

Battleship New Jersey

62 Battleship Place
Camden, NJ 08103
Mike Flynn
Phone: 856-966-1652 222 Fax: 856-966-3131
Email: education@battleshipnewjersey.org Web: <http://www.battleshipnewjersey.org>

The Battleship New Jersey, our nation's most decorated battleship, is located along the Camden Waterfront in Camden, New Jersey. American history comes alive aboard this 887 foot long, 45,000 ton memorial. A visit to the "Big J" in person or via videoconferencing will provide an educational experience that will long be remembered.

Program Title: Buoyancy and Battleships – How Boats Float

Description: Students will learn about the physical principals involved in keeping a 45,000 ton battleship afloat. Buoyancy, equilibrium, displacement, and density will all be explained through hands on activities that will have all age groups entertained and engaged. They will analyze why a steel ship doesn't sink and how submarines dive and return to the surface.

Disciplines: Science, Math, Social Studies, Technology/Information Science

NJ Standards: 4.1, 4.2, 5.1, 5.7, 6.4, 8.2

Grade Levels: 4, 5, 6, 7, 8, 9, 10, 11, 12

Fee: \$125.00

Availability: By Individual Request

Connection Type: IP

Program Title: How Energy Changes Form

Description: How does water taken on the ship convert to power to make it run? Students will discover the scientific principles behind these activities on the battleship. Sea water was used for all of the basic energy needs of the sailors- from heating and cooking, to propelling the ship through the ocean. Students will experience areas of the ship which are responsible for the processes necessary for the conversion of these resources.

Disciplines: Science, Math, Technology/Information Science

NJ Standards: 5.4, 5.7, 6.4, 8.2

Grade Levels: 4, 5, 6, 7, 8, 9, 10, 11, 12

Fee: \$125.00

Availability: By Individual Request

Connection Type: IP

Program Title: Mechanical Advantage

Description: When a projectile weighing 1,900 lbs. needs to be moved, without the use of machinery, how is it accomplished? Through the use of simple machines, work is carried out throughout the ship on a daily basis. Students will witness actual demonstrations in the machine shop aboard the battleship. They will also have the opportunity to listen to real life examples of how these machines were used as told by the men who worked on the New Jersey.

Disciplines: Science, Math, Technology/Information Science

NJ Standards: 5.4, 5.7, 6.4, 8.2

Grade Levels: 4, 5, 6, 7, 8, 9, 10, 11, 12

Fee: \$125.00

Availability: By Individual Request

Connection Type: IP

Program Title: What Good is a Parabola, Anyway?

Description: Students will examine how the Battleship New Jersey aimed the 16 inch guns with the assistance of a quadratic equation. These guns are capable of firing a 2000 pound projectile up to 23 miles and landing that shell within 30 yards of the intended target. This is amazing when one realizes that the equipment used to aim the guns was designed in the 1930's before GPS, digital computers, or Radar, and is still accurate enough to be used without change today. This is all accomplished with the use of parabolas which is also applied in this class to hands-on activities such as a quarterback throwing a football or a batter hitting a baseball. A video segment which demonstrates the 16 inch guns in action, as well as a life-size replica of an actual shell (over 5ft. tall!) serve to enhance the educational experience.

Disciplines: Science, Math, Technology/Information Science

NJ Standards: 4.3, 5.3, 6.4, 8.2

Grade Levels: 4, 5, 6, 7, 8, 9, 10, 11, 12

Fee: \$125.00

Availability: By Individual Request

Connection Type: IP

Bronx Zoo

Wildlife Conservation Society/Distance Learning

2300 Southern Boulevard

Bronx, NY 10460

Erica Sopha

Phone: 718-741-1693 Fax: 718-733-2921

Email: distancelearning@wcs.org Web: <http://www.bronxzoo.com/distancelearning>

With more than 4,000 animals and award-winning cutting-edge exhibits, the Bronx Zoo is world-renowned. It is the flagship zoo in the world's largest system of urban wildlife parks. The zoo is managed and headquarters to the Wildlife Conservation Society.

Program Title: Madagascar, Conserving Biodiversity

Description: How do scientists protect the future of a species? Students will answer this question as they explore the diverse world of lemurs at the Bronx Zoo's new Madagascar! exhibit. Live cameras will transport your class to our lemur exhibits, where students will explore the world of biodiversity. Through observation and classroom activities, students will learn what it takes to ensure a future for lemurs. This program has a strong focus on the role of genetics and geography in wildlife conservation, and includes visiting our fossa and ring-tailed mongoose exhibits.

