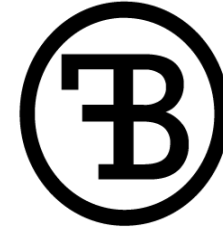


FaktaBaari **EDU**

Digital information literacy

Nordis
12.10.2022
Kari Kivinen





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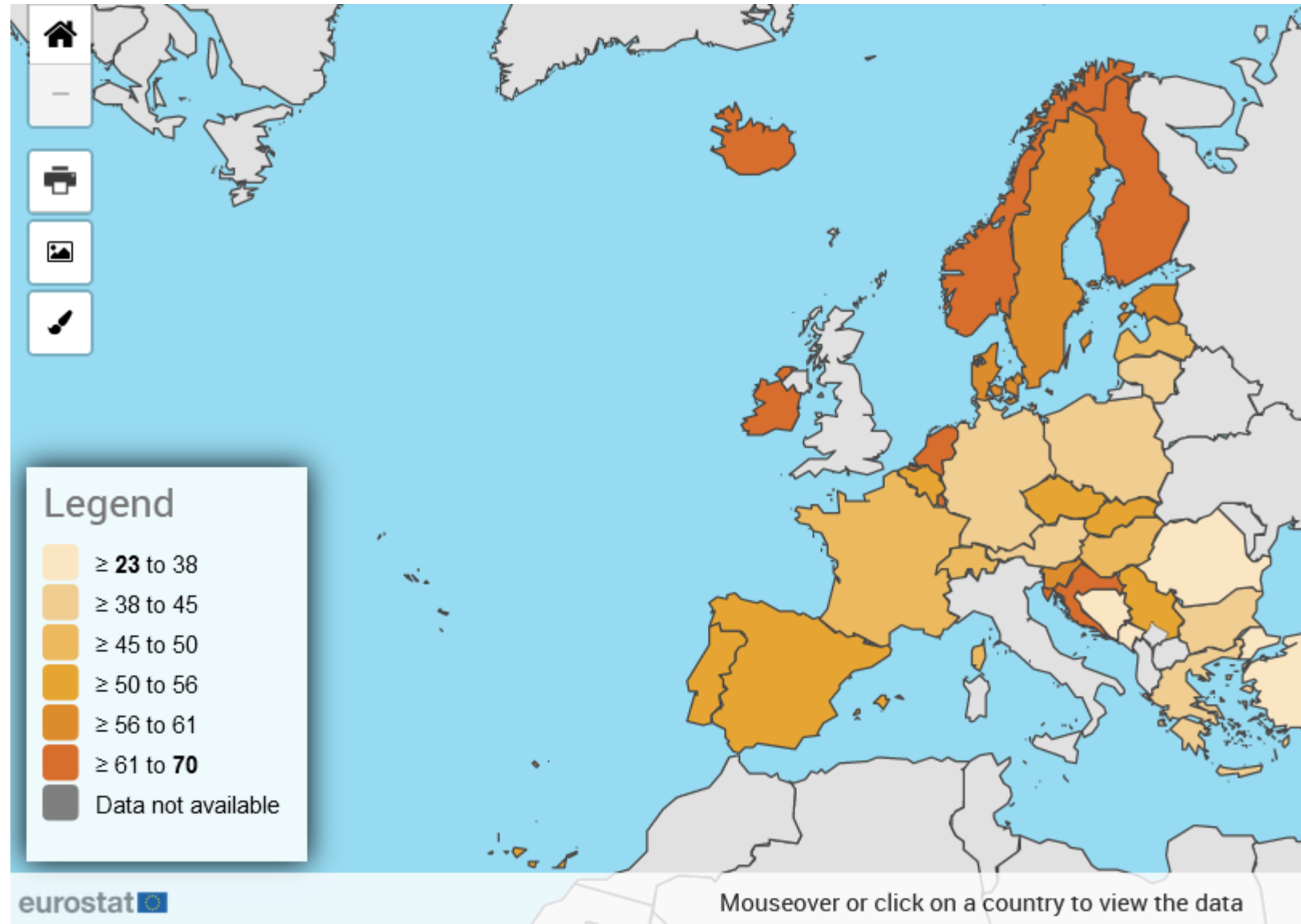
The FactBarEDU project brings together fact-checking experts, journalists, media specialists and pedagogues to create Digital Information Literacy tools:

