ARCS NEWS

Advancing Rural Computer Science

Brought to you by The Center for Educational Partnerships at Old Dominion University

Announcements

Greetings!

As the leaves change color and the air turns crisp, the excitement of fall is upon us. We hope you had a Halloween filled with creative costumes, delicious treats, and plenty of fun with friends and family.

Heading into November, we find ourselves in a season of reflection and gratitude, marked by celebrations like Thanksgiving, Veterans Day, and World Kindness Day. This month's newsletter delves into the world of **cybersecurity**, emphasizing the importance of safeguarding our digital lives. In the spirit of giving thanks, we express our appreciation for the cybersecurity experts who work tirelessly to protect our digital frontiers. We honor those who have served, recognizing that their dedication also extends into the realm of national cybersecurity. World Kindness Day also reminds us that fostering a culture of respect and safety online is a shared responsibility. Join us as we explore how these themes influence and inspire the ever-evolving field of cybersecurity.
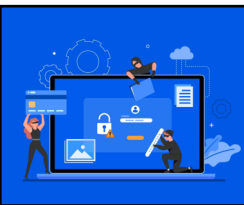
We hope you have a safe and successful month! Please don't hesitate to reach out to **TCEP@odu.edu** if you have any questions.

Sincerely,

The ARCS Team

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.
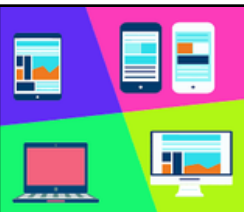
Pedagogy Pointers

Common Sense Education's Digital Citizenship Curriculum provides **cybersecurity lessons** for Grades K–8 to help students learn foundational skills for protecting themselves online. In today's digital landscape, cybersecurity has become an indispensable skill set for students. As they navigate the online world, it's crucial for them to learn how to protect themselves, their peers, and their school from digital threats. This collection of lessons introduces students to fundamental cybersecurity concepts, empowering them to safeguard against dangers such as phishing and unsafe websites and preparing them for the challenges they may face in our increasingly interconnected world.

INTERLAND is a free, interactive, web-based game that is part of Google's Be Internet Awesome program. Designed for elementary students in 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. Click **here** to watch an introductory video to Google's Be Internet Awesome initiative. 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

While the definition of computer science is not complex, the multitude of uses and applications of computer science is as diverse as any other aspect of our culture and society, which reminds us that computer science instruction should be designed to involve and engage all learners in a safe space that promotes safe practices. In fact, integrative computer science activities across the curriculum that incorporate student voice and introduce new concepts using familiar vocabulary are among the techniques that can promote computer science teaching and shared learning. **Check out** this brief (4 minute) video from the 2019 International Society for Technology in Education (ISTE) annual conference for ideas and examples on creating a culturally diverse learning space to promote computer science for all.

Old Dominion University

The Center for Educational Partnerships

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