FLORIDA
CYBERHub

CYBER FLORIDA
at the UNIVERSITY OF SOUTH FLORIDA

Unit One: Introduction to Cybersecurity Careers and Hacking

Lesson Two: Cybersecurity & the Jobs of Tomorrow

Overview

In this lesson, students dig deeper into the skills necessary to be successful in the cybersecurity careers of the future. Students discuss the impacts of artificial intelligence and how technology has and will continue to change the way we work and live.

Topic or Unit of Study: Cybersecurity Careers   **Time Allotment**: 50-55 minutes

Objectives

By the end of this lesson, students will be able to:

· Explore a variety of careers to which computing is central.
· Discuss how artificial intelligence is being used in a variety of major applications (i.e. medical, space, and automotive fields).
· Highlight some of the skills necessary to be successful in a career in cybersecurity.

Materials and Resources

· Internet access
· Web 2.0 tools (video, blog, webpage, online poster, etc.).

Recommended online resources:
· Video Clip: This is How AI is Changing the Way you Apply for a Job

Implementation

Warm-Up

Begin the day by asking students to reflect on the question: Consider all of the ways technology impacts our lives today (medicine, cars, schools, etc.). How do you think technology (especially AI) will change the way we live and work by 2050?

Allow students several minutes to record their answer. Once students have recorded their answer, show the clip <u>This is How AI is Changing the Way you Apply for a Job</u>. Allow students an additional 1-2 minutes to record any additional thoughts.

Ask students to share their reactions and thoughts as well as the answers they recorded. Ask how students feel AI will change the field of cybersecurity as well. Ask what types of skills they feel will be important to have to prepare for a career as a cybersecurity professional. TIP: If students completed Lesson 1 of this unit, refer students back to the skills and pathways recorded on their posters. Students can also be directed to Cyberseek: Cybersecurity Career Pathways at <u>https://www.cyberseek.org/pathway.html</u>.

Jobs of Tomorrow PSA

Sort students into groups of 3-5 participants. Introduce the activity and explain that teams are tasked with creating a media campaign (poster, infographic, tv ad, etc.) discussing the future of cybersecurity jobs and the skills young learners should focus on today.
This is an open activity and students are welcome to show their creativity when creating their PSA. Ideally, each PSA would highlight one or more field of Cybersecurity and encourage younger students to gain skills or get involved. Suggest students select from a variety of digital tools to create and share the PSA. Students should work in their groups to research and create their PSA. PSA should include:
- Skills for future cybersecurity career professionals.
- A slogan or hook for the PSA.
- A citation for any sources used.

Once completed, should share their resource by posting a link for other groups to view. Encourage creativity and allow students to share their information using visuals as well as text. Once groups have completed their PSA, ask one student from each group to share. Assess groups based on participation and/or PSA creation.

Closing
Ask students to look back at their warm-up reflection. Ask students to answer the question:
How has this activity made you think differently about your future career? What skills do you think will be important?

References

- Cyberseek (n.d.). Cybersecurity Career Pathways. Retrieved from https://www.cyberseek.org/pathway.html

- CNBC (2018, March 13). This is how AI is changing the way you apply for jobs [Video file]. Retrieved from https://www.cnbc.com/video/2018/03/13/this-is-how-ai-is-changing- the-way-you-apply-for-jobs.html