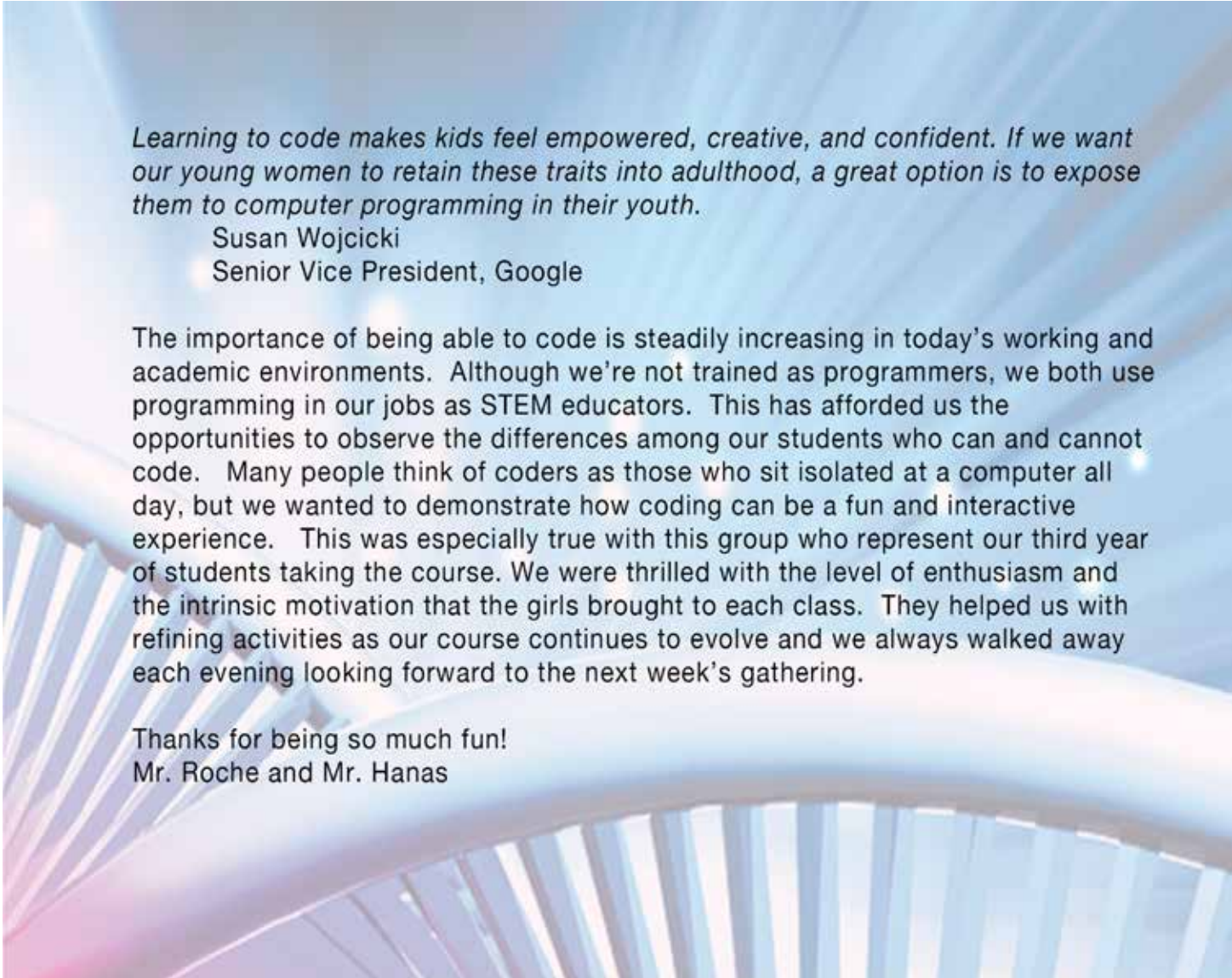




the stars
challenge

Code Secrets:
Girls, Science, and Coding
Fall 2016





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. This was especially true with this group who represent our third year of students taking the course. We were thrilled with the level of enthusiasm and the intrinsic motivation that the girls brought to each class. They helped us with refining activities as our course continues to evolve and we always walked away each evening looking forward to the next week's gathering.

