webwise.ie

AI, Algorithms and Critical Thinking

Empowering learners to safely and ethically navigate algorithms and GEN AI.

An Roinn Oideachais
Department of Education

Co-funded by the European Union

webwise.ie

ABOUT US

PROMOTING A SAFER, BETTER INTERNET

1. Education
2. Awareness
3. Youth Participation
4. Training and CPD
5. Parental Supports

An Roinn Oideachais
Department of Education

Co-funded by the European Union

SAFE. SECURE. EMPOWERED. AWARE

Oide

What's on the agenda?

1. Introduction
2. Debate the BIG issues
3. Under the influence?
4. Stop/Think/Check
5. Resources and Guides

Oide

Let’s Discuss...

In pairs:

Discuss one key benefit and one key concern in relation to children and young people’s use of internet and digital media.

Agree/Disagree?

I feel in control of how much time I spend online.

- **Stand up if you agree**
- **Stay seated if you disagree**

Agree/Disagree?

AI will make learners overly dependent on technology, weakening their problem solving and critical thinking skills.

- **Stand up if you agree**
- **Stay seated if you disagree**

Agree/Disagree?

Under 16's should be banned from social media

- **Stand up if you agree**
- **Stay seated if you disagree**

Agree/Disagree?

AI tools, like chatbots, could take away real human interaction, leaving teens feeling disconnected and isolated.

- **Stand up if you agree**
- **Stay seated if you disagree**

What do young people in UK and Ireland think?

Under the influence?

An Roinn Oideachais
Department of Education

Co-funded by
the European Union

What is an algorithm?

An algorithm is a series of code that provides step-by-step instruction to tell a computer system what to do.

For example:

- When you type in a search term on Google, an algorithm decides which websites to show you first.
- When you scroll on TikTok or Instagram, an algorithm picks which posts or videos you'll see based on what it thinks you'll like.

An Roinn Oideachais
Department of Education

Co-funded by
the European Union

Unpacking Algorithms: Lets Discuss

How do algorithms work on social media?

- **Prioritise content:** They show you posts or videos from people you engage with most, or content similar to things you've liked, shared, or commented on before.
- **Recommend content:** They also suggest new accounts, videos, and topics based on your previous activity.

How Do Algorithms Know What You Like?

- Likes, comments, and shares, watch time on videos
- Search history and clicks
- Patterns: for example, how often you're on the app, what time of day, and the types of content you keep coming back to

An Roinn Oideachais
Department of Education

Co-funded by
the European Union

Algorithms: Benefits and Challenges

In your groups (tables, pairs) – Discuss:

- How do algorithms improve your experience online?
- What are the drawbacks of algorithms?

An Roinn Oideachais
Department of Education

Co-funded by
the European Union

Unpacking Algorithms: Benefits and Challenges

Let's Brainstorm:

What are the benefits of algorithms?

- **Find What You Like:** Can help you find things you're interested in faster.
- **Discover New Interests**: Can suggest new hobbies, music or ideas you might enjoy.
- **See Reliable Sources**: Boost posts from trusted accounts if you follow them.