Disciplines: Math, Science, Social Studies, Career Ed, Cross-Curricular

NJ Standards: 5.5, 5.10

Grade Levels: 9, 10, 11, 12

Fee: \$180.00

Availability: By Individual Request

**Connection
Type:**

IP

ISDN

Program Title: Size & Shape

Description: Why is a ferret long and thin? Youngsters consider this and other questions about how an animal's size and shape are related to its way of life. By observing a variety of animals, students discover some fundamental concepts about how size and shape help an animal survive. Students also draw conclusions about where an animal lives and what it eats.

Disciplines: Math, Science, Cross-Curricular

NJ Standards: 5.1, 5.5

Grade Levels: K, 1

Fee: \$180.00

Availability: By Individual Request

**Connection
Type:** IP
ISDN

Camden Children's Garden

3 Riverside Drive
Camden, NJ 08103
Garden Educator
Phone: 856-365-8733 Fax: 856-365-9750
Email: education@camdenchildrensgarden.org Web: <http://www.camdenchildrensgarden.org>

The Camden Children's Garden Education Program Distance Learning and On-Site lessons follow the NJ Department of Education Core Curriculum Content Standards and the American Association for the Advancement of Science Benchmarks for Science Literacy.

Note: The Garden connects via ISDN. Bridging is available for an additional fee.

Program Title: Genetics: Mendel's Peas

Description: Discover dominant and recessive traits among yourselves, then study peas. Figure it all out on a Punnett Square. Length: 45 minutes

Disciplines: Science, Math

NJ Standards: 4.4, 5.1, 5.2, 5.3, 5.4, 5.5

Grade Levels: 7, 8, 9, 10, 11, 12

Fee: \$55.00 - \$80.00

Availability: By Individual Request

Connection Type: ISDN

Cape May County Park and Zoo

4 Moore Road, DN 801
Cape May Court House, NJ 08210
Barbara Agens
Phone: 609-465-6832 Fax: 609-465-5421
Email: bagens@co.cape-may.nj.us Web: <http://www.capemaycountygov.net>

We are an AZA accredited facility that focuses on educating the public and superior animal care.

Program Title: Animal Enrichment

Description: Investigate the newest thing to hit zoos across the world. Food, smells, toys, and sounds that are created solely for the animals' enjoyment. Take a look at the many different ways we keep our animals happy and healthy through enrichment.

Disciplines: Math, Science, Social Studies, Health/PE, Character Ed, Fine Arts

NJ Standards: 3.3, 3.4, 5.5, 5.10

Grade Levels: 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12

Fee: \$50.00 - \$75.00

Availability: By Individual Request

Connection Type: ISDN

Program Title: Exhibit Design

Description: Do you know the *four* essential requirements to support life? Do you know what it takes to keep an animal from escaping? Take a look into what we do for our animals at the zoo in order to keep them happy, healthy and safe.

Disciplines: Math, Science, Social Studies, Health/PE, Character Ed, Fine Arts, Language Arts

NJ Standards: 3.3, 3.4, 4.1, 4.2, 4.5, 5.5, 5.10

Grade Levels: PK, K, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12

Fee: \$50.00 - \$75.00

Availability: By Individual Request

Connection Type: ISDN

Center for Mathematics, Science and Computer Education

Rutgers University, CMSCE
118 Frelinghuysen Road
Piscataway, NJ 08854
Judy Bornstein
Phone: 732-445-0670 Fax: 732-445-3477
Email: jsborn@rutgers.edu Web: <http://cmsce.rutgers.edu>

The Center (CMSCE) sponsors more than 30 programs. Over the past twenty-one years, teachers and students from every legislative district in New Jersey and from two-thirds of all NJ school districts have benefited from participation in Center-sponsored projects. The leadership cadre spawned by these programs is improving the teaching and learning of mathematics, science, and technology statewide and even nationally.

Program Title: Test Prep Strategies for HSPA

Description: This workshop is designed to provide staff with the tools to create a learning environment where students are actively involved, solving meaning problems, and working together to acquire knowledge. Practical strategies, hands-on activities, use of a variety of manipulatives, and the use of technology will enhance your instruction in the clusters of the math curriculum to excite your students about learning mathematics and improve standardized test scores.

Disciplines: Math

NJ Standards:

Grade Levels: Teachers

Fee: \$100.00 - \$195.00

Availability: By Scheduled Date/Time

Connection Type: IP

Program Title: Test Prep Strategies for NJ ASK Grades 7 and 8

Description: This workshop is designed to provide staff with the tools to create a learning environment where students are actively involved, solving meaning problems, and working together to acquire knowledge. Practical strategies, hands-on activities, use of a variety of manipulatives, and the use of technology will enhance your instruction in the clusters of the math curriculum to excite your students about learning mathematics and improve standardized test scores.

