



the stars
challenge

Code Secrets:
Girls, Science, and Coding
Fall 2014



Learning to code makes kids feel empowered, creative, and confident. If we want our young women to retain these traits into adulthood, a great option is to expose them to computer programming in their youth.

Susan Wojcicki

Senior Vice President, Google

The importance of being able to code is steadily increasing in today's working and academic environments. Although we're not trained as programmers, we both use programming in our jobs as STEM educators. This has afforded us the opportunities to observe the differences among our students who can and cannot code. Many people think of coders as those who sit isolated at a computer all day, but we wanted to demonstrate how coding can be a fun and interactive experience. We were thrilled with the level of enthusiasm and the intrinsic motivation that the girls brought to each class. More importantly, we all learned from each other and walked away each evening looking forward to the next week's gathering.

Thanks for being so much fun!

Mr. Roche and Mr. Hanas



First night introductory experiences - some veterans / some novices...



TA's Matt & Nivetha (along with Mr. Roche & Mr. Hanas) appreciated the enthusiasm displayed by all.



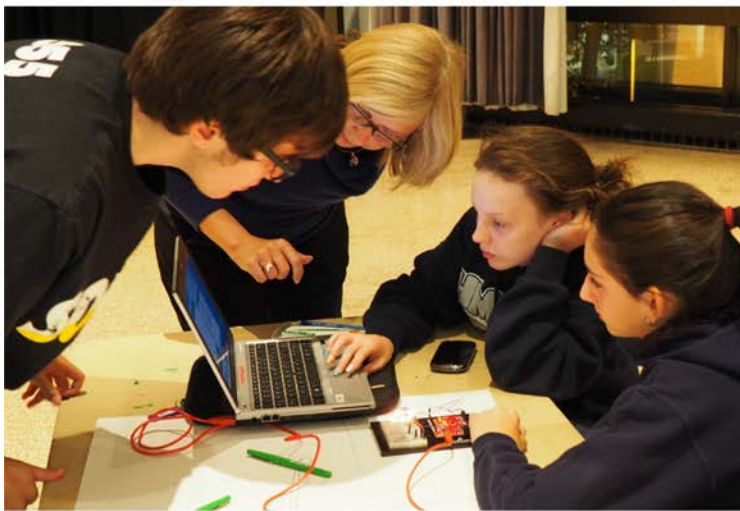
Erin & Felicia demonstrate their mastery of coding on the new Lilypad hardware.



Early activities range in complexity from the Googly Eyes challenge to debugging Arduino sketches.



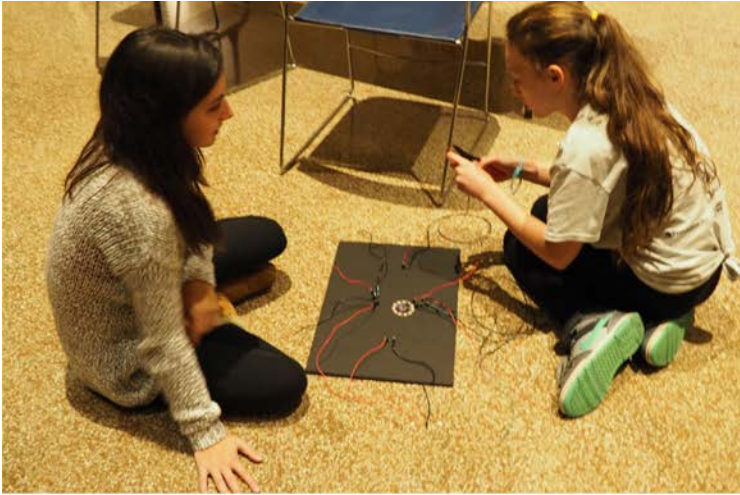
Josie and Chloe loving the fact that they successfully coded a heartbeat pattern.



Katiya, Tamia & Madison celebrate being the first to create their cascading light pattern.



Despite the name, "selfies" always seemed to include more than just one girl.



Veterans struggle with developing prototypes with foam core while Kelly enjoys the luxury of the breadboard.



Saylor's choice of tie-dye attire was perfect for the creative patterns she coded on the neopixel rings!



Attempting to make sense of the data with Jon and Nivetha to fall back on for advice / suggestions...



Girls use MIT's Scratch platform to advance their block programming skill set.



Kristyn & Leanne strike the perfect pose scratching their heads over Scratch.



Lillian and Lauren went through 22 meters of wiring to prototype their dancing tutu (22?)



HTHS programming students hosted the girls at a showcase featuring Twitter, Python & Android App Inventor.



Our grateful girls posed and prepared a personalized thank you for CommVault.

Katya Nekrasova:
You have really informed me on coding and how fun it is! Thank you so much!
Thank you for your products! Your donations have helped me learn so many new things in this course! The donations are used for everything from coding to...
Coding was amazing!
Thanks! (twice)

Code is so cool to figure out!

Code is the best!

Yay for Code Secrets!
-Jessie

Thanks for the laptops!!



Code is fun!

Thanks for the new computers! Learn & Grow!

FACTS
Hobby teeth
Coding is fun
Purple is good

Thank You for the laptops!
-Lillian Carlton

Google here I come!
-Madison Zimmerman

Brianna Yappell
you are really teaching it

A special thank you to CommVault for donating the hp laptops that made it possible to offer this enrichment course at Monmouth University, Fall 2014

Thank you for the laptops!
-Sambhavi

Your code secrets
-Jade!

Thank you for the computers!!
-Felicia

Chloe Anderson
Coding is so fun!
Thank you for donating!

Thank you so much for the laptops!
-Lauren C.
I hope to do something with coding in my future!

thanks for the laptops!

Thanks so much for such a fun course!
-Katie





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