



Technical Skill Focus – Stronger Passwords

SuperCyberKids Lesson Plan

Lesson 1 Introduction

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Author(s)	Giorgia Bassi, IIT-CNR Ilaria Matteucci, IIT-CNR
With contributions by:	<author, section(s)>

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1 Target info

Main tool: Video game "Nabbovaldo and the blackmail from cyberspace" and standard group games.

Learning Context:

- Ages 10-13
- 20-25 students
- 1 hour
- Location: classroom with projector or screen visible to all students
- Resources:
 - Internet-connected computer for instructor
 - NABBOVALDO game with lesson materials
 - Whiteboard
 - Paper and writing instruments for students

Objectives:

- The game introduces children to strategies for protecting against cyber attackers.
- The game introduces children to detecting and implementing actions against basic cyber-attacks.
- The game introduces children to understanding basic cyber threats.
- The game introduces children to basic prevention technologies.
- The game introduces children to using software tools to protect digital devices.
- The game introduces children to strategies to protect their personal information while surfing the web.

2 Lesson 1 - Introduction

Activity	Time	Details	Learning Goal	Extras
Intro	5 min	Announce to the class that the topic of discussion for the day will be cybersecurity. Activity: Teacher draws a basic network map on the board Explanation: Teacher explains how computers communicate with servers and the role of IP addresses in identifying devices. Teacher then asks, "But how does the server or your computer know that it is <i>you</i> ?" Teacher Questioning: Elicit responses from Students about how computers use passwords to identify users.	Introduce topic	
Real-life examples	5 min	Discussion: Teacher asks Students for examples of programs or websites they use that require passwords (e.g., Steam, Minecraft, Instagram, Roblox, email, etc.) Elicit responses from Students.	Begin to personalize topic	
Think-pair-share activity	7 min	Question: what could happen if someone got your password? Student work: in pairs, Students brainstorm 10 negative outcomes of having their password stolen. Sharing: after pairs discuss, each group shares one idea with the		

		class. Teacher writes ideas on board.		
Discussion	5 min	<p>How Passwords are stolen</p> <p>Teacher-led discussion: Teacher leads a conversation about how someone else could get their Passwords (e.g., PW sharing, PW guessing, hacking, phishing, etc.)</p> <p>Board work: Teacher writes the main points on the board:</p> <ul style="list-style-type: none"> - Sharing - Guessing - Other methods (optional) 		
Game	15 min	<p>Password Hangman game:</p> <p>Play a "Password Hangman" game. Start with a simple three-letter word.</p> <p>After the first round, elicit ideas about how to make the game more difficult (e.g., adding numbers, increasing number of letters, etc.)</p> <p>Play Hangman again after each suggestion to demonstrate how the password becomes stronger.</p> <p>After each round, emphasize the importance of making passwords harder to guess.</p>		
Wrap-up and HW assignment	3 min	<p>Teacher explains that, just like hangman, there are computer programs designed to guess passwords.</p> <p>Homework assignment: Students will create a set of rules for making strong passwords, based on what they learned in class.</p>		
Review and final thoughts	5 min	<p>Recap</p> <ul style="list-style-type: none"> - Why are Passwords important? - How to protect Passwords - How to create strong Passwords <p>Questions: Allow Students to ask any final questions before class ends.</p>		