



Full STEM Ahead Long Island – Women in STEM Resources for Your Classroom

Background: While times are changing and women now are approximately 50% of the workforce, there is still a large gap between men and women in the STEM fields. According to the National Girls Collaborative, “only 28% of employees in engineering and science are female”. How can we change that?! One of the best ways is for girls to learn about these exciting career pathways from people like them – women! Careers in STEM cover a variety of topics and span multiple industries including: healthcare, architecture, higher education, medical research, aviation, renewable energy, IT, and so many more.

Objective: Introduce students to female leaders in STEM. Provide students an opportunity to reflect and evaluate on their own interests to further develop an academic and career pathway.

Vocabulary:

Below are terms commonly used when learning about STEM careers -

Scientist	Aerodynamics	Wind Turbine	Cybersecurity
Engineer	Blueprint	Independent Variable	E-Commerce
Coder	Photovoltaic Cell	Dependent Variable	Concept Model

Materials:

Access to a computer and internet; paper; pen; watercolors; paintbrush; sketch paper

Procedure:

To celebrate Women’s History Month, we are proud to host “Women in STEM” and honor former astronaut Nicole Stott; Cybersecurity specialist Nicole Podhradsky; and Sharon Devivo, President of Vaughn College of Aeronautic Engineering, Aviation, and Technology; to inspire young ladies to explore in STEM through real-world application.

Close your eyes and think, just for a moment about yourself as a grown-up. Sometimes you know what you want to be when you grow up right away. Maybe it’s a doctor, a zoologist, a detective, or a teacher. When you think about your future, what do you hope you can do at job? Research the field or job of interest and then check into what famous or trailblazing women held a career in that field, what did they do? What is her education background? Write a quick biography about what you learned.

Then, let’s get a closer look at the speakers presented in the video. Sharon DeVivo and Nicole Stott are inspired by things that fly. In fact, Nicole was the first astronaut to paint a watercolor in space! Using watercolors, become your own artist and create a piece of art ready for the skies....or maybe for space!



Lesson Resources:

There are great activities for students of all ages to introduce STEM career pathways. All lessons are aligned with NGSS learning standards -

Teacher Vision – Women in STEM

<https://www.teachervision.com/women-stem>

YouTube / TEDx – Inspiring the next generation of female engineers – Debbie Sterling, GoldieBlox

<https://www.youtube.com/watch?v=FEeTLopLkEo>

SciGirls – Technology Activity (Keep Out)

<http://www.scigirlsconnect.org/resources/keep-out/>