

Aii Virtual Classroom: Teacher's Guide

Grades 9-12

We are excited that you are interested in Aii's lesson plans! Each plan is classroom-ready and calibrated to help propel you, fellow teachers, and your students to learn and engage with innovation and infrastructure in the world around them.



Cybersecurity

Your students are preparing to enter the world and make a difference. First, they'll need some facts and information to understand how we got here and what challenge and solutions are already out there.

Time: 45 to 60 minutes

Materials: Computer or internet access

Learning Objective:

1. Students can define cybersecurity in detail
2. Students can determine the importance of cybersecurity
3. Students can identify how to secure their information
4. Students give an example of how to avoid a security breach

Introduction:

In the age of social media, younger generations should know the importance of cybersecurity. This lesson will challenge your students' knowledge and increase their awareness of the cyber world.

Begin the Lesson:

Begin your lesson by asking students to write down every social media platform they have an account with. These can range from their personal emails to any app on their phone. Have students discuss how these platforms differ from each other and whether or not they keep their social media set on private. Have students write down at least three platforms that they are aware of even if they aren't connected with them personally. Have each student circle the one they use the most or know of the most, and have students break up into groups based on the one that they have circled.



Keyword Search:

Have each group look up the definition of cybersecurity and have them define it in their own words. Once they have done this, have the groups locate an article pertaining to a cybersecurity breach with their chosen platform. Have students summarize what occurred and note whether or not the hacker was caught or identified.

**Problem Solving:**

Have each group propose solutions for victims of a cybersecurity breach using their article as a basis. How could somebody avoid a cybersecurity breach altogether? What best practice(s) should we exercise in order to protect private information? Once each group has finished, bring everybody back for a full classroom discussion.

Presentation:

Allow each group to explain their definition of cybersecurity to the class. Then, have each group summarize what they found and what measures they believe should be taken to protect one's privacy.

Conclusion:

Which social media platform was the easiest for a hacker to breach? Which one was the most secure? Remind each student to be careful with what they put online and the information they keep.