Online Security and Privacy

Debate the pros and cons of life online with an activity that challenges students to assess digital security risks.

Objective

Students will evaluate the benefits and risks of activities they do online, brainstorm a design for an app that protects kids' security, and revise their design based on peer feedback.

Standards

ISTE

2d. Students manage their personal data to maintain digital privacy and security and are aware of data-collection technology used to track their navigation online.

4. Students use a variety of technologies within a design process to identify and solve problems by creating new, useful, or imaginative solutions.

Time

PART A: 90 minutes
PART B: 60 minutes

Materials

- Assess Online Risks activity sheet
- Digital student magazine

To download materials, visit:
scholastic.com/tech4innovation

Part A

1 Build anticipation by reading each statement aloud; have students raise their hands if it applies to them.

- I play games online.
- I use a tablet or smartphone.
- I text with friends online.
- I store digital files like photos, documents, and music in the cloud.

2 Facilitate a class discussion by asking students for other examples of activities they like to do online. Have them pair up and brainstorm the benefits of online access. If they need help, offer prompts such as access to information, entertainment, convenience, sharing ideas, etc. Collect answers on the board.

3 Point out that while there are lots of benefits to online access, there are also trade-offs with privacy and security (e.g., your personal information can be stolen, you can download malicious viruses by mistake, people you don't know can try to friend you on social media, etc). Distribute the Assess Online Risks activity sheet and have students complete it. Review answers as a class.

4 Next, ask students to work in small groups to design the concept for an app that would protect young people's safety and security online.

5 Work as a class to define success criteria for the app concept. (Example: protects against a wide variety of risks; provides user feedback about safe and unsafe practices; is engaging, fun, and easy to use for 10- to 14-year-olds; etc.).

6 Have students create concept art and a brief description of their app to share with a partner-group. Have partner-groups play the role of "friendly hacker" and look for weaknesses in the app that can be improved upon. Ask groups to incorporate the "friendly hacker" feedback into a second iteration of their app concept.

Part B

1 Explain that cybersecurity is a field in which people use technology to solve online privacy problems. Have students read about cybersecurity careers in the digital student magazine.

2 In small groups or as a class, have students discuss which cybersecurity and technology careers interest them and why.