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**ACTIVATING LESSON SCENARIO
developed as part of the project**

‘INNOVATIONS IN SCHOOL EDUCATION’

TOPIC

**Bots, Trolls and Fake Accounts – Who Are the Real Senders of
Information?**

(Identifying Inauthentic Profiles and Automated Activity Online)

1. Lesson Objectives

The student:

- Knows what internet bots, trolls and fake accounts are.
- Can recognise basic features of inauthentic profiles on social media.
- Understands why bots and fake accounts are created (commercial, political, propaganda, manipulative purposes).
- Can list simple methods for checking the credibility of an account/sender of information.
- Develops critical thinking, the ability to analyse sources, and safe internet usage skills.

2. Target Group

Primary school students

3. Teaching Methods

- Brainstorming
- Mini-lecture with examples (showing screenshots – fake profiles, bot activity)
- Group exercise – profile/sender analysis
- Guided discussion
- Individual reflection



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4. Teaching Aids / Sources

- Computer, projector or interactive whiteboard
- Screenshots of fictional profiles (prepared for the lesson)
- Worksheets with questions for account analysis (profile photo, post content, activity, links)
- Fact-checking websites and online activity analysis tools:
 - Poland: <https://demagog.org.pl>
 - Czech Republic: <https://manipulatori.cz>, <https://demagog.cz>
 - Slovakia: <https://demagog.sk>
 - Ukraine: <https://www.stopfake.org/en/news/>
 - EU: <https://edmo.eu>, <https://euvsdisinfo.eu>
 - Example bot analysis tool: <https://botometer.osome.iu.edu/>

5. Lesson Procedure (45 min)

1. Introduction – Is every sender of information genuine? (5–7 min)

1. Brainstorming (2 min)

- The teacher asks students to answer the question:
"Who can publish news or posts on the internet?"
- Students give their associations, e.g.:
 - ordinary users,
 - journalists, media, bloggers, influencers,
 - companies, organisations, political parties,
 - bots (automatic programmes),
 - trolls or fake accounts created for a specific purpose.
 - The teacher writes the answers on the board, highlighting the variety of online content authors.

2. Guiding questions for discussion (2–3 min)

- Does every social media profile belong to a real person?
- Why would someone create fake accounts instead of posting under their real name?
- Can bots look and write like real users?
- How do we know if a message we see online was written by a real human being?
- Can we fully trust a sender just because their account looks “professional”?

(The teacher asks whether students have encountered suspicious accounts online, e.g. profiles with no photos, repeating the same comments.)

3. Teacher’s elaboration – extended factual information (3–4 min)

- Not all senders of information online are real people.



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- Alongside ordinary users, there are bots – computer programmes that post automatically.
- There are also fake accounts run by people or organisations pretending to be real users, whose goal is not conversation but manipulating audiences.
 - Purposes of creating bots and fake accounts:
- **Advertising and marketing** – bots post hundreds of comments encouraging purchases of products or services.
- **Propaganda and influencing public opinion** – artificially increasing post popularity, supporting political campaigns or discrediting opponents.
- **Disinformation** – spreading fake news, conspiracy theories, rumours to stir emotions and chaos.
- **Manipulating trends** – bots can make a message appear “popular” even if no real people support it.
 - Scale of the problem:
- It is estimated that in popular social media services, even 10–15% of active accounts may be inauthentic.
- Bots can write like humans, post in multiple languages and mimic human mistakes to be harder to detect.
 - Important:
- If we don’t know who the real sender of information is, we might believe something created solely to manipulate us.
- Fake senders can shift public opinion, influence elections, financial decisions, or the emotions of audiences.

2. Mini-lecture: Bots, Trolls and Fake Accounts (10–12 min)

1. Introduction – Why is it important to know who the sender of information is? (1–2 min)

- The teacher asks the students:
“Do we always know who is really behind a post on the internet? Is every comment written by a real person?”
- Explains that modern social media is full of accounts run by both people and automated systems, which look like ordinary users but have hidden aims – manipulative, advertising, political or propaganda.
- Understanding who bots, trolls and fake accounts are helps protect oneself from manipulation, scams and disinformation.

2. Internet bot (3 min)

- **Definition:** A computer programme that automatically performs actions online – posts, comments, likes or shares content. It can operate 24 hours a day, faster than a human, mass-



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replicating information.