Disciplines: Math, Professional Development

NJ Standards:

Grade Levels: Teachers

Fee: \$100.00 - \$195.00

Availability: By Scheduled Date/Time

Connection Type: IP
Desktop VC

Program Title: Test Prep Strategies for NJASK Grades 3 and 4

Description: This workshop is designed to provide staff with the tools to create a learning environment where students are actively involved, solving meaning problems, and working together to acquire knowledge. Practical strategies, hands-on activities, use of a variety of manipulatives, and the use of technology will enhance your instruction in the clusters of the math curriculum to excite your students about learning mathematics and improve standardized test scores.

Disciplines: Math, Professional Development

NJ Standards:

Grade Levels: Teachers

Fee: \$100.00 - \$195.00

Availability: By Scheduled Date/Time

Connection Type: IP
Desktop VC

Program Title: Test Prep Strategies for NJASK Grades 5 and 6

Description: This workshop is designed to provide staff with the tools to create a learning environment where students are actively involved, solving meaning problems, and working together to acquire knowledge. Practical strategies, hands-on activities, use of a variety of manipulatives, and the use of technology will enhance your instruction in the clusters of the math curriculum to excite your students about learning mathematics and improve standardized test scores.

Disciplines: Math, Professional Development

NJ Standards:

Grade Levels: Teachers

Fee: \$100.00 - \$195.00

Availability: By Scheduled Date/Time

**Connection
Type:** IP
Desktop VC

Ellis Island Immigration Museum

Statue of Liberty National Monument & Ellis Island

Liberty Island, NY 10004

Joan Kelly

Phone: 212-363-3206 134 Fax: 212-363-6304

Email: morgan_smith@nps.gov Web: <http://http://www.nps.gov/elis/forteachers/index.htm>

An agency of the United States Department of the Interior.

Program Title: A Distant Shore

Description: Students will learn about America's immigration past during its busiest era in history, focusing on the years 1892 through 1954 through the nation's first federal immigration station, Ellis Island.

Disciplines: Math, Social Studies, Language Arts, Cross-Curricular

NJ Standards: 2.6, 2.7,3.1,3.2,3.3,3.4,3.5,4.3,4.10,6.4,6.5,6.6,6.7,6.8,6.9

Grade Levels: 4, 5, 6

Fee: \$0.00 - \$0.00

Availability: By Individual Request

Connection Type: ISDN

Global Education Motivators (GEM)

9601 Germantown Ave
Philadelphia , PA 19118
Sabrina Cusimano
Phone: 215-248-1150 Fax:
Email: gem@chc.edu Web: <http://www.gem-ngo.org>

GEM is a non-profit educational organization based at Chestnut Hill College in Philadelphia, PA (USA). GEM is an NGO (non-governmental organization) in association with the United States Department of Public Information. GEM services schools to promote global awareness, understanding and responsibility in an interdependent world through the use of videoconferencing technology.

Program Title: No More Business as Usual

Description: Businesses have been in the news lately because many have acted in an unethical or irresponsible manner. Widespread incidences of lying, cheating and greed have led to improprieties and scandals at such companies as Enron, WorldCom and Tyco as well as numerous mutual fund companies. The values most people are taught at home and in school - do unto others, tell the truth, consider long term consequences - are often forgotten at work in the name of making the fast buck.

As students start thinking about college sources and/or earning a living, both excitement and apprehension undoubtedly surface. Young adults are usually familiar with today's economic uncertainties, environmental problems and global conflicts. Recent business scandals have touched the lives of many families and are understandably detrimental to society at large. Making a good living is an important goal but only if it is done in an equitable and sustainable manner i.e. business is operated responsibly.

The goal of "Introduction to Socially Responsible Business" is to help students better understand our interdependent world and present a model that enhances the welfare of the economy, the ecosystem and society at large. This understanding will enable them to make informed decisions and ask timely questions of themselves, their communities and their leaders. Actions students can take to positively influence the business community are presented so that everyone has the opportunity to make a difference both locally and globally.

Topics to select from:

1. Introduction to and History of Socially Responsible Business Movement.
2. Benefits of Socially Responsible Business Practices - Sustainability

Disciplines: Math, Career Ed, Language Arts, Cross-Curricular

NJ Standards: 6.2

Grade Levels: 9, 10, 11, 12

Fee: \$200.00

Availability: By Individual Request

Connection Type:
IP
ISDN
Desktop VC

Historically Speaking

P.O. Box 488

Cameron Mills, NY 14820

Paul Stillman

Phone: 607-695-2656 Fax:

Email: Realbenfranklin@aol.com Web: <http://www.speakinghistorically.com>

First-person, historical characterizations, workshops, long distance learning

Program Title: Benjamin Franklin

Description: Benjamin Franklin talks about his life and times, with numerous visuals, his inventions, science experiments, life abroad, Declaration of Independence, the Revolutionary War and the Constitution.

