



BACK 2
BASICS

BRIDGING THE GAP BETWEEN HIGHER EDUCATION
AND LABOR MARKET BY FOSTERING DIGITAL SKILLS

Bridging the gap between Higher Education and the labour market

2021-1-PT01-KA220-HED-000023543

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BACK 2 BASICS

BRIDGING THE GAP BETWEEN HIGHER EDUCATION
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Module 1

Information Literacy



2021-1-PT01-KA220-HED-000023543

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BRIDGING THE GAP BETWEEN HIGHER EDUCATION
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Information Literacy

Part 1 – Information Literacy Overview

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LEARNING OBJECTIVES

Discover Key terms & concepts:
“Information Literacy”, “Data Literacy”,
“Media Literacy”, “Digital Literacy”





Welcome!

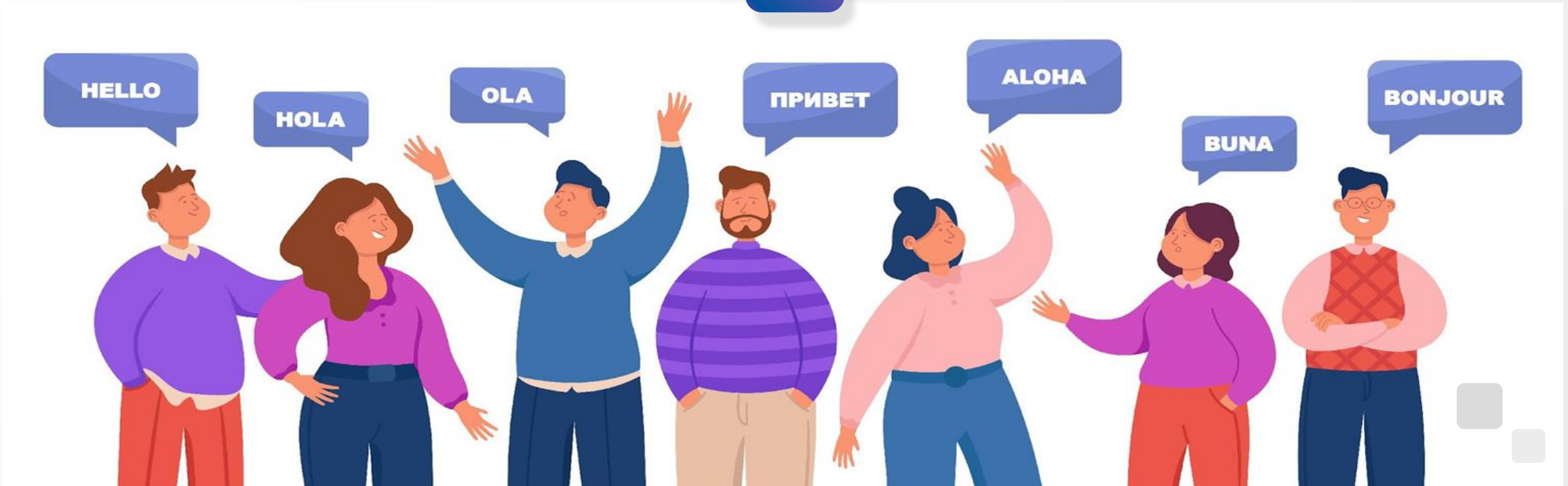


Image by pch.vector on Freepik



WARM UP ACTIVITY!!



Open discussion: How would you define Digital Literacy? Have you ever heard other terms like "Information Literacy" or "Media Literacy" ? Reflect (2/3 min).



THEORY!!



Image by pixabay



A plethora of interrelated concepts and definitions... (1/2)

- 'Digital Skills',
- 'Digital Competence',
- 'Information Literacy',
- 'Media Literacy',
- 'Digital Literacy',
- 'ICT Literacy',
- 'Digital Skills'...



Image source: <https://www.pexels.com/photo/photo-of-woman-writing-on-tablet-computer-while-using-laptop-4348401/>

There is still **confusion** what exactly these concepts describe.