- to support teachers in dealing with social media issues in the classroom context ;
- to empower students with critical thinking and digital information literacy skills to resist mis- and disinformation, and
- to activate citizens to verify their social media content

www.faktabaari.fi

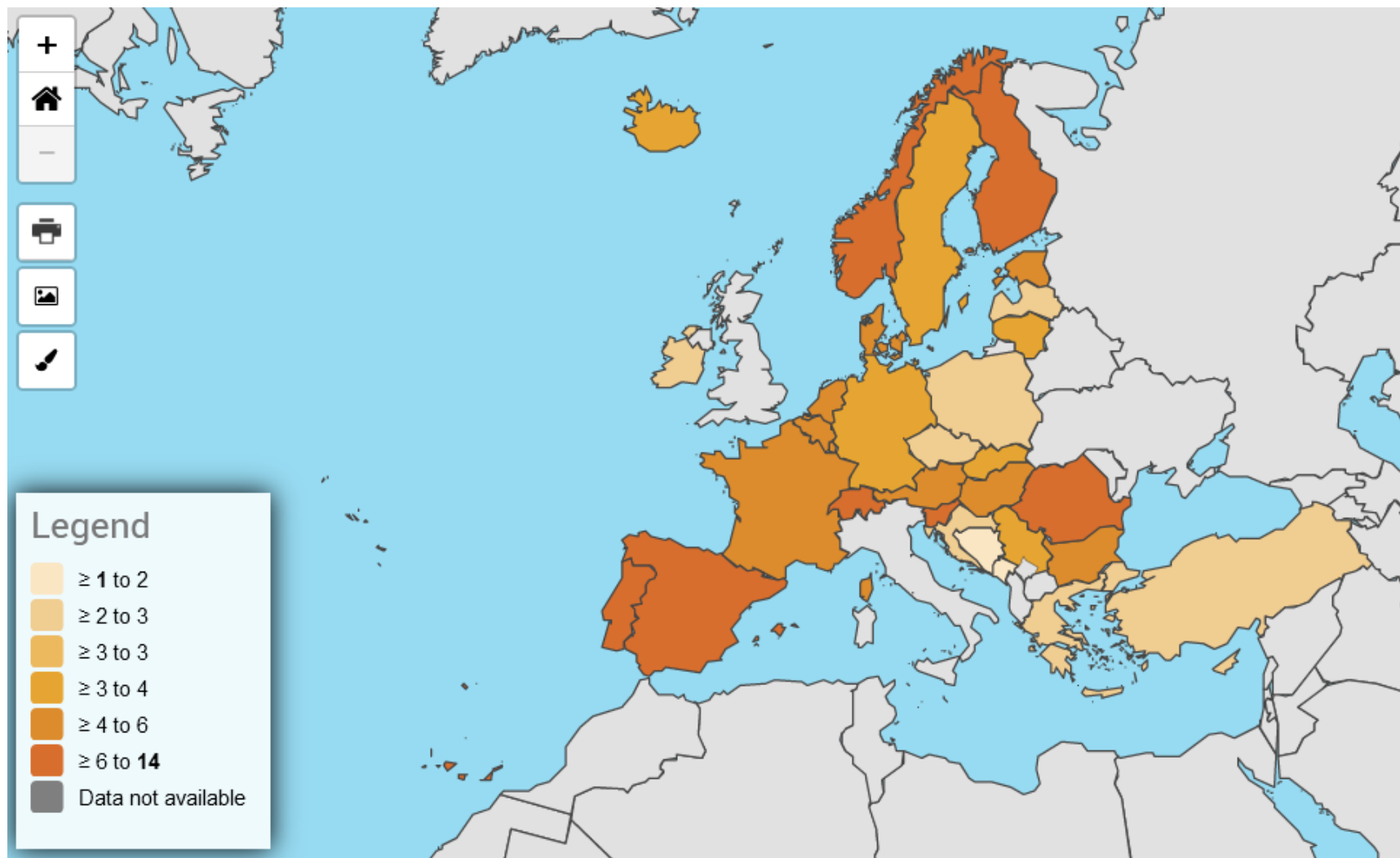
Individuals **have seen untrue or doubtful information** or content on the internet news sites or social media

