



ENVISION THE FUTURE

A residential STEM program for girls 11-13 years old
July 20-24, 2015

Envision the Future is a five-day residential science, technology, engineering, and math (STEM) program for girls ages 11-13. The program is designed to foster interest in STEM fields by modeling effective practices. The program will provide opportunities for girls to engage in challenging STEM activities, explore career options with STEM professionals, meet women role models in STEM fields, and connect with other girls with similar interests and aspirations.

Envision the Future is a program of the SE MA STEM Network. Collaborators from education, business, government, and community organizations committed to advancing STEM education are volunteering their time and expertise to make this program possible. Envision the Future will be held at Bridgewater State University from Monday, July 20 to Friday, July 24, 2015.

Key Partners

AAUW (American Association of University Women) - Bridgewater State University –
CONNECT Partnership - SE MA STEM Network - Office of Congressman Joseph Kennedy

PROGRAM ELEMENTS

WORKSHOPS: Presentations by Experts in STEM fields.

8:30 a.m. - 2:30 p.m.

Solve It	Create It	Build It
<u>Biotechnology</u> Use DNA to Solve a Crime	<u>Computing</u> Create a mobile app and a Video Game	<u>Engineering</u> Build a ROV (remotely operated vehicle)

ACTIVITIES: Designed to Engage & Inspire

2:30 - 4:00 p.m. and 6:00 - 8:30 p.m.

Afternoon and evening activities presented by women and men who are educators and representatives of business and community organizations will allow students to:

Experience EarthView · Design a balloon car · Program robots · Create a mobile App · Make a DNA model using manipulatives · Participate in the Women Heroes Writing Project · Learn about the achievement of women in STEM throughout history · Develop a career path for at least three careers · Meet STEM professionals · Explore a college campus · Learn how to conserve natural resources.

MEET & GREET: Opportunities to Explore Career Paths

5:00 - 7:30 p.m.

One evening, attendees will participate in speed networking and activities with women STEM professionals which will allow them to explore career paths in STEM fields including:

Agriculture & Natural Resources · Architecture · Biological & Biomedical Sciences · Computer & Information Science · Engineering & Engineering Technology/Technicians · Health Professions & Clinical Sciences · Mathematics & Statistics · Mechanic/Repair Technician · Military Technology · Physical Sciences · Precision Production.

ELIGIBLE COMMUNITIES

Envision the Future is open to communities in the Southeastern Massachusetts STEM Network region with five openings for MA communities outside the SE MA STEM Network region.

HELP SHAPE THE FUTURE OF STEM ACHIEVEMENT

- **Support a girl to attend the Envision the Future Program**
- **Donate products and/or services**
- **Join a Replication Team** - *Deadlines for Intent to Participate – January 28 & February 28, 2015.*
Forward thinking educators and representatives from business and the community will form teams responsible for:
 - Selecting participants
 - Meeting with Parents
 - Securing financial contributions to cover cost to attend
 - Participating in the Program
 - Replicating one or more program activities in their community

COLLABORATORS

Representatives of the following organizations are involved in the development and implementation of Envision the Future.

AAUW · A. D. Makepeace · AccuRounds · Aldebaran Robotics · Amgen Biotech Experience
Bridgewater State University · Bristol Community College · Bristol-Plymouth Regional Technical School
Brockton Workforce Investment Board · Cambridge Science Festival · Cape Light Compact
Engaging Young Minds · Essential Physics · Girl Scouts of Eastern Massachusetts
Global Learning Charter School · Jr. Tech · Lockheed Martin · MAPS · Massasoit Community College
MassCUE · MassCAN · Markman Children's Programs · Meditech · Museum of Science
Marine Life Center · Natural Resources Trust of Easton · North Easton Machine
Office of Congressman Joseph Kennedy · Old Colony RVTHS · Project Lead the Way
Stonehill College · Sensata Technologies · Science from Scientists
University of Massachusetts Dartmouth · Siemens · Universal Technical Institute

Collaborators from public schools include representatives from: Attleboro, Avon, Braintree, Canton, Easton, Dennis Yarmouth, Braintree, Somerset, Mansfield, and Weymouth Public Schools

***To learn more about Envision the Future,
email Katherine Honey at khoney@comcast.net.***

The Southeastern Massachusetts STEM Network (SE MA STEM Network) is funded through the Department of Higher Education's STEM Pipeline Fund. The Fund seeks to improve teacher preparation in science, technology, engineering and mathematics (STEM) subjects and to increase student interest in, preparation for, and success in STEM Careers.