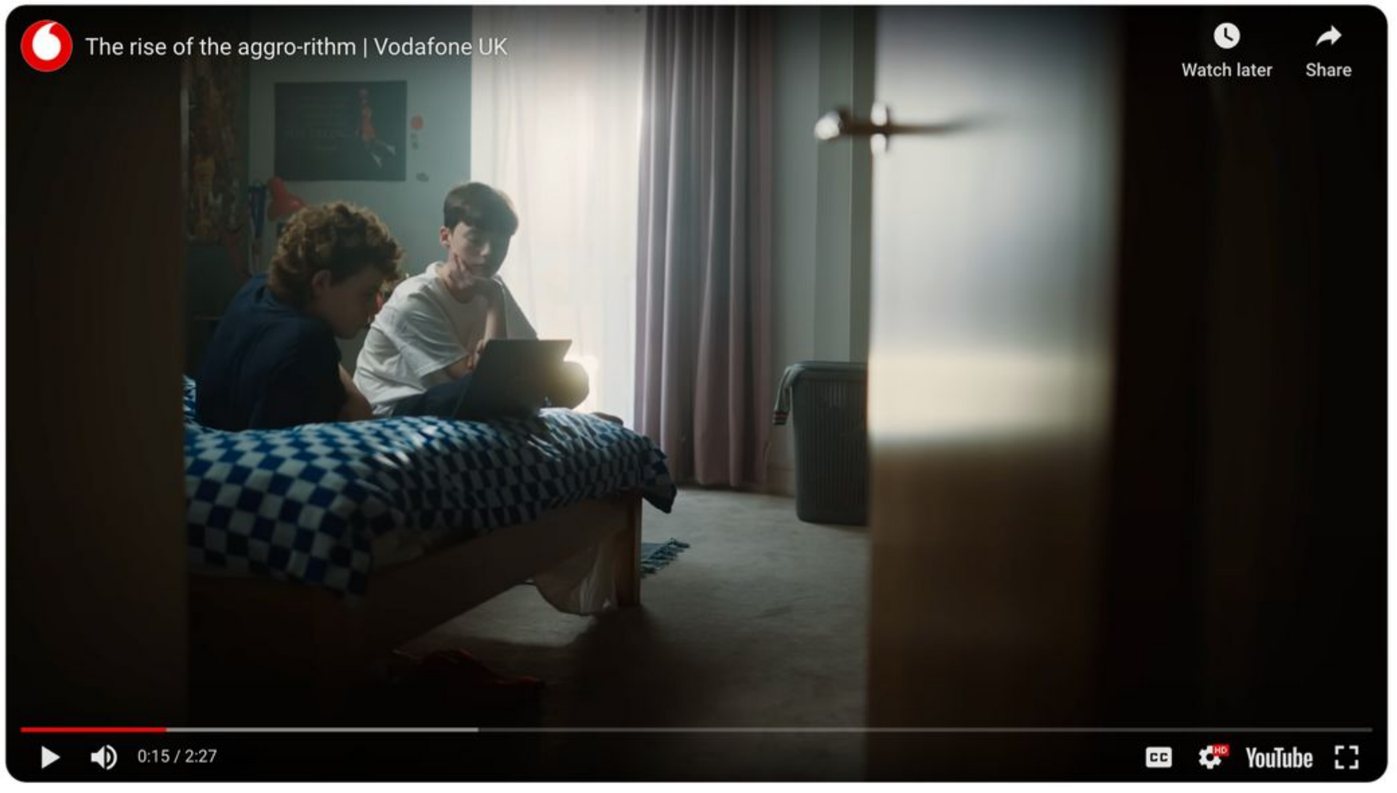
What are the challenges with algorithms?

- **Amplify False Information:** Algorithms highlight content that gets lots of likes and views even if it is not true or accurate.
- **Create Filter Bubbles**: Algorithms tend to show more of the same type of content which can mean you miss out on other views or perspectives.
- **Time Trap**: Algorithms are designed to keep us on platforms for longer by using tricks like auto-play and showing you more content you might like.
- **Personal Information:** Algorithms are building a picture of you based on your activity online (your likes, searches, views, clicks and shares).

The ‘Aggro-rithm’

Watch this short video

In pairs, brainstorm practical tips for teens on navigating powerful algorithms



AI ‘Aggro-rithms’: young boys are served harmful content within 60 seconds of being online

An Roinn Oideachais
Department of Education

Co-funded by the European Union

Research: Recommending Toxicity

- A new study from **Dublin City University's Anti-Bullying Centre** shows that the recommender algorithms used by social media platforms are rapidly amplifying misogynistic and male supremacist content.
- 10 experimental or 'sockpuppet' accounts on 10 blank smartphones - five on YouTube Shorts and five on TikTok.
- Researchers found that all of the male-identified accounts were fed masculinist, anti-feminist and other extremist content, irrespective of whether they sought out general or male supremacist-related content, and that they all received this content within the first 23 minutes of the experiment.
- Once the account showed interest by watching this sort of content, the amount rapidly increased.
- Content featuring 'Manfluencers' (male influencers) accounted for the vast majority of recommended videos
- New Guidance published for schools, teachers and

An Roinn Oideachais
Department of Education

Co-funded by the European Union

Taking Back Control

- Knowledge is power – who owns the platforms? How do they work? How do they make money?
- Search for accounts with positive and enjoyable content
- Always register accounts with the correct age
- Unfollow or mute accounts that you don't like
- Report and block content
- Follow a range of accounts with different perspectives
- Reset the algorithm
- Building healthy digital habits – family agreements
- Being intentional with your time online
- Take a step back... Device free activities
- Remember, you have rights!

An Roinn Oideachais
Department of Education

Co-funded by the European Union

STOP / THINK / CHECK

Did you know?

More than half of people in Ireland (57%) struggle to tell the difference between real news and fake news on the internet.

And... 2/3 of digital content creators do not check their facts before sharing.

An Roinn Oideachais
Department of Education

Co-funded by the European Union

Critical Thinking and AI Literacy

What is critical thinking?

Critical thinking means examining information closely to make better choices. It involves questioning assumptions, solving problems and making informed decisions.

Critical thinking is key to AI literacy. To use AI well, students must be able to weigh up information. Critical thinking is also necessary for identifying biases – a big problem in AI-generated material – and understanding AI's impact on society.