Eurostat,
Digital Skills
Statistics
2022



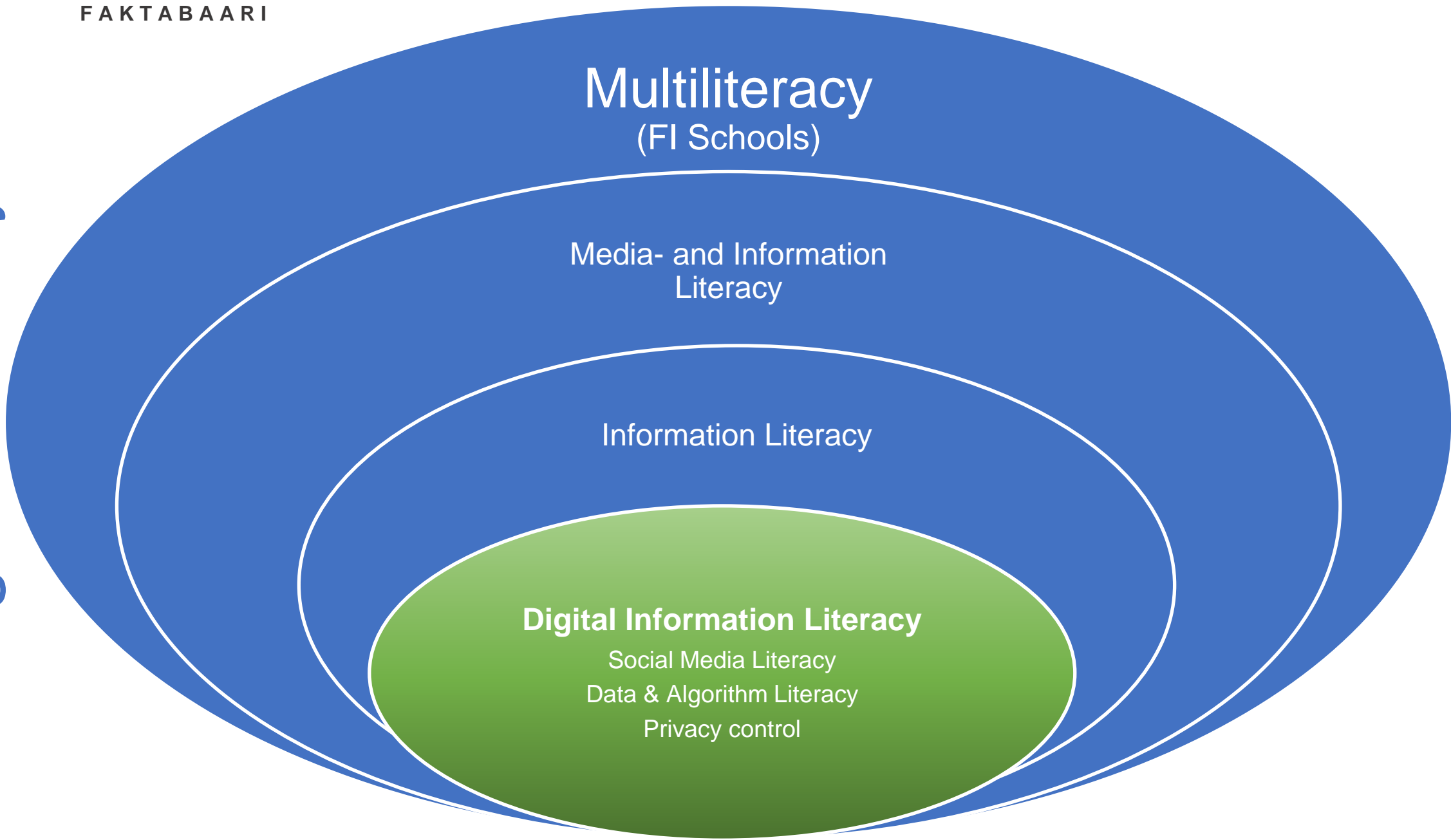
Individuals have not checked the truthfulness of the information or content found on the internet **because they lacked skills or knowledge**

Eurostat,
Digital Skills
Statistics
2022



Digital Literacy

Critical Literacy



Multiliteracy
(FI Schools)

Media- and Information
Literacy

Information Literacy

Digital Information Literacy
Social Media Literacy
Data & Algorithm Literacy
Privacy control