Disciplines: Math, Science, Social Studies, Performing Arts, Cross-curricular

NJ Standards: 1.2, 6.1

Grade Levels: PK, K, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, Teachers

Fee: \$150.00

Availability: By Individual Request

Connection

Type: IP
ISDN

Liberty Science Center

Liberty State Park
222 Jersey City Blvd.
Jersey City, NJ 07305
Nina Colon
Phone: 201-253-1382 Fax: 201-866-8024
Email: eft@lsc.org Web: <http://www.lsc.org/>

Liberty Science Center is an innovative learning resource for lifelong exploration of nature, humanity and technology, strengthening communities and inspiring global stewardship. Let Liberty Science Center's dynamic instructors become your partners in an exploration of exciting science concepts--from the convenience of your own facility. Electronic Field Trips (EFTs) are interactive lessons delivered directly to your students at school via videoconferencing. They are broadcast live from our exhibition floors or our new laboratory setting in the Jennifer A. Chalsty Center for Science Learning and Teaching.

Our Science Educators will help your students explore a range of dynamic cross-curricular themes. EFTs come with classroom curriculum aligned with the National Science Education Standards, New Jersey Core Curriculum Science Content Standards and New York Learning Standards for Math, Science and Technology. Professional development on the use of videoconferencing technology or introduction to EFTs is available for teachers and administrators.

Program Title: **Geometry in Nature**

Description: Did you know that math can be found in a seashell, a honeycomb and a leaf? Investigate the patterns and shapes that can be observed in nature and discover the mathematical principles behind these phenomena.

Disciplines: Science, Math, Cross-Curricular

NJ Standards: 5.1, 5.3, 5.5, 5.10

Grade Levels: 3, 4, 5, 6, 7, 8, 9, 10, 11, 12

Fee: \$190.00

Availability: By Individual Request

Connection Type: IP and ISDN
IP
ISDN

New Jersey Department of Education

PO Box 500
100 Riverview Plaza
Trenton, NJ 08625-0500
Sue Sullivan
Phone: 609-777-4661 Fax: 609-341-3884
Email: sue.sullivan@doe.state.nj.us Web: <http://www.state.nj.us/education>

Program Title: Educational and Policy Outreach

Description: The state does outreach for educational and policy related issues.

Disciplines: Math, Science, Social Studies, Health/PE, Career Ed, Character Ed, Special Needs, Technology/Information Science, Professional Development, Language Arts, World Languages, Cross-curricular, Performing Arts

NJ Standards: n/a

Grade Levels: Teachers, Administrators

Fee: \$0.00

Availability: By Individual Request

Connection Type: IP
ISDN

New York Hall of Science

4701 111th St.
Flushing, NY 11368
Anthony Negron
Phone: 718-699-0005 597 Fax:
Email: anegron@nyscience.org Web: <http://www.nyhallsci.org>

The New York Hall of Science is New York's hands-on science and technology center. The Hall features more than 400 hands-on exhibits. Visit us and explore the wonder and excitement of biology, chemistry and physics.

Program Title: Fun with Bubbles

Description: Can a bubble be a shape other than a sphere? Make your own bubbles while learning what makes a bubble, why they maintain their shape, and investigate the different colors. Watch as one of our Explainers makes a gigantic bubble from the Soap Bubbles exhibit. Create your own bubble art!

Disciplines: Science, Math

NJ Standards: 5.1, 5.4, 5.6, 5.8

Grade Levels: K, 1, 2

Fee: \$125.00

Availability: By Individual Request

Connection Type: IP
ISDN
Desktop VC

Program Title: Mathematica: Beyond Numbers (Virtual Visit Unit)

Description: Gaze upon anything and you are looking at some form of mathematical principle. Math is everywhere; patterns and relationships exist all around us, all the time. Gain an understanding about Math that is not just numbers and equations. Explore the concepts of how math applied in Science and our everyday lives.

Disciplines: Math, Science

NJ Standards: 4.1, 4.3, 4.5, 4.8

Grade Levels: 6, 7, 8, 9, 10, 11, 12

Fee: \$200.00

Availability: By Individual Request

Connection Type: IP
ISDN
Desktop VC

Ocean of Know

Apt 7 US 60 Morrow Ave.
Scarsdale, NY 10583
Daniel McVeigh
Phone: 845-797-0968 Fax:
Email: dpm36@columbia.edu Web: <http://www.oceanofk.org>

Ocean of Know is a not for profit 501(c)3 corporation founded in 1989. It was driven by a vision of how true integration of technology could transform the experience of education for everyone. The cornerstone of Ocean of Know is Young McDonald's Farm (YMF), a tele-robotic aquaponics farm located at the Rutgers University Research Greenhouse in New Jersey also partnered with Teachers College Columbia University. Students can connect with the YMF via videoconferencing link, no matter where they are. YMF is the learning incubator for both teachers and students in our programs. It is the place where they learn to put technology to work for them, to achieve their own goals, satisfy their curiosity, and in the process learn math, science, programming, strengthen their literacy skills---seamlessly.