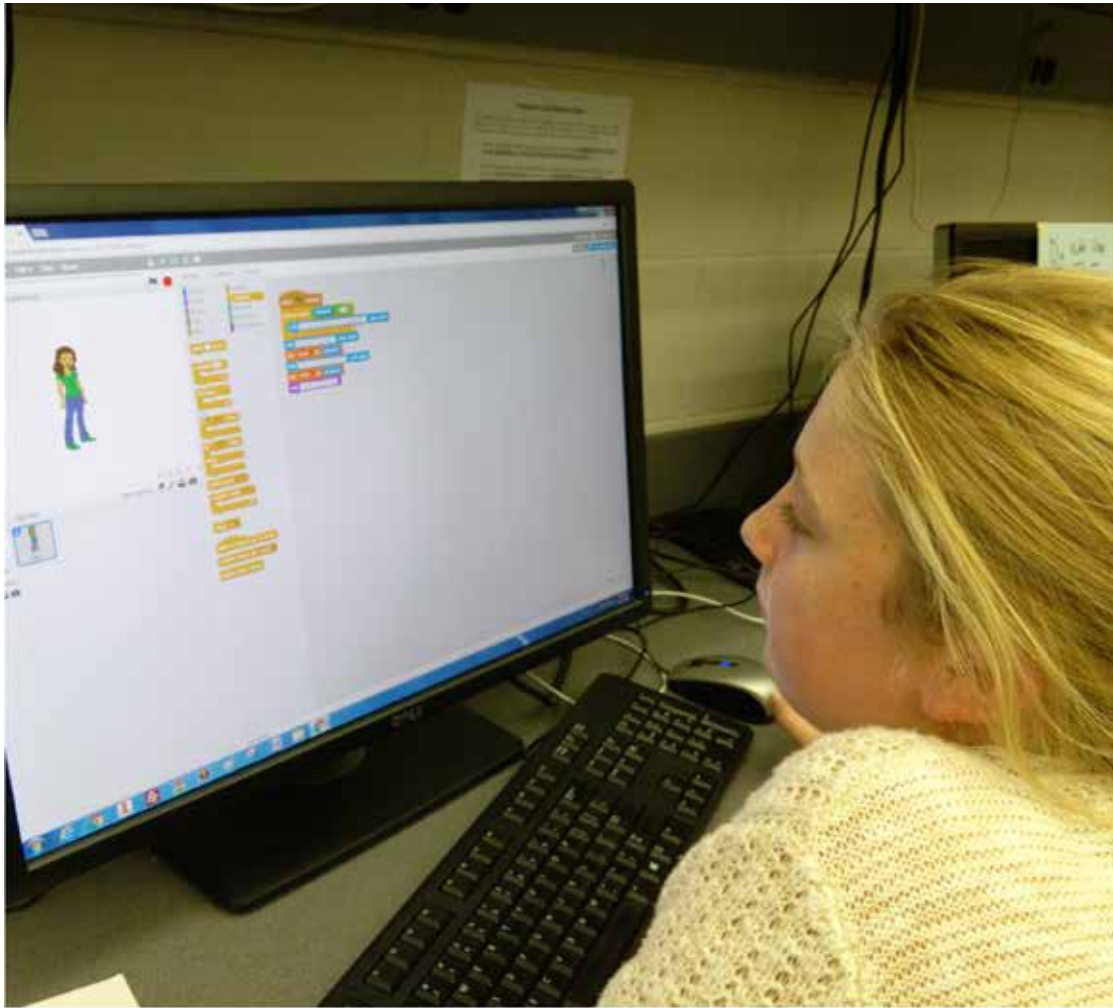
Thanks for being so much fun!
Mr. Roche and Mr. Hanas



Our "veteran" coders start off with a review of the Scratch programming language



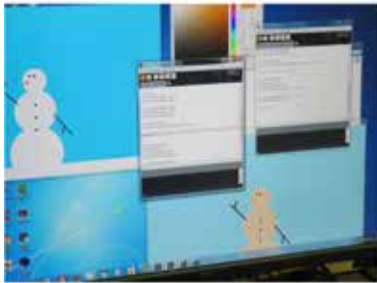
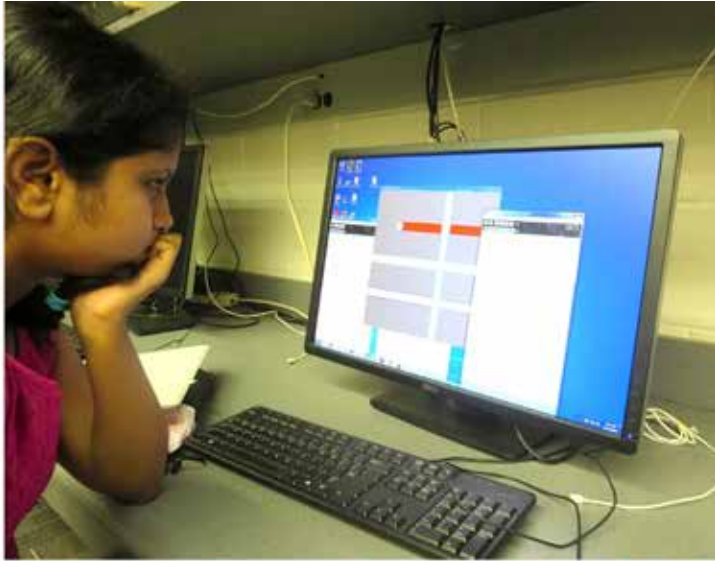
One of our many "perfect attendance" evenings