- **Types of bots:**

- *Useful:* e.g. weather bots, bots providing currency rates, sports news.
- *Harmful:* sending spam, links to suspicious sites, fake news, creating apparent support for political ideas or conspiracy theories.
 - **Example of activity:** During election campaigns in various countries, bots have been used to spread thousands of identical posts to give the impression that “everyone” thinks the same way.
 - **Question to students:** “*Does the number of likes or comments always mean that the content is popular among real people?*”

3. Internet troll (3 min)

- **Definition:** A person (sometimes paid, sometimes acting on their own) whose goal is to provoke, insult, or create conflicts online.
- Trolls often pretend to be ordinary users, but their posts are aimed at triggering emotions: anger, fear, outrage.
- **Troll activity features:**

- Provocative questions and offensive comments.
- Mocking others, distorting their words.
- Using lies or half-truths to cause chaos.
- **Why trolls are a problem:**
 - They disrupt substantive discussions.
 - They may spread fake news or propaganda.
 - They pressure users, discouraging them from expressing their opinions.
- **Question to students:** “*Have you ever seen a comment online that seemed to have only one purpose – to provoke a quarrel?*”

4. Fake account (3–4 min)

- **Definition:** A profile created by a person or organisation that pretends to be a real user but is used to manipulate public opinion, advertise products, or commit fraud (e.g. phishing).
- **Typical warning signs:**

- No real photo (or a stock image, image taken from the internet).
- Strange username, e.g. a string of random numbers.
- Few friends/followers or only suspicious accounts.
- Mass posting of the same content to various groups or pages.



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- Sharing links to unknown or dubious sources.
 - **Example of activity:** Fake accounts may be created to artificially increase support for an idea (e.g. hundreds of comments praising a certain politician or criticising their opponent).

5. Why are bots, trolls and fake accounts created? (2–3 min)

- **Manipulating public opinion:** Especially during election campaigns – creating an illusion of “majority support.”
- **Propaganda:** Reinforcing conspiracy theories, spreading disinformation during social crises or information wars.
- **Advertising and marketing:** Posing as “ordinary customers” praising a product or criticising competition.
- **Sowing chaos and hostility:** Fueling conflicts between social groups, deepening divisions and emotions.
- **Fraud:** Phishing, links to fake websites that steal user information.

6. Summary – How to protect yourself? (1 min)

- Do not trust every message just because it is popular or frequently commented on.
- Check who the author of the content is – profile, activity history, sources.
- Use tools to analyse bots and fake accounts, e.g. Botometer.
- Remember that some online discussions may be artificially created, not stemming from genuine human opinions.

3. Group Exercise – “Real or Fake Sender?” (15–20 min)

Purpose of the exercise

- Teach students to analyse online profiles for credibility.
- Draw attention to signs of fake accounts, bots and trolls.
- Show that not every account online is what it claims to be – and how to check it in practice.

Exercise procedure – step by step



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1. Division into groups (1 min)

- The class is divided into 3–5 teams of 3–4 people.
- Each group receives a set of 3 fictional profiles (printouts, slides or prepared boards):

- **Profile A – authentic user:** normal photos, varied posts, interaction with others, natural language.
- **Profile B – bot:** repetitive comments, no photo or generic photo, posts at unnaturally high speed.
- **Profile C – fake troll:** offensive or provocative content, no real data, frequent links to suspicious sites.

Profile A – Authentic user

Name: Anna Kowalska

Profile photo: selfie in a park, smiling, natural light

Bio: “*Lover of travel, books and good coffee*

Recent posts:

1. Photo from a trip to Gdańsk – caption: “*Wonderful weekend by the sea* ” (25 likes, 6 comments from friends).
2. Shared article about new books at the city library – comment: “*I already know what I'm going to borrow!*”
3. Coffee shop photo, tagging a friend: “*Thanks for the meeting, Kasia!*”

Activity:

- Comments on friends’ birthdays (“Happy Birthday, Piotr!”).
- Replies to comments.
- Posts on average 2–3 times a week.
- Posts cover various topics – travel, hobbies, everyday life.

Profile B – Bot

Username: @info_news_fast

Profile photo: blue globe icon (stock image).

Bio: “*Latest news 24/7*”

Recent posts:

1. 5 posts within 2 minutes – each is the same article with a different headline.
2. Comments under random posts: “*Check here >> [link]*”, “*Amazing, see for yourself!*” – no relation to content.
3. Shares only from one website.

Activity:

- Posts at various times of day and night at unnatural speed.

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- No interaction with others – no replies to comments.
- No personal life photos, no stories.

Profile C – Fake troll

Username: @Truth_without_censorship

Profile photo: blurred face in a hoodie.

