Don’t Just Use Technology!
Learn To Change It!
How did I get here in 5 easy steps?

- Step 1: AP CS teacher leaves
- Step 2: Hire CS Graduate to teach
- Step 3: CS Graduate receives more lucrative offer to program (DUHH!!)
- Step 4: Anyone MATH willing to teach AP CS?
- Step 5: ME – “OK??”
Building the Plane While Flying
AP COMPUTER SCIENCE YR 1

• Serious
• Covered all content through Lecture then practice
• Business Like Classroom
• All assignments independent
• Not Mastery Learning
Successes: ALL learned SOMETHING, 75% of the students completed course, recruited a girl, class scheduled
Challenges: TOO MANY!
Tapestry 2012

• RECRUITING
• CSTA, NCWIT, CS4HS
• OTHER CS TEACHERS
• FUN!!! (food)
Year 2 : Not Quite a 747!
Bring on the FUN!

• Paired Programming but with a twist

• Students working together almost every day

• Logic Groups (YOU ALL KNOW THIS)

• Students guiding assignments and activities
Selena is going to be a freshman at MIT, and she has been interested in science and technology since middle school. Selena is very interested in computer science and technology, and is proficient in Java, C++, and RobotC, as well as HTML, Perl, and PHP. She has participated in the cyber security program Cyber Foundations, winning 3rd place in the state of Virginia and 7th in the nation, allowing her to move on to the Virginia Governor’s Cup competition last March. At the 2013 Virginia Piedmont Regional Science Fair, she won the first place in Computer Science category, the Intel Excellence in Computer Science Award, and the Outstanding Exhibit in Computer Science Award. She also likes to apply her knowledge of computer science to solve problems in math and physics, and is currently doing research on some computer science problems. Selena is a recipient of this year's NCWIT AspireIT Middle School Outreach Program grant. This grant is for her new program GREAT (Girls Excited About Technology) that will introduce middle school girls to technology through a curriculum including AppInventor and robotics. She plans on majoring in computer science in college, and hopes to one day create a new technology that will significantly impact the world. She plays flute and piano, and enjoys dancing, swimming, and reading in her free time.
Cherry was involved in Math Counts, Robotics, and Destination Imagination. She excelled as a programmer on her Robotics team. She is also very familiar in Excel and coding languages such as HTML and C#. Her goals in the future include spreading the interest of technology to younger females so there will be more girls in the computing and technology field. Her future plans are to continue studying technology and expanding her knowledge. She hopes to attend college at the University of Virginia or the College of William and Mary. She would like to continue doing as many technology related projects as possible in college, especially those which involve getting more females involved. On her free time, Cherry likes to take pictures of nature, play piano and saxophone, and hang out with friends!
Ayoade is part of her school's Math, Engineering and Science Academy (MESA), and founder of MESA Bridge Camp, summer camp for middle school girls aiming to give them an opportunity to see how STEM is applied in real life and to give them an idea about what careers in STEM are all about. To do this, Ayoade brought together other high school students to be mentors for the campers and to teach them math and physics concepts through labs, demonstrations, and building projects. Then, the girls used their new knowledge to design and build a pedestrian bridge over a stream crossing on a local trail. The camp had its inaugural session in the summer of 2015, and in planning and improving MESA Bridge Camp's 2016 session, Ayoade hopes that the camp can be a long-term contribution to her community and an opportunity that encourages girls to pursue their interests. Ayoade’s other achievements include selection for a mentorship program at Northrop Grumman, and completing the Virginia Space Coast Scholars program and Summer Academy at Wallops Island Flight Facility. Currently she is a taking part in the Virginia Aerospace and Technology Scholars program (VASTS). Ayoade also enjoys being a musician and play piano, cello, and saxophone, and is working her first job as a beginning cello teacher.
Hannah is currently a senior at Albemarle High School in the Math, Engineering and Science Academy (MESA). She loves listening to funky fresh tunes in her party prius, and playing cello with her cello trio Under Tempo. Hannah is also the captain of her FIRST robotics team 619. This past summer Hannah interned at the app startup Capsure, which is launching in early April. After high school, she plans on going to a four-year institution and majoring in business and computer science, and later starting her own company, or becoming an astronaut.
Girls day at UVa!

1 National Honorable Mention
1 State Winner
4 State Honorable Mention
3 Certificate of Distinction
AP Computer Science A
Course #3291
PreReq: Algebra II & Interest In Programming
AP Computer Science Principles

Course #3293

CoReq: Algebra II & Interest In Programming
Computer Science Club
CoReq: Interest In Programming
Computer Science Honor Society

CoReq: Interest In Programming
Computer Science Honor Society
Cyber Patriot IX
GOLD TIER STATE ROUND
National Youth Cyber Defense Competition
GUI Contests!
Get ‘er done!
OzoBots
Ducky Days!
Recruiting Techniques Spelled Out!

- Flyer
- Having the students recruit
- Morning announcements
- Class experiences..
- Class mascot (rubber ducky)
- Computer Club
- Computer Science Honor Society!!!
Recruiting #s

2011 – 2012
  – 1 Section AP CS
  – 20 MALES
2012 – 2013
  – 1 Section AP CS
  – 10 males AND 5 females!!!!
  – 1 HISPANIC STUDENT
2013 – 2014
  – 2 Sections AP CS!!!!
  – 30+ Students, at least 8 female!
Recruiting #s

2014 – 2015
- 2 Section AP CS
- 30 males AND 10 FEMALES!!!

2015 – 2016
- 2 Section AP CS
- 22 males AND 20 FEMALES!!!!
- 3 HISPANIC STUDENTS
- 3 BLACK STUDENTS
Recruiting #s

2016 – 2017
– 3 Sections AP CSA!!!!
– 2 Sections AP CSP!!!!
– 37 FEMALES!!!!
– 6 HISPANIC STUDENTS
– 8 BLACK STUDENTS

2017 – 2018
– 2 Section AP CS
– 2 Sections AP CSP
– CSHS Pres and VP both FEMALE
Now What?

Pick one thing from this week pledge to yourself to do it. (write it down!)

What if?
I don’t think I can....
How do I....

Go to the resources page of the Tapestry website
Join the Tapestry Facebook Group
Reach out to anyone here and we would be more than happy to help
Still Building, but it's getting easier!

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