Program Title: Aquatic Eco Systems

Description: Students gain a better understanding of aquaponics (plants and fish in the same system). This program will show students how to integrate aquaculture (fish farming) and hydroponics (plants in solution, no soil) by building and maintaining their own classroom based fish tank system.

Disciplines: Math, Science, Career Ed, Special Needs, Professional Development, Cross-Curricular

NJ Standards: 4.1, 4.5, 5.1, 5.2, 8.2

Grade Levels: 4, 6, 7, 8, 9, Teachers, Administrators, Parents

Fee: \$175.00

Availability: By Individual Request

Connection Type: IP
ISDN

Program Title: Catch a Fish - Weigh a Fish

Description: Students go on a virtual journey from Squeak Programming to the Virtual Fish Farm. Students engage in mathematic based learning while becoming aware of environmental cognition and responsibility. Through virtual training they become aware and knowledgeable in a real setting. The learning experience culminates with real ongoing experiences in a classroom aquarium. Various mathematic and technology standards are addresses in this experience.

Disciplines: Math, Science, Language Arts, Cross-Curricular

NJ Standards: 4.1-4.5, 5.1, 5.2, 5.4, 8.2, 5.10

Grade Levels:

Fee: \$175.00

Availability: By Individual Request

**Connection
Type:** IP
ISDN

Program Title: Charting and Graphing Fish Data

Description: Students use a fish farm software simulation to monitor, chart and graph data.

Disciplines: Science, Professional Development, Language Arts, Cross-Curricular, Math

NJ Standards: 5.4, 5.10, 8.2

Grade Levels: 3, 4, 5, 6, Teachers, Administrators, Parents

Fee: \$175.00

Availability: By Individual Request

**Connection
Type:** IP
ISDN

Program Title: Finding the Percent of a Number in Fish Body Weight

Description: In this learning experience students will use operations of fractions/decimals to find the weight of fish and apply percents to determine the percent of food to feed them. Students will determine the weight of the fish by finding the difference between the weight of the container, water, and fish and the weight of the container and water. They will also calculate the amount of food to feed them based on a percent of their body weight. They will record their information into a data table which they will summarize using Excel.

Disciplines: Science, Language Arts, Math

NJ Standards:

Grade Levels:

Fee: \$175.00

Availability: By Individual Request

**Connection
Type:** IP
ISDN

Program Title: Fish Math

Description: Students will gain a better understanding of fractions, decimals, and percents through the use of a software based fish farm simulation.

Disciplines: Math, Science, Special Needs, Professional Development, Cross-Curricular

NJ Standards:

Grade Levels: 4, 5, 6, Teachers, Administrators, Parents

Fee: \$175.00

Availability: By Individual Request

**Connection
Type:** IP
ISDN

Program Title: How Do Robots Think?

Description: How do robots think? Students will gain a better understanding of basic programming concepts by using a children's programming language as well as being able to trigger a real robotic arm over the Internet. They will be able to view its actions via video teleconferencing.

Disciplines: Math, Science, Cross-Curricular, Fine Arts, Professional Development, Special Needs

NJ Standards: 4.5, 5.1, 8.1

Grade Levels: 4, 5, 6, 7, 8, Teachers, Parents

Fee: \$175.00

Availability: By Individual Request

Connection Type: IP
ISDN

Program Title: Intro to Aquaculture: Part I

Description: Students will learn how to build a real re-circulation fish farm with 30 gallon buckets, PVC pipe and sump pump. A copy of fish farm simulation software is supplied to better explain how a fish farm works. (Gravity and Air pressure)

Disciplines: Math, Science, Career Ed, Special Needs, Cross-Curricular, Professional Development

NJ Standards:

Grade Levels: 4, 5, 6, 7, 8, 9, 10, 11, 12, Teachers, Administrators, Parents

Fee: \$175.00

Availability: By Individual Request

Connection Type: IP
ISDN

Program Title: Intro to Aquaculture: Part III

Description: Topics to include: Water chemistry II, Basic Chemistry, Nitrate and Ammonia Nitrogen.

