Lesson plan

CODING GIRL
GIRLS JUST WANT TO HAVE FUN CODING

Topic	Digital security
Block name	How to protect yourself online and inform others using visual design

Age category 12–15	**Duration** 135 minutes	**Number of teaching hours** 3

Student-centered educational goals (content and performance standards)

Content standard:

- understands the importance of digital security and privacy
- can distinguish between trustworthy and dangerous online situations
- can describe the principles of safe behavior on the Internet (strong passwords, privacy, digital footprint)
- recognizes disinformation, phishing and risks of online communication
- can find relevant sources of information about cybersecurity

Performance standard:

- can clearly and creatively visualize the rules of safe behavior on the Internet
- uses graphic design elements (colors, icons, font, hierarchy) for effective communication
- presents their work, defends their design choice and explains the main idea

- can provide constructive feedback to peers

Integration of subjects:

- Informatics
- Civics
- Art education
- Ethical education / Language

21st century skills:

- Critical thinking
- Creativity
- Digital literacy
- Communications
- Cooperation

Teaching aids and teaching techniques:

- Canva – an online tool for creating infographics, posters, and visual campaigns
- Computers or tablets – for group work (1 device per 2–3 students)
- Data projector / interactive whiteboard – video presentation, demonstration of design templates, joint reflection
- Internet connection – to access Canva and verify information from trusted sources
- School email / Canva for Education account – for saving and sharing outputs

References / Resources (videos, methodologies):

- Safe Web Surfing: Top Tips for Kids and Teens Online
- O2 Smart School: How to behave safely on social networks
- Data Lhota: Security in the digital world - ČT edu - Czech Television
- E-safety project

__Motivational phase (10-15 minutes):__

Objective: To generate interest in the topic of digital security, connect it to students' personal experiences, and show that online identity protection can be communicated in a creative way.

Progress:

1. Opening activity – "My digital day" (5 min)
   o The teacher invites students to briefly reflect on how many times a day they use their mobile phone, computer or social media.
   o Together, they will try to estimate how much time they spend online and in which situations they are most vulnerable (e.g. sharing photos, logging into apps, using public Wi-Fi).
1. Video + discussion (5 min)
   o The teacher plays a short video (e.g. "How to protect your data online" – Safer Internet / E-safety, 2–3 min).
   o After watching, lead a guided discussion: "What came to mind after watching this video?" "Why is it important to talk about digital security?" "What surprised you the most personally?"
1. Main task assignment (3–5 min)
   o The teacher explains that the students will become creators of a safe internet campaign that will serve as educational material for other students in the school.
   o He will show some examples of infographics and explain that they will be working in Canva to create professional-looking visuals.

Exposure phase ():

Objective: Students actively explore and process the topic of digital security. They learn to combine critical thinking with graphic design, choose a project focus, and begin creating visual output in Canva.

Progress:

1. Team organization (5 min)
   o Students are divided into teams of 3-4 members. Each team chooses a sub-topic:
     ▪ Secure password
     ▪ Phishing and fake news
     ▪ Privacy Policy
     ▪ Cyberbullying
     ▪ Online ethics and respect
1. Researching the topic (10–15 min)

- o Each team searches for current information on the Internet (CZ.NIC, E-safety, Police of the Czech Republic, Safer Internet).
- o The teacher emphasizes how to recognize trusted sources (https, author, date).
- o Students will select 3–5 key pieces of information to communicate in their proposal.

1. Infographic structure design (10 min)
   - o Create a content layout (title, main message, icons, texts) on paper or in Canva using a template.
   - o The teacher will explain the principles of visual communication: legibility, contrast, balance, visual hierarchy.
1. Working in Canva (25–30 min)
   - o Students create a design in Canva, using graphic elements, icons, illustrations, and colors according to the theme.
   - o The teacher goes around the groups, helping with technique, advising on aesthetics, and formulating ongoing questions: "What is the main goal of your campaign?" "How do you want the reader to feel when they see this?"

Output: A developed visual campaign design (poster / infographic) ready for finalization.

Fixation phase (40-45 minutes):

Objective: Students will complete their creations, present them to their classmates, and reflect on how their message can influence the behavior of other Internet users.

Progress:

1. Finalize the design (15–20 min)
   - o Teams will add visual and textual elements, adjust colors and fonts for better readability.
   - o The teacher will remind you of the safety principles when using images (copyright, sources).
1. Project presentation (15 min)
   - o Each team will present their poster/infographic (2–3 min).
   - o Other students evaluate according to the rubric: Content (truthfulness) – Form (graphics, clarity) – Creativity – Impact of the message.
1. Reflection and discussion (10 min)
   - o The teacher invites students to reflect: "What have you learned about online safety?" "What behavior would you like to change after today's lesson?" "How can design be a tool for positive influence?"
   - o Students can voluntarily publish their suggestions on the school website or bulletin board.

Student evaluation:

Teacher's rating:

- Short commentary on the infographic + verbal feedback during the presentation.

Peer evaluation:

- Each team receives 1-2 reflection cards from another team ("What we liked", "What we would improve").

Student self-assessment:

- Short questionnaire (paper / Google Form):
- What did I learn about security and technology today?
- What technologies-tools do I use or want to start using?
  - What did I do best while working at Canva?