Digital Information Literacy Guide

Table of contents

Introduction - Elsa Kivinen & Kari Kivinen

1. Digital information literacy - what is it? Kari Kivinen
2. What does it mean to be digitally competent today? Riina Vuorikari & Kari Kivinen
3. From digital natives to digitally literate critical thinkers, Kari Kivinen
4. COVID and Ukraine war increased Finns' social media use, Harto Pönkä
5. Online inquiry requires criticality, Carita Kiili
6. Online reading skills & strategies, Kari Kivinen
7. Claim your rights! From users to citizens in online environments, Minna Aslama
8. Many shapes and sizes: Dissecting online disorders, Minna Aslama
9. Political propaganda based on psychological manipulation, Joonas Pörsti
10. What can we learn from fact-checkers? Pipsa Havula
11. Fact-checking transparency codes - how do I identify a fact-checker? Mikko Salo
12. How to evaluate a scientific claim and expertise of an expert? Kari Kivinen
13. Algorithm awareness - the challenges of artificial intelligence, Harto Pönkä
14. Digital footprint and privacy in online services, Harto Pönkä
15. Everyday use of digital services generates digital power, Tiina Härkönen
16. Digital civilisation is a key tool for defending democracy, Jukka Vahti

Definitions (link)

Appendix (link) - Theory of change, Minna Aslama

Digital Information Literacy Guide

A DIGITAL INFORMATION LITERACY GUIDE
FOR CITIZENS IN THE DIGITAL AGE



FaktaBaari  EDU

Kari Kivinen, Minna Aslama-Horowitz, Pipsa Havula, Tiina Härkönen, Carita Kiili,
Elsa Kivinen, Harto Pönkä, Joonas Pörsti, Mikko Salo, Riina Vuorikari & Jukka Vahti

Digital Information Literacy DIL

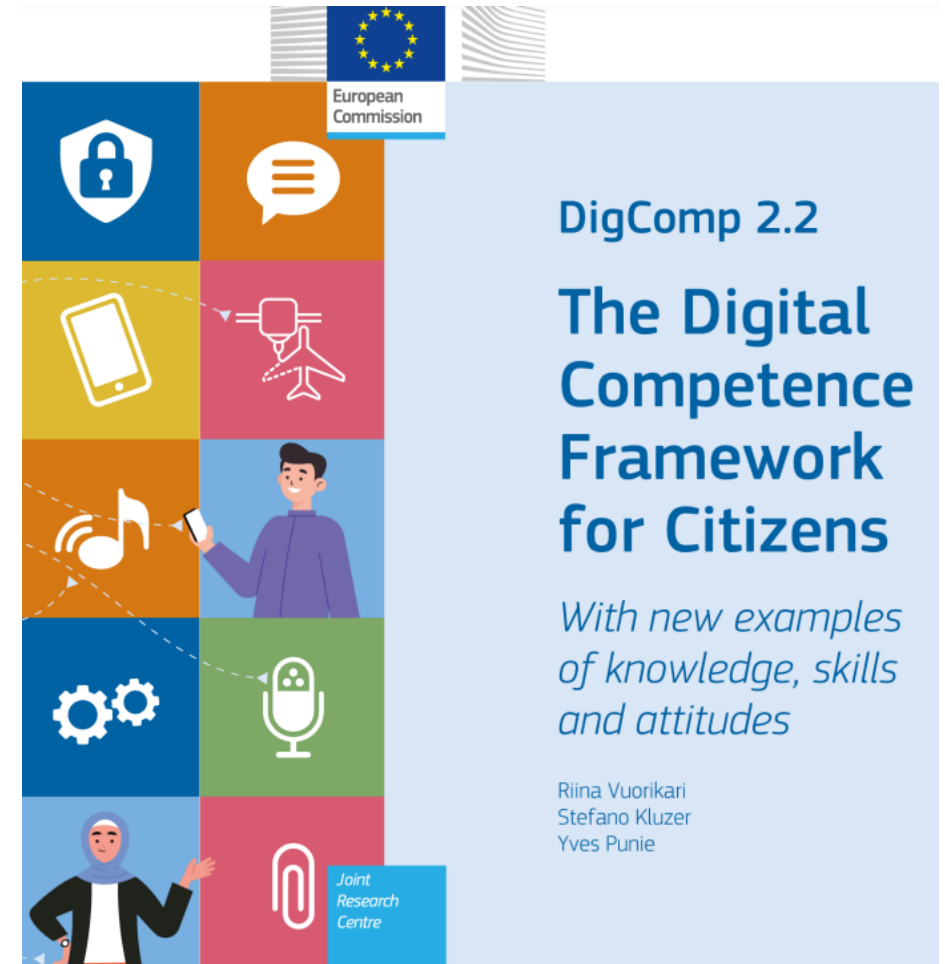
Digital information literacy is the ability to access, manage, understand, integrate, communicate, evaluate, create, and disseminate information safely and appropriately through digital technologies.