AI literacy involves understanding what AI is, how it works and its limitations. It means using AI tools effectively and responsibly.

An Roinn Oideachais
Department of Education

Co-funded by
the European Union

Quiz Time

An Roinn Oideachais
Department of Education

Co-funded by
the European Union

Developing Critical Thinking

Remember to **Stop, Think, Check** what you seeing, reading or hearing is accurate and reliable.

Who is sharing the story?

Check the source

Look beyond the headline

Viral/Trending doesn't mean true

Check other sources

Is it a joke?

You are what you like

Check your biases

Seeing (and hearing) is believing

- Take a closer look…
- Too perfect?
- Reverse image search
- Look at the context… the source…

Source: Tactical Tech

webwise.ie

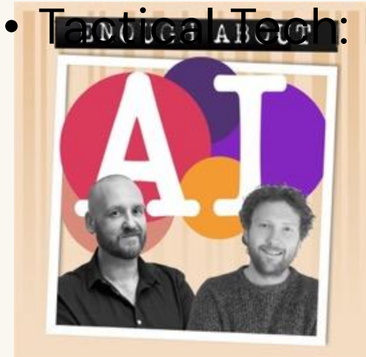
RESOURCES and guidance

An Roinn Oideachais
Department of Education

Co-funded by
the European Union

Explore more...

- Webwise Resources
- Oide TIE Online Courses
- ADAPT AI Literacy 90 mins online course
- ADAPT AI in my life (TY)
- ADAPT Technology in my life (Primary)
- Enough About AI Podcast
- Project Evolve (SWGFL)
- Childnet
- Tactical Tech: Everywhere all the time



Engaging Content
Engaging People
AI IN MY LIFE

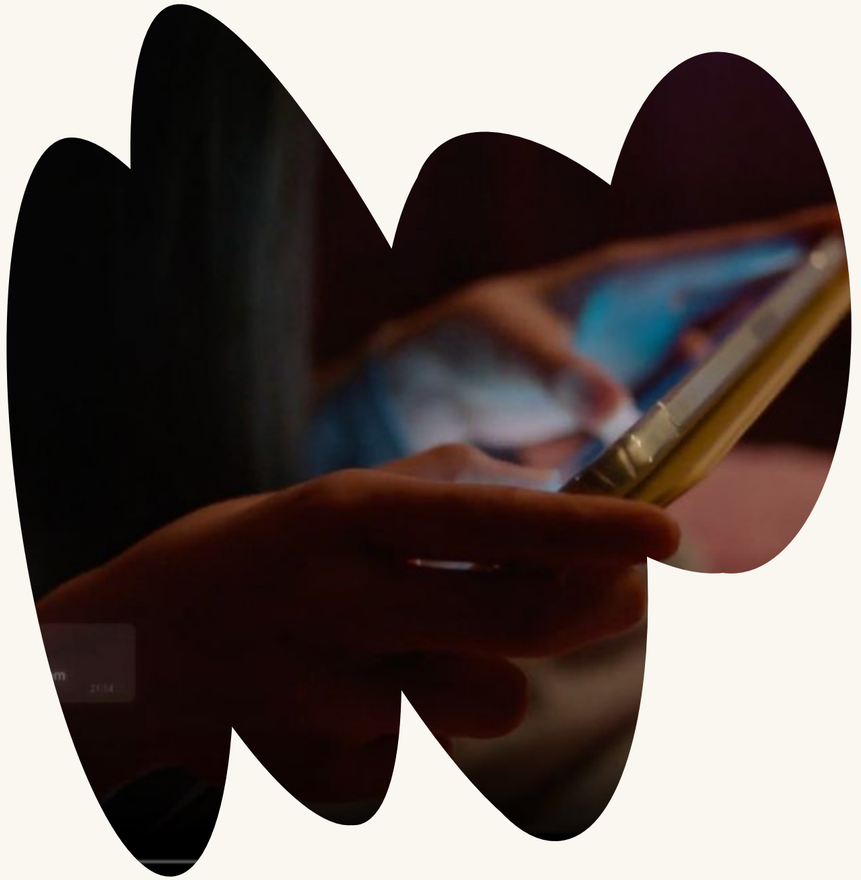
Reflection...

As a result of today, what one action will you take to incorporate digital citizenship into your practice?

Wrap-up

"The illiterate of the 21st century will not be those who cannot read and write, but those who cannot learn, unlearn, and relearn."

Alvin Toffler



The most important thing educators can do is to provide a space to talk and learn about the complex media landscape we now live in.

webwise.ie

THANK YOU

jane.mcgarrigle@oide.ie