that connect science to New York City’s parks, waterfronts, buildings, bridges, and neighborhoods.

Girl Scouts: Investing in Tomorrow’s STEM Leaders
Maggie Vasquez, Director of Programs, Girl Scouts of Greater New York
Through hands-on activities, experience national Girl Scout curricula developed to introduce girls from Kindergarten through High School to a range of STEM programs including digital arts, science and technology, innovation, and environmental studies. Based on research, learn how to engage girls to ask questions about the world, problem solve, and use natural creativity through play and experimentation in order to build their interest and excitement in STEM.
STEM Live! continued

Iridescent Engineering and Science Education Programs
Devin Dillon, Director of Community Programs, Iridescent
Learn about Iridescent’s science and engineering programs including information about Family Science sessions, the Be an Inventor afterschool program, Technology, and our Curiosity Machine website.

Patterns in Nature with the Staten Island Museum
Claire Aniela Arthurs, Manager of Education Programs, Staten Island Museum
Join New York City’s oldest and only general-interest museum in exploring the connections between art and science. Look closely at different natural science objects, discuss pattern creation, and use a microscope to zoom in on nature’s patterns.

9:00am – 12:30pm
NYU Kimmel Center: Rooms 405 and 406
Budgeting for Your Future
Aimee Berniard, Cents Ability
Cents Ability provides free financial literacy workshops to teens in the New York City area. Complete the hands-on budgeting exercise to learn about financial literacy.

Randall’s Island Wetlands Stewardship Program
Victoria O’Neill, Natural Areas Manager, Donna Piluso, Volunteer Coordinator, Randall’s Island Park Alliance
Learn about the Randall’s Island Wetlands Stewardship Program that teaches children about wetland ecology and enables children to experience nature through hands-on learning. This exhibit will feature free educational materials, photos highlighting the program, specimens of animals found in the field, and a list of field trip dates and volunteer opportunities.

The Math and Science of Skateparks and Skyscrapers
Tiffany Judkins, Education Director, Salvadori Center
Use spring scales and rulers to explore the properties of inclined planes and how their length affects the force needed to lift a load. Build and test a movable pulley system in order to uncover the relationship between the length of rope and the force required to lift a load.

WILD, WET and Tree-ific!
Andrew Snyder, Environmental Educator I, New York State Department of Environmental Conservation
Learn about the New York State Department of Environmental Conservation’s professional development training for formal and informal educators using the international programs of Project Learning Tree, Project WILD, and Project WET. The programs have lessons for pre-K through high school youth and incorporate STEM into a majority of the lessons.

You Can Grow on Randall’s Island!
Nick Storrs, Urban Farmer, Randall’s Island Park Alliance
Learn about the free hands-on educational program that Randall’s Island Urban Farm offers to public schools and community groups. On the farm, students participate in all aspects of growing, harvesting, and preparing nutritious, seasonal produce. Students’ hands-on experience in the outdoor kitchen and garden fosters a deeper appreciation and understanding of our natural world while developing real world science and math skills in the sciences. The Urban Farm contains the only inner-city rice paddy in New York City. This year, Randall’s Island Urban Farm will incorporate cereal grains and medicinal plants to medley of vegetables that has been produced in the past.

1:00 pm – 4:00 pm
NYU Kimmel Center: Rooms 405 and 406
WINNING with Web 2.0!
Shawn C. Petty, Technical Assistance Manager, Edvance Research, Inc.
Get an introduction to the new Web 2.0 technologies that are beginning to transform the field of youth development? Learn how to use these tools and how to implement them in your work with youth. Tackle WINNING with Web 2.0!

Bricks 4 Kidz – We Learn, We Build, We Play… with Lego® Bricks
Lamacca Holmes, Director, Bricks 4 Kidz
Bricks 4 Kidz® classes provide an extraordinary atmosphere for children, where we learn, we build, we play … with LEGO bricks. Programs are built around LEGO’s proprietary model plans and designed by engineers and architects, with exciting themes such as space, construction, and amusement parks.

Engineering Adventures: Engineering Activities for Out-of-School Time
Michelle Dileo, Senior Curriculum and PD Assistant, Museum of Science
Engineering Adventures is a curriculum that engages kids from third to fifth grade in engineering. Come join the adventure! With units focusing on different fields of engineering and parts of the world, kids will collaborate to engineer technologies to meet each design challenge. Four units are currently available, free for download, at www.engineeringadventures.org.

Learning Through Games on NoNameSite.com
Jessie Ford, Director of Events & Educational Programs, TopCoder
Explore how through games, students may take more of an interest in pursuing a CS-STEM related career. Originally funded by DARPA, NoNameSite.com was built to help encourage and foster CS-STEM skills for students ages 13 to 18.
STEMLive! and learning tours

**New York Hall of Science**
Georgette Williams, Coordinator of Out of School Time Learning, New York Hall of Science

Learn about NYSCI, New York’s premier science and technology center with over 400 hands-on exhibits, live science demonstrations, workshops, and more! NYSCI will demonstrate various tabletop activities that can be replicated along with resources and programs available at NYSCI.