- It includes competences that are variously referred to as information literacy and media literacy, computer, and ICT literacy but also an ability to understand the functioning the digital information landscape at large.
- Digital Information Literacy involves a dimension of active and civic engagement with the digital world and promotes active citizenship.

What does it mean to be digitally competent today?

The EU has set ambitious targets for at least 80% of the population to have basic digital skills by 2030.

- DigComp 2.2. provides a common understanding of which are the key areas of digital competence.
- Digital Literacy competences are considered as basic civic skills



DigComp 2.2. Information and Data Literacy



	EXAMPLES OF KNOWLEDGE, SKILLS AND ATTITUDES
Knowledge	<p>16. Aware that online environments contain all types of information and content including misinformation and disinformation, and even if a topic is widely reported it does not necessarily mean it is accurate.</p> <p>17. Understands the difference between disinformation (false information with the intent to deceive people) and misinformation (false information regardless of intent to deceive or mislead people).</p>
Skills	<p>24. Knows how to differentiate sponsored content from other content online (e.g. recognising advertisements and marketing messages on social media or search engines) even if it is not marked as sponsored.</p> <p>25. Knows how to analyse and critically evaluate search results and social media activity streams, to identify their origins, to distinguish fact-reporting from opinion, and to determine whether outputs are truthful or have other limitations (e.g. economic, political, religious interests).</p>
Attitudes	<p>29. Willing to fact-check a piece of information and assess its accuracy, reliability and authority, while preferring primary sources over secondary sources of information where possible.</p>

DIMENSION 1 • COMPETENCE AREA


1. INFORMATION AND DATA LITERACY

DIMENSION 2 • COMPETENCE

1.2 EVALUATING DATA, INFORMATION AND DIGITAL CONTENT

To analyse, compare and critically evaluate the credibility and reliability of sources of data, information and digital content. To analyse, interpret and critically evaluate the data, information and digital content.

From digital natives to digitally literate critical thinkers



“Our students may be “digital natives” but in some ways they are surprisingly inexperienced at evaluating sources online, distinguishing ads from other content, understanding what a .org domain name means and doesn't mean, navigating search results, etc.”

Carl T. Bergström, University of Washington
Co-author of *Calling Bullshit: The Art of Skepticism in a Data-Driven World*

COVID and Ukraine war increased Finns' social media use

Finns are frequent users of social media services and have a very positive attitude towards them. In chapter four, Harto Pönkä analyses Finns' use of social media through a wide range of studies and lists the latest social media trends:

- Covid-19 and the war in Ukraine boosted Finns' social media use
- Short videos on TikTok and Instagram Reels are growing in popularity
- Young people's messaging is moving from What's Up to Snapchat
- Fake content and bought reactions on the rise.

Online inquiry requires criticality

The CRITICAL project investigates children's and adolescents' critical reading skills, including supporting and hindering factors for development. They also develop research-based methods and materials to support critical reading in classrooms.

The results of the Critical Group's research show that students need support to understand what kind of evidence can be regarded as credible when determining cause–effect relationships.

In addition, there are considerable inter-individual differences in adolescents' online inquiry skills and criticality. While some students need support with basic skills, others need more challenges to further develop as critical online readers.

(see www.educritical.fi/en).



Online vs. offline environments

- In the online environment, the amount of information available is breathtaking and it is possible to diffuse any information effortlessly to vast audiences in no time.
- Contents can be changed, removed and added all the time.
- The results of the search engines and recommender systems are individualised and unpredictable.
- Etc.

Online environments are often designed to:

- *maximise commercial interests,*
- *capture and sustain users' attention,*
- *monetise user data, and*
- *predict and influence future behavior*

Kozyreva et al (2020)

Online reading skills & strategies

Online environments are evolving rapidly and continuously compared to traditional off-line environments.

- Inaccurate or distorted information is increasingly being disseminated online.
- traditional reading skills should be complemented by new online assessment strategies and online literacy skills.

Effective methods proven to tackle disinformation:

- prebunking (anticipation),
- debunking (correction),
- strategic ignorance
- lateral reading,
- civic online reasoning
- click restraint strategy
- etc

Claim your rights! From users to citizens in online environments

Given the huge potential of the digital environment, we should also take seriously our rights and responsibilities as digital citizens.