Resource: [Perifanou, M., & Economides, A. \(2019\). The digital competence actions framework.](#)



A plethora of interrelated concepts and definitions... (2/2)

Perifanou and Economides (2019) propose digital competence to be defined as the person's knowledge, skills and attitude to 'efficiently' :

- access digital resources,
- use digital resources,
- create digital resources,
- share digital resources,
- communicate,
- and collaborate with others

by using digital technologies in order to achieve specific goals.

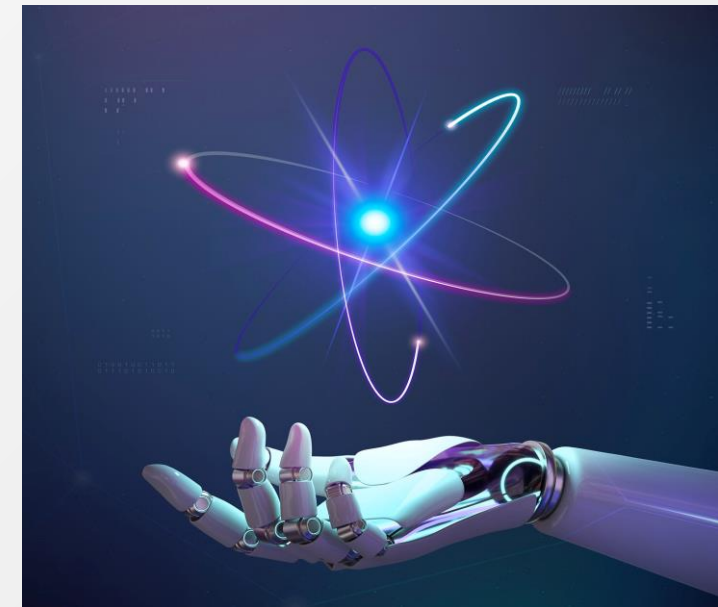


image source: <https://pixabay.com/illustrations/arm-artificial-intelligence-robot-7014655/>

Resource: Perifanou, M., & Economides, A. (2019). The digital competence actions framework.



What is 'efficiently' considered?

An umbrella term includes the following:

- effectively,
- appropriately,
- responsibly (e.g. legally, ethically, respectfully),
- securely,
- critically,
- reflectively,
- creatively.



image source: <https://www.apifirst.in/2020/09/17/jidoka-lean-tool-for-improvement-of-process-effectiveness-and-efficiency/>

Resource: [Perifanou, M., & Economides, A. \(2019\). The digital competence actions framework.](#)