**Test the Waters**
Margaret Flanagan, Ships Educator, South Street Seaport Museum

Test a series of mystery water samples, analyze results, and compare them to standards to determine the content and origin of the mystery water! Is it from a river or the sea? Is it polluted? Learn more about the water ecosystems these mystery samples represent and about the marine science programs offered at South Street Seaport Museum aboard our educational sailing vessel, the schooner Pioneer.

**Tooned In to Animation with the Paley Center for Media**
Rebekah Fisk, Associate Director of Education, The Paley Center for Media

Animation is a filmmaking process where the illusion of motion is created frame-by-frame. Experience the magic of hand drawn animation and learn about the process behind one of television and film’s most creative forms.

Using programs from the collection of over 150,000 television and radio recordings, educators lead classes offered on a wide range of subjects such as advertising, animation, radio theater, and the civil rights movement. Discussion-based classes are designed to build analytical thinking, viewing, and listening skills and attempt to provide insight into the roles television and radio play in our culture. Classes are available on site and off site through video conferencing equipment.

**DAY 2**
Wednesday, June 5th

**Learning Tours**

**Aviation, Engineering and Robotics**
**After School Programs at the NYC Center for Space Science Education**
Peter Giles, Assistant Director
NYC Center for Space Science Education
NYC Department of Education
10:00am - 1:00pm

Participants will spend their time at the NYC Center for Space Science Education being introduced to the programs that are offered for after school experiences such as Lego Robotics, model building and flight simulation.

**Brooklyn Botanic Garden**
Candace Johnson, Teacher Education Coordinator, Brooklyn Botanic Garden
Barbara Kruland, Manager of Schools Programs
9:30am - 12:00pm

Experience a modeled self-guided tour of both the Brooklyn Botanic Garden’s outdoor and indoor collections. In addition to touring the grounds, participants will learn about the types of content-based assignments and activities in which youth and families may engage when visiting.

**Brooklyn Bridge Park**
Kara Gilmour, Nim Lee, Brooklyn Bridge Park
12:30pm - 2:00pm

Discover the underwater world of the East River. Participants will observe and categorize various salt- and freshwater species with the guidance of a staff biologist.

**Center for Architecture Foundation**
Catherine Teegarden, Director of Education, Center for Architecture Foundation
1:00pm - 2:30pm

Tour the Center for Architecture’s exhibition of K-12 grade student design work. Participants will learn about opportunities for bringing classes to hands-on design workshops at the Center and get ideas for adding architecture and design activities to their own programming.

**Cornell University Cooperative Extension, NYC Hydroponics, Aquaculture, Aquaponics Applied Research Teaching and Demonstration Labs**
Philson Warner, Applied Scientist/Extension Associate, Cornell University Cooperative Extension
10:00am - 1:00pm

Visit and tour the Cornell University Cooperative Extension, NYC Hydroponics, Aquaculture, Aquaponics Applied Research Teaching and Demonstration Labs. Experience state-of-the-art cutting-edge technologies that can be applied as delivery vehicles for STEM programs.

**Queens Botanical Garden**
Marnie Rackmill, Professional Development Coordinator, Queens Botanical Garden
10:00am - 1:00pm

Experience the Queens Botanical tour that will focus on our curated garden exhibits such as the Herb Garden, Fragrance Walk, Green Roof, Perennial Garden, and Rainwater Collection Exhibits. The topics covered will include plant identification and natural history, local ecology, and green urban infrastructure.

**El Museo del Barrio**
Meghan Lally, Manager of Education Programs, El Museo del Barrio
10:00am - 12:00pm

Enjoy a guided tour designed to encourage observations, spark curiosities, and create conversations around selected works of art and objects. The tour and hands-on workshop are inquiry-based and reflect the Museum’s approach of engaging visitors in meaningful dialogue. The tour’s theme, Framing Narratives, allows participants to link storytelling to other disciplines including science, social studies, and math using the objects in PRESENCIA, the Museum’s Permanent Collection installation.
The Studio Museum in Harlem
Shanta Scott, Education Manager, The Studio Museum in Harlem
10:00am - 12:30pm
Join The Studio Museum in Harlem's Education team for an inquiry-based tour and hands-on workshop experience that models how investigation of contemporary works of art and art-making activities can foster imagination, enhance visual literacy, and help to develop critical thinking skills. Learn how visual inquiry and art-making skills are transferable across STEM disciplines.