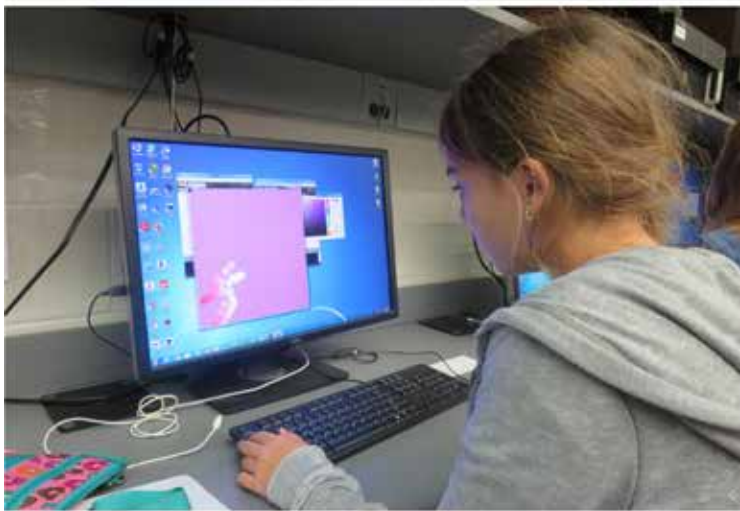


Lily lost in deep thought :-)



Elizabeth and Alice (top) working on the nuances of Processing for generating artistic "sketches"





Miyako was quick to master variables and how they could be manipulated in artwork



Arduinos begin to "make connections" between software and hardware







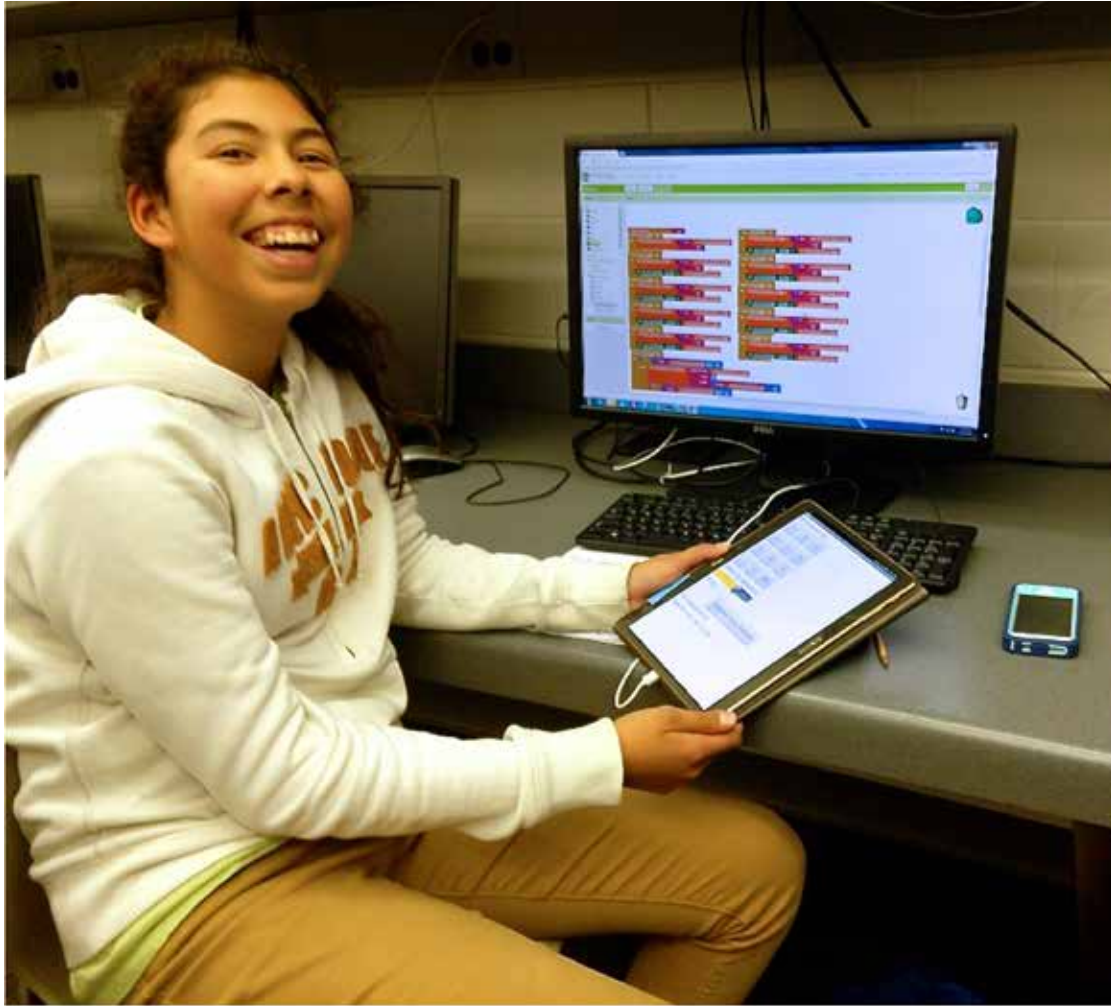
Modeling a heartbeat with LED's and code



Ore demonstrates advanced mastery of MIT App Inventor



We've seen Hannah in this pose many times at Stars :-)



"Cookie" earned a new nickname building her first Android tablet app :-)



TA's Darren and Emily: always there when you need them ...



... and if not, Erin magically appears!



Regina and Lily "processing" their final project ideas