Organisations that support digital citizens' rights:

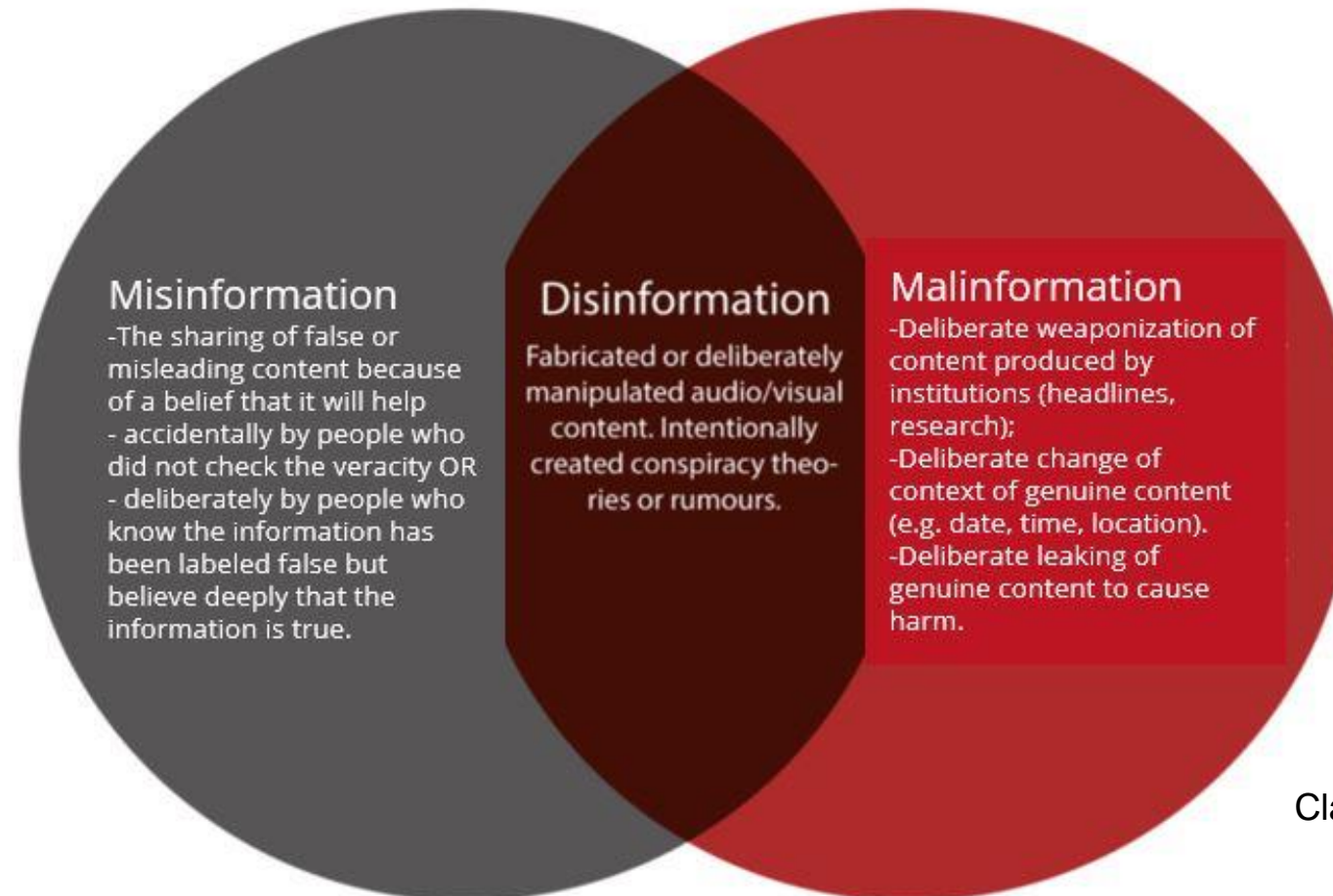
- The UN lays the groundwork for basic principles and international forums where we can discuss our rights.
- The EU provides support through various legislative initiatives.
- Civil society organisations and groups are often at the forefront of tackling digital harms and problems.
- DigComp 2.2 also gives us a framework to understand what kind of digital citizenship skills we need.