The Paley Center for Media Education Program
Rebekah Fisk, Associate Director of Education, The Paley Center for Media
10:00pm - 12:00pm
The Fine Art of Persuasion: Television and Advertising. What is advertising, what is its goal, and what are its methods? How do images and sounds combine to make a point or sell a product, and how have these changed over time? Through careful analysis, participants will discover the persuasive techniques developed to capture a viewer's attention in order to promote a product or idea. This workshop will also discuss how to use television and radio to enrich existing classroom curricula and stress the importance of focused viewing, listening, and discussion when using media as a teaching tool.

Staten Island Museum
Claire Aniela Arthurs, Manager of Education Programs, Staten Island Museum
11:00am-1:00pm
Take a guided tour of the Museum’s newest exhibit: “They’re Baack! Return of the 17-Year Cicada.” Participants will also work with the Museum’s powerful digital microscope to look at creatures close up, and discuss how to do a lesson with children on insects, worms or snails. Cicada recipes provided for the brave.

The Metropolitan Museum of Art
William Crow, Managing Museum Educator, School and Teacher Programs, Betsy Gibbons, Assistant Museum Educator, The Metropolitan Museum of Art
10:00am - 12:00pm
Explore a range of art from diverse periods and cultures during an inquiry-based, object-centered guided tour at the Metropolitan Museum of Art. The guided tour will model teaching approaches, themes, and hands-on activities offered for camp and community youth organizations so that participants can have first-hand experience with these program offerings and discover resources that will support their work at their organization.

Randall’s Island Park Alliance
Donna Piluso, Volunteer Coordinator, Randall’s Island Park Alliance
10:00am - 1:00pm
Get an overview of the free STEM-related programming that Randall’s Island Park Alliance offers. The day will include a tour of the island and chance to view activities at the wetlands and the urban farm.

New York Hall of Science
Georgette Williams, Coordinator of Out of School Time Learning, New York Hall of Science
11:00am-1:30pm
Explore the Tenement Museum and learn how it provides a place-based multi-modal learning experience for students of all ages.

New-York Historical Society
Chelsea Frosini, Coordinator of Secondary and Post-Secondary Programs, New York Historical Society
12:00pm - 2:00pm
Engage with a selected artwork at the New-York Historical Society (N-YHS) while a Museum Educator models how the Student Historian Internship Program uses inquiry to facilitate conversations about art and history in a museum environment. This is a practice that the program uses to encourage Student Historians to explore the Museum’s collection with educators, on their own, and/or in small groups, while developing research, writing, thinking, public speaking, and creative problem solving skills outside of school.

International Center of Photography
Carly Goldman, Coordinator of Community Programs, International Center of Photography
Jaime Schlesinger, ICP Faculty and Museum Educator
12:00pm -2:00pm
Experience a guided tour of the International Center of Photography’s (ICP) museum and school facilities. The museum tour will focus on the upcoming exhibition, “A Different Kind of Order: The ICP Triennial.”

Lower East Side Tenement Museum
Miriam Bader, Education Director, Lower East Side Tenement Museum
10:00am - 1:00pm
Explore the Tenement Museum and learn how it provides a place-based multi-modal learning experience for students of all ages.

New York Hall of Science
Georgette Williams, Coordinator of Out of School Time Learning, New York Hall of Science
10:00am - 1:00pm
Participants will observe first hand how inquiry is incorporated into every aspect of NYSCI philosophy from exhibit design to programs. Participants will learn about various programs available for their students, potential partnerships and an opportunity to network with NYSCI and other providers.

New York Hall of Science
Don Luistro, Science Instructor
10:00am - 1:00pm
Participants will observe first hand how inquiry is incorporated into every aspect of NYSCI philosophy from exhibit design to programs. Participants will learn about various programs available for their students, potential partnerships and an opportunity to network with NYSCI and other providers.

New York Hall of Science
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Acknowledgements

An extraordinary team of dedicated DYCD staff and experts from STEM, development, and your education fields mad this conference possible. The response to our vision for this event was overwhelming—thank you to all of the organizations that are committed to cultivating curiosity in your people. We are especially grateful to those organizations that generously shared their staff time and resources to lead workshops, STEM LIVE activities, and learning tours.

Contributions from corporations, nonprofits, and individuals helped to make this a special day for afterschool programs in NYC. Several companies—Curiosity Champions—made significant contributions or commitments to build on the foundation established at this conference to support the expansion of STEM programming over the next year.

CURIOSITY CHAMPIONS

STEM STARS
Facebook
First Book
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Lumos Labs
Mary Roach
National Center for Family Literacy
National Institute on Out-of-School Time
Scientific American
PBS Kids Go, The Electric Company
Sprint
The Afterschool Corporation
The New York Academy of Sciences
Verizon
WGBH Educational Foundation

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