Bio: *“I tell it like it is. Not for the naive.”*

Recent posts:

1. Offensive comment under a celebrity photo: *“Your place is in prison!”*
2. Link to a suspicious site: *“Real facts the media won’t show you [link]”*.
3. Provocative post: *“Who still believes this propaganda? Wake up!”*

Activity:

- Frequent use of CAPS LOCK, angry emojis 😡 💩.
- Comments meant to provoke arguments.
- No real personal data or photos.
- Posts 1–2 times daily, but in many places at once.

2. Supporting tool – “Warning Signals Card” (5 min)

Each group receives a checklist with signals that may indicate an inauthentic profile:

Warning Signals Card – Is the account real?

No.	Warning signal	Tick (✓ / X)
1	No profile photo or a photo from the internet (stock, celebrity)	
2	Strange username (string of numbers, random characters)	
3	No information about the owner (bio, place of residence, account creation date)	
4	Very few friends/followers or only suspicious accounts	
5	Repeating the same comments in different places	
6	Posting at unnaturally short intervals, 24/7	
7	Links leading to unknown or unsafe sites	
8	Aggressive, provocative, or offensive language	
9	No interaction with other users (no replies, no reactions)	
10	Content focused on a single topic, lack of variety (e.g. only politics, one issue)	



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(Task: The group analyses each profile using this card and marks warning signals.)

3. Profile analysis (7–8 min)

- The group reviews the profile and marks in the table what seems credible and what is suspicious.
- They answer the questions:
 1. What warning signals are present in this profile?
 2. Does the profile appear authentic, a bot, or a fake troll?
 3. How can the credibility of this account be checked? (e.g. reverse image search, checking links, comparing comments).

Table to fill in:

Profile name	What looks credible?	What is suspicious?	How to check it?
Profile A			
Profile B			
Profile C			

4. Presentation of results (4–5 min)

- Each group presents its conclusions in 2–3 minutes.
- The teacher writes on the board the most common “red flags” for fake senders, creating a shared class list.

Final conclusions

- Not every sender online is who they claim to be.
- Fake accounts may look very realistic but reveal themselves through certain behaviour patterns.
- Before trusting or sharing information online, it is worth checking who the author is and whether the account appears authentic.

4. Discussion: How to recognise a fake sender online? (8–10 min)

Purpose of the discussion

- Develop critical thinking and content analysis skills for social media.



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- Raise awareness that fake profiles, bots and trolls can look very convincing, while their goal is manipulation, provocation, or spreading disinformation.
- Work out safe ways of responding to suspicious accounts and comments.

1. Questions for students (extended)

1. Is it easy to tell a real account from a fake one?

- What makes a profile seem credible at first glance?
- Does profile appearance always mean the sender is real?

2. What warning signals can indicate a fake sender?

- (Reference the list from the previous exercise: no photo, strange name, few friends, repeated posts, links to unknown sites, no interaction).
- Have you encountered such profiles online?

3. Why are bots and trolls effective at spreading fake news?

- Does the number of comments, likes and shares always mean something is true?
- How does the “crowd effect” work online – do we believe more easily when we see hundreds of similar posts?

4. How can we check an account’s credibility before trusting its content?

- Can you verify a profile photo (e.g. reverse image search)?
- Can you check how long the account has existed and its past activity?
- Why is it worth comparing information in other sources?

5. Should we respond to provocative comments online?

- Does debating with a troll make sense or just “feed” the conflict?
- How can we react without engaging in pointless arguments? (e.g. reporting, ignoring, blocking).

2. Additional probing questions

- Can a bot pretend to be a real person by posting photos and short comments?
- How to distinguish genuine human emotions from bot-programmed reactions?
- Have you seen situations where many profiles posted the same thing in a short time? How did that affect your perception of the information?



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3. Example situation for analysis (optional)

The teacher shows a short fragment of a fictional online discussion:

- 5 different accounts comment on an article in exactly the same way: “*It’s the politicians’ fault! They must be removed!*”
- Clicking on the profiles reveals: no photos, strange usernames, no earlier posts.

Questions for students:

- What might indicate these are fake senders?
- Can such comment repetition change how we see the topic?
- How can we check if real people are behind these accounts?

4. Teacher guidelines

- Encourage concrete examples from students’ experience (without revealing personal data or profile names).
- Ensure students understand that anonymity does not always mean a fake sender – the key is analysing behaviour, not just the lack of a name.
- Emphasise not to trust a post’s popularity blindly – bots and trolls can artificially create “trending topics.”

5. Summary of discussion (2 min)

- Not every sender online is who they claim – it may be a bot, troll or fake profile with a specific goal.

