

## Why are we focusing on Computer Science at L L Beazley?

The 2016 Virginia General Assembly approved legislation requiring that the Standard of Learning include computer science and computational thinking, including computer coding. As a result, the <u>Computer Science Standards of Learning</u> were developed in 2017. The K - 8 standards were designed to be integrated into instruction in multiple subject areas including mathematics, science, history, English, and fine arts.

The core practices of computer science, including collaboration, communication, and fostering an inclusive culture, describe the behaviors and ways of thinking that computationally literate students use to fully engage in today's data-rich and interconnected world. Collaborative computing is the process of performing a computational task by working in pairs and on teams, including working with individuals with diverse perspectives, skills, and personalities. Students will need to solicit and incorporate the feedback of others, which can lead to better outcomes than working independently. Students should use collaborative tools to effectively work together and to create complex artifacts.

#### - Excerpt from the VDOE 2017 Computer Science Standards of Learning Preface

And equity... **Equity** is the big piece! VA ranked 4<sup>th</sup> largest employment opportunities in the CS field and thousands of CS jobs go unfilled because there are not enough people to fill them! No, not everyone will graduate and pursue a career in software development or cybersecurity; but we want our PGCS graduates to have the basic knowledge that will allow them to productively participate in the world and make well informed decisions about their lives.

## Problem Based Learning (PBL) & Problem Based Assessments (PBA)

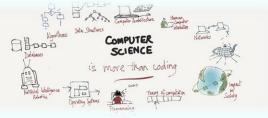
- There is NOT a new SOL test to assess the CS Standards. The CS Standards will be assessed through local PBAs.
- Beazley Night to Shine!? 😇

#### How will we integrate the Computer Science Standards into Core Content Area at Beazley?

- Monthly Tech Thursdays (formally known as Tech Tuesday)
  - o <u>Unpack the CS Standards</u>
  - Align CS Standards with Core Content Areas (English, Math, Science & History)
  - Align what we're currently doing in the classroom with the CS Standards & create new lessons
  - Share resources

# Vocabulary Immersion & CS Experiences

- Post <u>CS Vocabulary Word Walls</u> in Classrooms & around Beazley
- Use CS Vocabulary in place of traditional vocabulary:
  - Today's Algorithm vs. Today's Schedule
  - **Debug** your writing or math problem vs. fix...
- Plan at least one CS activity per month (with or without ITRT... plugged or unplugged)
- Art & Music will plan & coteach CS integrated units during resource class
- Use me (ITRT) as a resource:
  - Co-Teach
  - o Ozobot Lessons
  - CS First & Coding with Scratch
  - o Unplugged Activities (More Unplugged)







**PLC Schedule** 

2019 – 2020 <mark>Mark your calendar!</mark>



Where: Guidance II – During your Planning Block

1st 9 Weeks	2 <sup>nd</sup> 9 Weeks	3 <sup>rd</sup> 9 Weeks	4 <sup>th</sup> 9 Weeks
September 19 <sup>th</sup> October 10 <sup>th</sup>	November 21 <sup>st</sup> December 19 <sup>th</sup>	January 16 <sup>th</sup> March 19 <sup>th</sup>	April 23 <sup>rd</sup> June 11 <sup>th</sup> (?)
Strands:	Strands:	Strands:	Strands:
Algorithms & Programming* Cybersecurity	Algorithms & Programming* Computing Systems Data Analysis	Algorithms & Programming* Networking & the Internet Impacts of Computing	Algorithms & Programming* Reflection & Planning Ahead
Related Documents & PLC Resources			
Beazley PLCResources		<u>VDOE K – 12<sup>th</sup> CS Standards</u>	
<u>CS Standards Scope &amp; Sequence PDF</u>		VDOE CS Standards Curriculum Framework	
Unpacking the K5 CS Standards PDF		Blocky Coding Platforms	
K Content Alignment PDF	<u>3<sup>rd</sup> Gr Content Alignment PDF</u>	Code.org	<u>CS First</u>
1 <sup>st</sup> Gr Content Alignment PDF	4 <sup>th</sup> Gr Content Alignment PDF	<u>Scratch</u>	<u>Code Spark</u>
2 <sup>nd</sup> Gr Content Alignment PDF	5 <sup>th</sup> Gr Content Alignment PDF	<u>Code.org Glossary</u>	Creative Coding BrainPop