Disciplines: Math, Science, Special Needs, All

NJ Standards:

Grade Levels: 4, 5, 6, 7, 8, 9, 10, 11, 12, Teachers, Administrators, Parents

Fee: \$175.00

Availability: By Individual Request

Connection Type: IP
ISDN

Program Title: Intro to Aquaculture: Part IV

Description: General information on different types of fish farming, trout, shrimp, tilapia.
Disciplines: Math, Science, Special Needs, Cross-Curricular
NJ Standards:
Grade Levels: 4, 5, 6, 7, 8, 9, 10, 11, 12, Teachers, Administrators, Parents
Fee: \$175.00
Availability: By Individual Request
Connection Type: IP
ISDN

Program Title: Intro to Aquaculture: Part V

Description: Intro to Hydroponics, nutrients and tracer elements.
Disciplines: Math, Science, Special Needs, Professional Development, Cross-Curricular
NJ Standards:
Grade Levels: 4, 5, 6, 7, 8, 9, 10, 11, 12
Fee: \$175.00
Availability: By Individual Request
Connection Type: IP
ISDN

Program Title: Intro to Hydroponics

Description: How do we grow plants in solution without soil? What role do nutrients and tracer elements play in plant nutrition?
Disciplines: Math, Science, Special Needs, Professional Development, Cross-Curricular
NJ Standards:
Grade Levels: 4, 5, 6, 7, 8, 9, 10, 11, 12, Teachers, Administrators, Parents
Fee: \$175.00
Availability: By Individual Request
Connection Type: IP
ISDN

Program Title: Tilipia in the Classroom

Description: Students will learn how to develop and monitor a working fish farm in their classroom. Students will work on problem solving skills as they maintain the delicate balance between feeding rates, growth rates and water chemistry.

Disciplines: Special Needs, Professional Development, Math, Science, Career Ed, Cross-Curricular

NJ Standards:

Grade Levels: 4, 5, 6, 7, 8, 9, 10, 11, 12, Teachers, Administrators, Parents

Fee: \$175.00

Availability: By Individual Request

Connection Type: IP
ISDN

Program Title: Water Chemistry for Fish Farming of Tilipia

Description: Understanding how to balance water chemistry when farming tilipia. How to monitor and control pH; acid and base levels; best growth rate temperatures; and safe dissolved oxygen levels.

Disciplines: Math, Science, Special Needs, Professional Development, Cross-Curricular

NJ Standards: 1, 5.5

Grade Levels: 4, 5, 6, 7, 8, 9, 10, 11, 12, Teachers, Administrators, Parents

Fee: \$175.00

Availability: By Individual Request

Connection Type: IP
ISDN

Program Title: Water Chemistry for Fish Farming of Tilapia: Part II

Description: Understanding how to balance water chemistry when farming tilapia. How to monitor and control fish waste, nitrate and ammonia nitrogen levels. How and when does ammonia become lethal to fish health.

Disciplines: Math, Science, Special Needs, Professional Development, Cross-Curricular

NJ Standards: 1, 5.5

Grade Levels: 4, 5, 6, 7, 8, 9, 10, 11, 12, Teachers, Administrators, Parents

Fee: \$175.00

Availability: By Individual Request

**Connection
Type:** IP
ISDN

Philadelphia Museum of Art

Box 7646

Philadelphia, Pa 19101

Lynda O'Leary and Candace LeClaire

Phone: 215-684-7399 Fax: 215-236-4063

Email: distancelearning@philamuseum.org Web: <http://www.philamuseum.org/education>

As one of the largest museums in the U.S., the Philadelphia Museum of Art invites visitors from around the world to explore its renowned collections, special exhibitions and enriching programs.

Program Title: Math and Art

Description: Explore the many ways artists have used mathematical concepts in their art. Students will see a variety of artistic styles and techniques. Topics may include pattern, symmetry, perspective and proportion.

Disciplines: Math, Fine Arts, Performing Arts, Cross-Curricular

NJ Standards: 1.1, 1.3, 1.4, 1.5, 3.3, 3.4, 3.5, 6.1, 6.3

Grade Levels: K, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12

Fee: \$100.00

Availability:

Connection

Type: IP
ISDN

Rutgers-Camden Center for the Arts

Rutgers-Camden Center for the Arts

314 Linden Street

Camden, NJ 08102

Lynda Hitchman

Phone: 856-225-6202 Fax: 856-225-6597

Email: ljhitch@camden.rutgers.edu Web: <http://www.rutgerscamdenarts.org>

Rutgers-Camden Center for the Arts, home of the Stedman Gallery and Gordon Theater, is located in the Fine Arts Complex on the Rutgers-Camden Campus. D'ARTS programs deliver live, interactive classes directly to K-12 schools through videoconferencing technology. D'ARTS combines dynamic, responsive teaching with high quality content conveyed in a cross-curricular context. Classes are offered in two general categories: Visual Arts in Diverse Curricular Contexts teaches in, through, and about visual arts; and Sources for Drama teaches various aspects of theatre.