Most important rules:

1. Check the profile: photo, post history, repeated content, links.
2. Think critically – likes and comments do not equal truth.
3. Don’t feed trolls – avoid pointless conflicts, report suspicious accounts.
4. Verify information in multiple sources before believing or sharing it.

5. Summary and Reflection (7 min)

- Students finish the sentences:



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- *“Today I understood that not every sender of information...”*
- *“The easiest way to recognise a fake account is...”*
- *“Before I believe a message, I will check...”*

• On a flipchart, create a shared list: *“How to protect yourself from bots and trolls?”*

- I check profile photos and information.
- I look at post history and activity.
- I verify information in independent sources.
- I do not react impulsively to provocations.
- I use tools to analyse bots (e.g. Botometer).

6. Glossary of Terms

Term	Definition
Internet bot	A computer programme that posts or reacts online automatically, often on a large scale.
Troll	A person deliberately causing arguments, conflicts and emotions online, often for profit or propaganda.
Fake account	A profile pretending to be a real user, created for manipulation, fraud or advertising.
Automated activity	Posting a large number of similar messages in a short time by bots or fake accounts.
Sender of information	A person, organisation or system that creates and spreads content online.

7. Teacher’s Methodological Guide

1. Lesson preparation

• **Selecting materials:**

- Choose fictional or international examples of profiles, discussions and posts to avoid disputes linked to local politics or students’ personal situations.
- Materials should look visually realistic but contain no real personal data.
- Prepare a set of 3–6 fictional profiles (authentic, bot, troll) including sample posts, comments, profile photos so the exercise is practical.

• **Material format:**



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- Screenshots (or imitations) from various platforms (Facebook, Twitter/X, Instagram, internet forums).
- Text posts, memes, short conversations, links to sites – to show different forms of fake account activity.
- A “Warning Signals Card” for analysing profile credibility – as a support tool for students.

2. Lesson delivery

- **Introduction:**

- Start with curiosity-provoking questions (“Is every profile online a real person?”).
- If students give examples from real life (e.g. they met a troll), do not analyse them personally – use only as general examples of the mechanism.

- **Group work:**

- Make sure each participant has a role (e.g. profile reader, table filler, presenter) to increase engagement.
- Remind students the aim is to learn to spot patterns, not to judge specific people.

3. Moderating discussion

- Ask follow-up questions:

- “What makes a profile seem suspicious?”
- “Could this be bot activity? Why?”
- “How can you check who is really behind this account?”

- Stress that the line between real and fake senders is often subtle – sometimes you cannot be 100% sure without additional tools.
- Avoid mocking wrong answers – show that doubts are natural and everyone can make a mistake.

4. Safe classroom atmosphere

- Remember some students may have been victims of trolling, cyberbullying or fake profiles.
- Ensure the lesson is a supportive space, not a place for blaming mistakes in recognising fake



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senders.

- Encourage questions – “better to ask than to trust blindly.”

5. Educational aim of the lesson

- Develop in students the habit of:
 1. Checking the author of information (profile, post history, source credibility).
 2. Not relying on likes or comments as proof, since they may be generated automatically.
 3. Avoiding impulsive actions (e.g. sharing a message, reacting aggressively to provocations) before confirming who the sender is.

6. Possible lesson extensions

- **Mini home project:** Students find real-life examples of suspicious profiles online (without revealing personal data) and analyse them in class for warning signals.
- **Educational poster:** Create together a list of “10 Ways to Spot a Fake Sender Online.”
- **Short educational game:** “*Bot or human?*” – the teacher shows sample posts, and students guess whether it’s a bot, troll, or real user, justifying their answer.

7. Additional materials

Websites for verification and account analysis:

- <https://botometer.osome.iu.edu> – bot probability analysis tool (in English)
- <https://edmo.eu> – European Digital Media Observatory
- <https://demagog.org.pl> – fact-checking in Poland
- <https://stopfake.org> – analysis of false information in the Ukrainian-language space

8. Educational and fact-checking sources

- European Digital Media Observatory (EDMO) – <https://edmo.eu>
- EUvsDisinfo – European External Action Service – <https://euvdisinfo.eu>
- Demagog.org.pl (Poland) – <https://demagog.org.pl>
- Manipulátori.cz (Czech Republic) – <https://manipulatori.cz>
- Demagog.cz (Czech Republic) – <https://demagog.cz>
- Demagog.sk (Slovakia) – <https://demagog.sk>



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- StopFake.org (Ukraine) – <https://www.stopfake.org/en/news/>
- Botometer (USA, bot analysis tool) – <https://botometer.osome.iu.edu/>