FAKTABAARI

TYPES OF INFORMATION DISORDER

FALSENESS

INTENT TO HARM




Political propaganda based on psychological manipulation

Political propaganda, as a broad form of influence, is aimed at persuading the target audience to act in accordance with the propagandist's objectives.

- The hallmark of propaganda is psychological manipulation, typically using disinformation, i.e. deliberately disseminated misleading information
- Fact-checking, digital information literacy and an understanding of propaganda techniques are recommended as an antidote to propaganda.

What can we learn from fact-checkers?



The working methods used by fact-checkers have become an essential part of new online reading skills.

- Research shows that the way fact-checkers approach new information on digital platforms has proven to be very effective.
- Image and video verification tools used by fact-checkers can be used by anybody

A practical tip

- If a claim, image or video you come across online causes a strong emotional response, stop.
- Disinformation spreaders often seek to stir up emotions, and when emotions are running high, it's harder to critically evaluate the claim.

Fact-checking transparency codes - how do I identify a fact-checker?

In terms of source criticism, digital information literacy assumes that the main line of defence against information manipulation is in between everyone's ears.

But when your own skills may not be sufficient, or you feel that a wider public debate would benefit from evaluating a claim, contact a fact-checking service.

Fact-checkers are happy to take story tips and turn them into pedagogical checks, as well as support material to disseminate the checked information with your support.

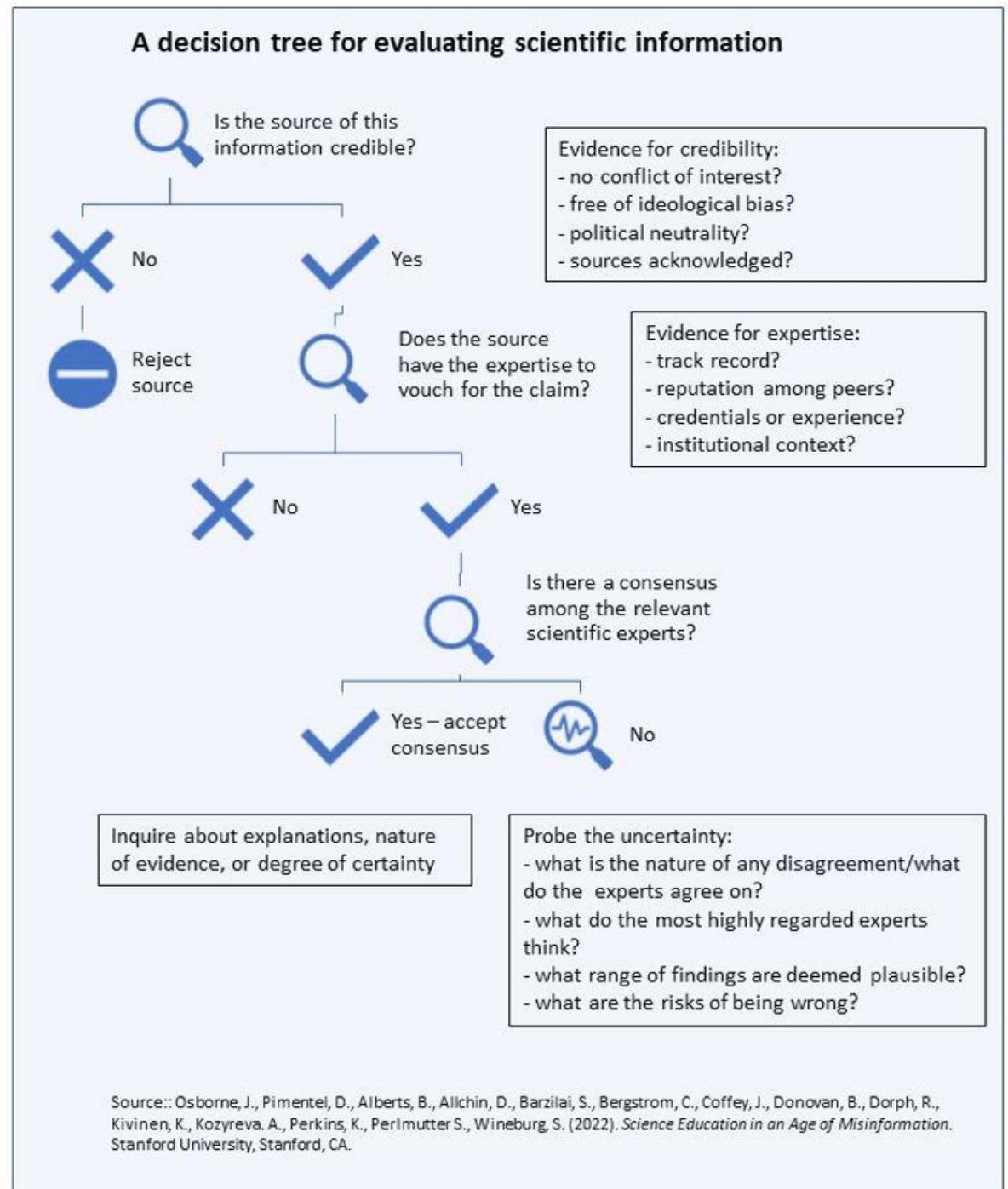
The International Fact Checking Network (IFCN) compiled its transparency principles