The CONNECT Partnership serves as administrator of the SE MA STEM network.



SCIENCE ■ TECHNOLOGY ■ ENGINEERING ■ MATH
STEM
Southeastern Massachusetts Network

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- **Futurist** - Girls ages 11-13
- **Envision the Future Replication Teams**
Composed of 3-10 forward thinking community members.
 - **Participation in Envision the Future Program** - The team agrees that a representative of the team will attend one day (July 20-23, 2015) for at least two hours to observe an activity and a representative will attend on the last day (July 24, 2015) to see the presentations by the Futurists and gather resources to support replication activities.
 - **Replication** - The team will be able to access electronically or will receive a copy of Envision the Future activities and materials. The team would choose one or more activities to replicate.
NOTE: It is not expected that a team would replicate a residential program only that they would review program materials and select at least one activity to replicate.
 - **Provide an Opportunity for Futurists to Present** - The team would arrange for the girls to make a presentation about Envision the Future to a group which could include their peers, educators, parents, members of community organizations, and/or school committee members. At least one member would work with the girl to prepare for the presentation that would feature highlights of the program.
 - **Follow Up Meeting** - At least one representative of the team would attend and discuss replication efforts at one or more SE MA STEM Network events in 2015 or 2016.
 - **Secure Financial Contributions – Envision the Future Participant Supporter**
The cost for each girl to attend is \$550.00.
Futurist Supporter Contribution: Supporters would contribute \$500 per girl and could include businesses, a Rotary Club, an educational foundation, an individual, or a community organization.
Parent Contribution: parents contribute \$50.00 for their daughter to attend. Parents will be invited to attend the orientation on July 20, 2015 and the presentations on July 24, 2015.
 - **Selecting Participants** - Identify girls ages 11-13 to attend Envision the Future who is interested in attending, curious, able to work collaboratively, understands that the program is engaging and challenging, and confirms that she is comfortable with participating in a residential program – 4 nights and 5 days.
 - **Meet with Parents** - A representative of the team would meet with a parent(s) or guardian(s) to ensure they want their daughter to attend a residential program and that the cost to the family is \$50.00. They would be encouraged to attend the presentations by the participants on the last day of the program on July 24, 2015.

NOTE: *Transportation to the program on July 20, 2015 and from the program on July 24, 2015 is the responsibility of the team or parents.*

- **Applications – Intent to Participate**

**Applications Available in December 2014
Application Deadlines – 2015**

JANUARY 28 – INTENT TO PARTICIPATE - EARLY ACCEPTANCE - 1-5 GIRLS

Contributions due February 28, 2015 – \$550.00 per Participant.

Supporter Contribution \$500.00 - Parent Contribution \$50.00

FEBRUARY 28 – INTENT TO PARTICIPATE - 1-3 GIRLS

Contribution due February 28, 2015 – \$550.00 per Participant.

Supporter Contribution \$500.00 - Parent Contribution \$50.00

MARCH 28 – INTENT TO PARTICIPATE - 1-3 GIRLS OR WAIT LIST

Contribution due March 28, 2015 – \$550.00 per Participant.

Supporter Contribution \$500.00 - Parent Contribution \$50.00

- **Envision the Future Program Sponsors**

Funds will be used to support the development and implementation of the *Envision the Future* program to be held July 20-24, 2015 at Bridgewater State University and the replication of *Envision the Future* elements in communities in Southeastern Massachusetts in 2016.

___ up to \$499	___ \$500 to \$999	___ \$1,000 to \$4,999	___ \$5,000+
Pioneer	Innovator	Catalyst	Visionary

- **Envision the Future Program Donors**

Provides products and services to support the Envision the Future program such as printing, gift certificates, T-shirts, electronic devices, lab supplies, 3-ring binders, sheet protectors, poster board, disposable cameras, Big Shot Camera Kits, android laptops and tablets or other products.

- **Envision the Future Collaborators**

Collaborators include parents, educators (early childhood, K-12, higher education), and representatives of business, government, and community organizations who volunteer their time to develop and implement activities and program evaluation, supervise the residential component, assist with administration of the program, and document the program via photos, videos and narrative.

- **Key Partners**

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For information on how you can help, contact:

Katherine Honey, SE MA STEM Network Coordinator at khoney@comcast.net.