Program Title: Bridge Building: The Benjamin Franklin Bridge

Description: The intersections of engineering and aesthetics and infrastructure and community are explored via the study of the construction of a suspension bridge through photographs, archival renderings, and vintage postcards. The Ben Franklin Bridge (1926), which joins together Camden, NJ and Philadelphia, PA, was the first bridge over the Delaware River (and briefly the longest suspension bridge in the world). "Big Ben" was an engineering marvel that forever changed the economic and transportation infrastructure of the region.

Please note that this program has limited availability.

Disciplines: Math, Science, Social Studies, Fine Arts, Cross-curricular

NJ Standards: 1.1-1.5, 3.1, 3.3, 3.4, 3.5, 4.2, 4.3, 4.5, 5.2, 5.3, 5.4, 5.7, 5.10, 6.1, 6.2, 6.4, 6.5, 6.6, 8.2, 9.2

Grade Levels: 3, 4, 5, 6, 7, 8, 9, 10, 11, 12

Fee: \$65.00 - \$75.00

Availability: By Individual Request

Connection Type: ISDN
IP

Program Title: How Much is a Million? Number Sense & Relative Size

Description: Make mind-expanding (and mind-boggling) comparisons between numbers and sizes from very large to microscopic and have lots of fun while you're learning!

Disciplines: Math, Science, Fine Arts, Language Arts, Career Ed

NJ Standards: 1.1, 3.3, 3.4, 3.5, 4.1, 4.2, 4.3, 4.4, 4.5, 5.1, 5.3, 9.2

Grade Levels: 5, 6, 7, 8, 9, 10, 11, 12

Fee: \$65.00 - \$75.00

Availability: By Individual Request

**Connection
Type:** IP
ISDN

Program Title: Mathematical Visions-Primary Level

Description: Various works of visual art are effectively used to illustrate a wide range of mathematical concepts. Geometry, grids, patterns, symmetry, scale, and proportion are clearly demonstrated in an innovative way to the students.

Disciplines: Math, Fine Arts, Cross-curricular

NJ Standards: 1.1-1.5, 3.1, 3.3, 3.4, 3.5, 4.1-4.5, 5.2, 5.3, 9.2

Grade Levels: 2, 3, 4, 5, 6

Fee: \$65.00 - \$75.00

Availability: By Individual Request

**Connection
Type:** ISDN
IP

Program Title: Mathematical Visions-Secondary Level

Description: Various works of visual art are effectively used to illustrate a wide range of mathematical concepts at a more advanced level than that of the primary level class. Geometry, grids, patterns, symmetry, scale, proportion, topology, golden ratio, and the Fibonacci Sequence are investigated through the artworks. are clearly demonstrated in an innovative way to the students.

Disciplines: Math, Cross-curricular, Fine Arts

NJ Standards: 1.1-1.5, 3.1, 3.3, 3.4, 3.5, 4.1, 4.2, 4.3, 4.4, 4.5, 5.2, 5.3, 5.8, 9.2

Grade Levels: 7, 8, 9, 10, 11, 12

Fee: \$65.00 - \$75.00

Availability: By Individual Request

**Connection
Type:** ISDN
IP

Program Title: Mathematical Visions: Explorations in the Intersection of Math and Visual Art

Description: Using selections from the Rutgers-Camden Collection of Art as a framework, teachers will explore mathematical concepts in art.

Disciplines: Math, Fine Arts, Cross-curricular

NJ Standards:

Grade Levels: Teachers

Fee: \$65.00 - \$75.00

Availability: By Individual Request

**Connection
Type:** ISDN
IP

Program Title: Overview of RCCA's D'ARTS Class Offerings

Description: Program describes how to make the best use of these opportunities to meet your curricular requirements.

Disciplines: Math, Science, Social Studies, Language Arts, Fine Arts, Cross-curricular

NJ Standards:

Grade Levels: Teachers

Fee: \$65.00 - \$75.00

Availability: By Individual Request

**Connection
Type:** ISDN
IP

Program Title: Patterns Matter: Symmetry, Patterns, Tessellation

Description: Various works of art will be used to focus on concepts relating to patterning, symmetry, and tessellation. Find out why these concepts are important, how they are used by artists and how they are used in the real world? Students will complete activities during the session to further demonstrate the concepts.

Disciplines: Math, Science, Career Ed, Language Arts, Fine Arts

NJ Standards: 1.1, 1.2, 1.3, 1.4, 1.5, 3.3, 3.4, 3.5, 4.2, 4.3, 4.5, 5.1, 5.3, 5.4, 9.2

Grade Levels: 4, 5, 6, 7, 8

Fee: \$65.00 - \$75.00

Availability: By Individual Request

**Connection
Type:** IP
ISDN

Program Title: Points of Perspective

Description: How do artists create the illusion of a three-dimensional world on a two-dimensional canvas? By using mathematics! The D'ARTS teacher uses works of visual art to give students an effective way of understanding various spatial systems employed by visual artists including linear and atmospheric perspective, scale, and proportion. Please note that this program has limited availability.