- 1) requirements for impartiality and fairness, together with
- 2) transparency of methodology, sources, funding and correction policies.

Chapter 12



12. How to evaluate a scientific claim and expertise of an expert?



Algorithm awareness - the challenges of artificial intelligence

- Algorithms have an impact on the behaviour of their users, and most often this impact is seen in the content that is recommended to users.
 - The business of online and social services is usually based on ad monetization
 - The most important thing for users' privacy would be to know in which ways their personal data are used by the algorithms.
- New EU legislative packages are in the process of requiring greater transparency from online services on how algorithms work.

Digital footprint and privacy in online service?

What are active and passive digital footprints?

- Privacy is one of the most important fundamental rights in the digital age.
- It is based on national laws and European Union regulations such as the EU GDPR, international treaties and the UN Declaration of Human Rights.
- Privacy is primarily about the protection of private life, home and communications, but in the digital environment it is more appropriate to talk about information relating to a specific person, i.e. personal data.

The article answers important questions such as:

- To whom is it safe to share my data?
- How do cookies work?
- Should you share your location?
- How can data be deleted?

Everyday use of digital services generates digital power

Sitra presents the results of **digitrail survey** and the **digipower investigation**.

- These studies revealed in concrete terms the large-scale operation of data collection ecosystems, the countless different entities that process our data and the huge amount of data that is generated about us and stored for unknown companies to use.
- The findings of both surveys also revealed how poorly data giants comply with European data protection legislation.
- The digipower investigation also sought to understand whether data and profiling can also be used to influence societal decision-making.

Sitra has developed a digital behaviour assessment tool - the **digiprofile test**.

The test assesses three different aspects:

1. knowledge,
2. attitudes and
3. online behaviour.

The result is a personalised digital profile and personalised tips on how to manage your information.

Digital civilisation is a key tool for defending democracy

How to harness the power of the web to support and renew democracy?

- Sitra's four-year Digital Power and Democracy project aims to increase understanding of the nature of networked, digital power and to find ways to harness that power - the power of the web - to reform democracy.
- Democracy is based on a sufficiently shared understanding of reality among different people and populations, including a desire for truth, i.e. the desire to know what is true and the ability to form their own opinions based on the information available.
- Critical digital information literacy and, more broadly, digital civilisation are key to this.
- The ability to form opinions based on information is a prerequisite for participation in society

Digital Education Action Plan (DEAP) - Enhancing digital skills and competences for the digital transformation



DigComp 2.2
The Digital
Competence
Framework
for Citizens

Expert group report and guidelines for teachers was published today!

Online traffic rule number 1

When confronted with a claim in the online environment, ask three key questions:

- Who is spreading the claim? Source?
- What evidence has been presented to support the claim?
- What do the other sources have to say about it?



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EDMO - Nordis

Nordic universities and fact-checkers joined together

European Schoolnet

- Facts4All, March 2022
- Democracy events project 2023-2024

Stanford-group

- Science Education in an Age of Misinformation, March 2022

SITRA

- A bright future ahead for democracy? Event 25.9.2022
- How to move from the era of disinformation towards an inspiring digital democracy?

JRC & DigComp 2.2.

- Digital Competences will include MIL competences, 22.3.2022

Commission: DG EAC & DG CNECT

- Commission expert group on tackling disinformation and promoting digital literacy through education and training

US Embassy

- Conference with First Draft Claire Wardle to Finland

Erasmus +

- MILBOX project, 2022-2024

Ministry of Education

- Project with librarians and adult educators



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Thanks

kari@kivinen.net
Faktabaari.fi