ARCS NEWS

**Advancing Rural Computer Science**

Announcements

Greetings and welcome to our first official newsletter of the 2022-2023 school year! We had a very successful summer of professional learning through the Code VA K-5 Coaches Academy and, for second year participants, the CS Integration Microcredentials. We thank you for your participation!

The ARCS **team** sends our best wishes to you all as you start the new school year. We recognize that for many, the teaching context looks very different from this time last year. Our aim is to provide you with regular **ARCS** updates and resources that will help you integrate K-5 Computer Science (CS) SOLs into your instruction. This is in addition to the "**Learning Bytes**" professional learning opportunities provided to you through Code VA. Register here for "**Learning Bytes**".

This month's theme is **cyber security,** which is defined in the helpful Glossary section of the CS SOL **Curriculum Framework** as **the study and practice of protecting computers and programs from unwanted access and theft of data**.

We hope you have a safe and successful month! Please don't hesitate to reach out to **TCEP@odu.edu** if you have any questions.

Concept Corner
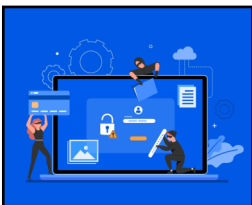
The increased use of computers in all aspects of daily life from online shopping to virtual learning means that online safety awareness is more important than ever. Practicing online safety will help keep your personal information out of the hands of unauthorized and malicious users. Here are some ways your personal information can be put at risk and how to mitigate the risk.

Phishing: Phishing predominantly happens over e-mail. In a not-so-subtle phishing attempt, you might receive an email requesting personal information because you have won a gift. In more subtle attempts, the email would appear to be sent from a legitimate sender or even someone you know, and a link is usually included. By clicking on the link you end up making yourself vulnerable. To avoid falling prey to phishing, verify the sender's email address and do not click on shortened links. Even if you need to submit personal information to a verified sender, log on to the sender's portal outside of the email shortcuts to prevent any vulnerability to identity theft.

Weak passwords: Hackers can easily break into accounts with weak passwords, which is why having a strong password to protect your information is vital. Avoid using common English words, phrases, and common names. Preferably use a combination of upper and lower-case letters, numbers and special characters.

Unsecured Sites: Know the difference between secure (HTTPS) and non-secure (HTTP) sites. The non-secure sites do not protect the users' information. Any information or details input into a non-secure site make the user vulnerable to identity theft.

Pedagogy Pointers

Click **here** to watch an introductory video to Google's Be Internet Awesome initiative.

Upper Elementary: **INTERLAND** from Google is a free, interactive game that is appropriate for upper elementary students (designed for grades 2-6). It helps players learn about smart, sensible, safe behaviors in online settings. The game includes a companion curriculum book in both **English** and **Spanish** for teachers to access and make use of when using INTERLAND as a lesson or classroom activity. Aligns with CS K.10, 1.9 & 1.10, 2.9 & 2.10, 3.10 & 3.11, 4.10 & 4.11, 5.9 & 5.10

Computer Science in the Commonwealth

Teacher Resources: Did you know that **#GoOpenVA** is active and has an extensive searchable library of resources for teachers? It was designed for teachers to create, share, and use digital resources with the goal of equitable access to learning materials. We found several lower and upper primary level resources for Computer Science. These free, digital materials can be used or modified to adjust to student needs. They are openly licensed and unhampered by many traditional copyright limitations. The database is easy to search by keyword, standard, and grade band.

Engaging All Learners

A new school year brings both excitement and challenges as we get to know new students and discover how embracing our differences can support teaching and learning. Now more than ever, it is important to support diversity in the classroom through strategies that will broaden participation in science, technology, engineering, and mathematics – including computer science – particularly among underrepresented students in STEM. Throughout the year, we will be sharing information, resources, and strategies designed to engage all learners in computer science teaching and learning. This month, we provide an explanation of a theory developed by Dr. Geneva Gay, Professor of Education at the University of Washington-Seattle. Click **here** to learn more about the theory that the ARCS project will employ and to read more about Dr. Gay's philosophy.

Interested in language and culture specific to classrooms in Virginia? The VDOE has developed a series of videos to help educators understand the persistent academic challenges faced by some members of diverse populations in the Commonwealth (view them **here**).

Old Dominion University

The Center for Educational Partnerships

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