Disciplines: Math, Fine Arts, Cross-curricular

NJ Standards: 1.1-1.5, 3.1, 3.3, 3.4, 3.5, 4.2, 4.3, 4.5, 5.2, 5.3, 5.4, 9.2

Grade Levels: 6, 7, 8, 9, 10, 11, 12

Fee: \$65.00 - \$75.00

Availability: By Individual Request

**Connection
Type:** ISDN
IP

Program Title: Points of Perspective

Description: The D'ARTS teacher uses works of visual art to give students an effective way of understanding various spatial systems employed by visual artists including linear and atmospheric perspective, scale, and proportion.

Disciplines: Fine Arts, Language Arts, Career Ed, Math, Science

NJ Standards: 1.1, 1.2, 1.3, 1.4, 1.5, 3.3, 3.4, 3.5, 4.2, 4.3, 4.5, 5.1, 5.3, 5.4, 9.2

Grade Levels: 6, 7, 8, 9, 10, 11, 12

Fee: \$65.00 - \$75.00

Availability: By Individual Request

**Connection
Type:** IP
ISDN

Program Title: Points of Perspective: Explorations in Systems of Perspective

Description: Using selections from the Rutgers-Camden Collection of Art as a framework, teachers will explore how artists create the illusion of a three-dimensional world on a two-dimensional canvas.

Disciplines: Fine Arts, Math, Cross-curricular

NJ Standards:

Grade Levels: Teachers

Fee: \$65.00 - \$75.00

Availability: By Individual Request

**Connection
Type:** ISDN
IP

Science in the Cinema

Passaic Valley Regional High School
160 East Main St.
Little Falls, NJ 07424
Matt Conforth
Phone: 973-890-2500 2541 Fax: 973-890-0385
Email: pvmconforth@yahoo.com

Free film and lecture series intended for an audience that enjoys the cinema and has an interest in science and medicine. Following the viewing of each film, an expert discusses the science depicted in the film and takes questions from the audience.

This program is a collaboration with the New Jersey Association of Biomedical Research. (Contact: Jayne Mackta, 908-964-9449)

Watch for the comprehensive website for Science in the Cinema coming this summer!

Program Title: Science in the Cinema via Video Conferencing

Description: Science in the Cinema in its original form is a free film and lecture series intended for a broad range of individuals who enjoy the cinema and have an interest in science and medicine. Selected films touch on a variety of medical and scientific topics. Following each film, an expert discusses the science depicted in the film and takes questions from the audience. These discussions also include the ethical implications raised by the film. Science in the Cinema via Videoconferencing uses the same concept, but connects the students with the expert using videoconferencing. Recent projects have included experts in the fields of medicine, genetics, anthropology, cellular biology and toxicology. An example is the movie Lorenzo's Oil that was used as a catalyst to discussions on the treatment of diseases and the ethics in human experiments and gene therapy. Dr. Tischfield, a Rutgers professor of genetics was the guest speaker. Other movies include Jurassic Park, and The Real Jurassic Park, Civil Action, Gattaca, The Island of Dr. Moreau, and Erin Brokovich.

Disciplines: Science, Math, Social Studies

NJ Standards: Science Standards 5.1, 5.2, 5.4, 5.5, 5.6, 5.8, 5.10
Comprehensive Health and Phys. Ed. Standards 2.1, 2.2, 2.3

Grade Levels: 7, 8, 9, 10, 11, 12

Fee: \$0.00

Availability: By Individual Request

Connection Type: IP
ISDN

The Paley Center for Media (formerly The Museum of Television & Radio)

25 West 52nd St.
New York, NY 10019
Education
Phone: 212-621-6600 Fax: 212-621-6765
Email: distancelearningny@paleycenter.org Web: <http://www.paleycenter.org>

The Paley Center's Education Department uses the collection in partnership with schools and other institutions to explore important themes and issues that have shaped contemporary history, as well as to develop and refine our audience's critical thinking and viewing skills. While the medium is television or radio, the subject may be advertising, animation, political campaigns, the Cold War, or many others.

Program Title: Tooned In to Animation

Description: Experience the magic of animation and learn about the process behind one of television's most creative forms. Students will watch a series of clips and discover how still images become animated cartoons.

Disciplines: Math, Social Studies, Career Ed, Language Arts, Fine Arts, Cross-curricular

NJ Standards: 3.4, 3.3, 6.2

Grade Levels: 3, 4, 5, 6, 7, 8

Fee: \$125.00

Availability: By Individual Request

Connection Type: IP
ISDN