European
Commission



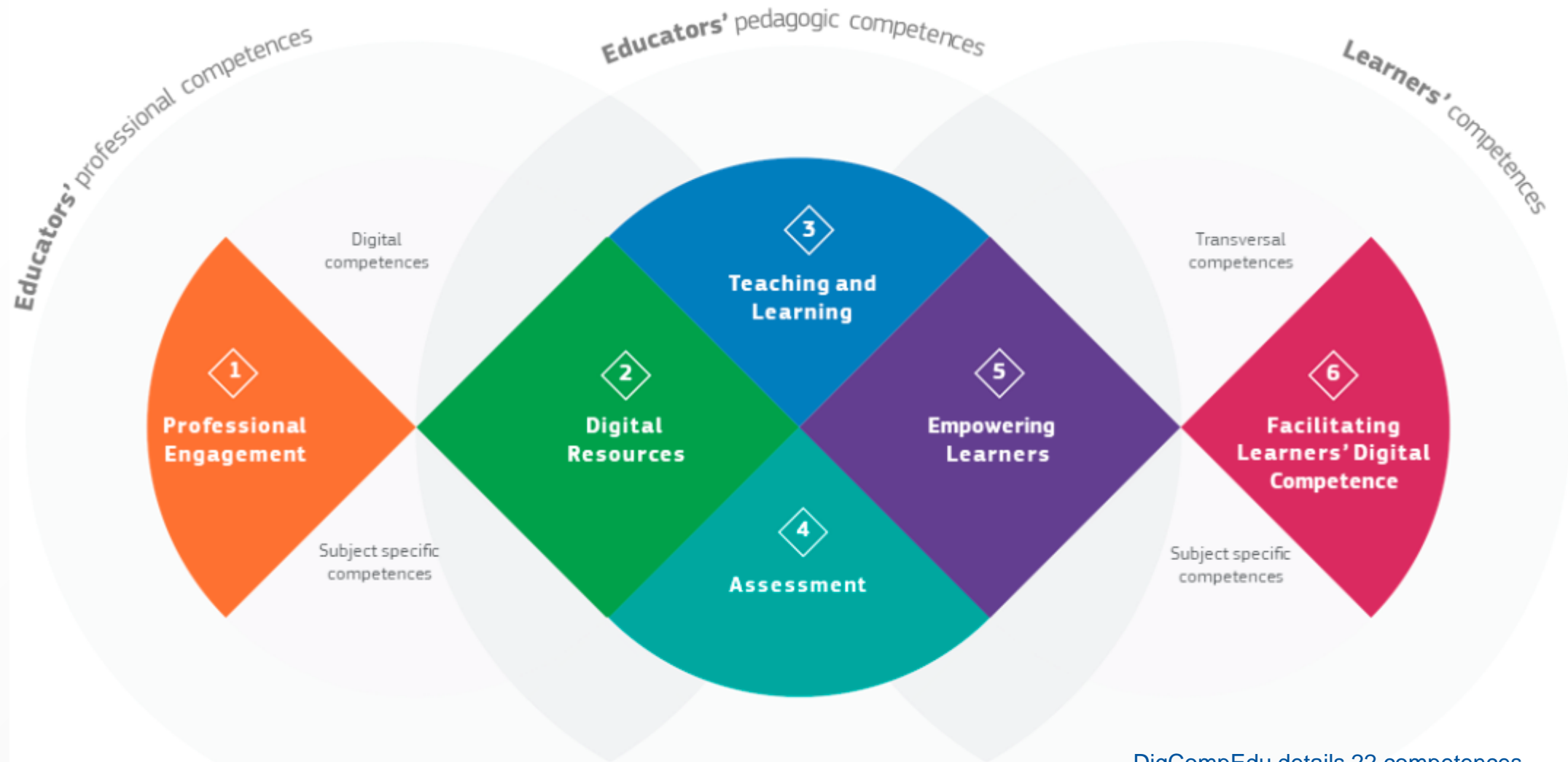
DigComp into Action

GET INSPIRED
MAKE IT HAPPEN

A user guide to the
European Digital
Competence Framework

Joint
Research
Centre

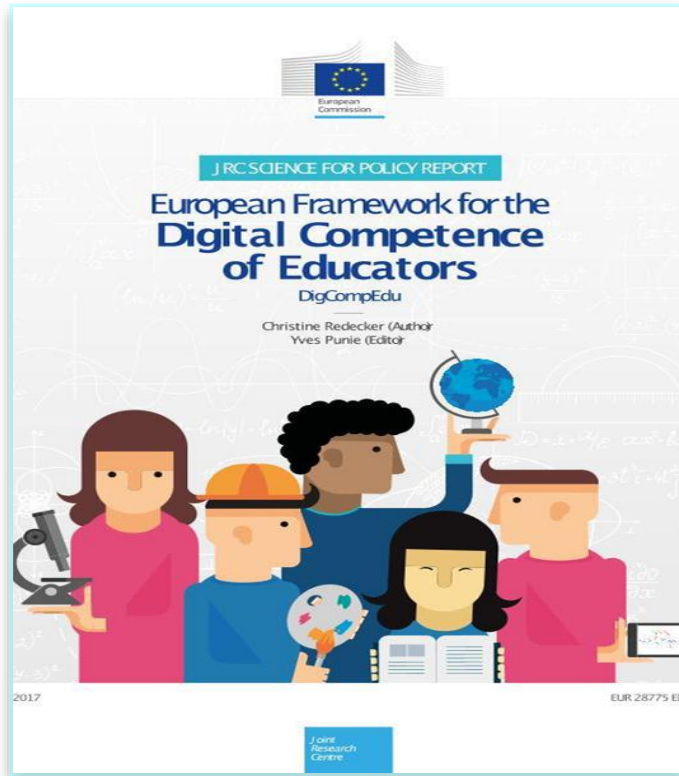
EUR 29115 EN



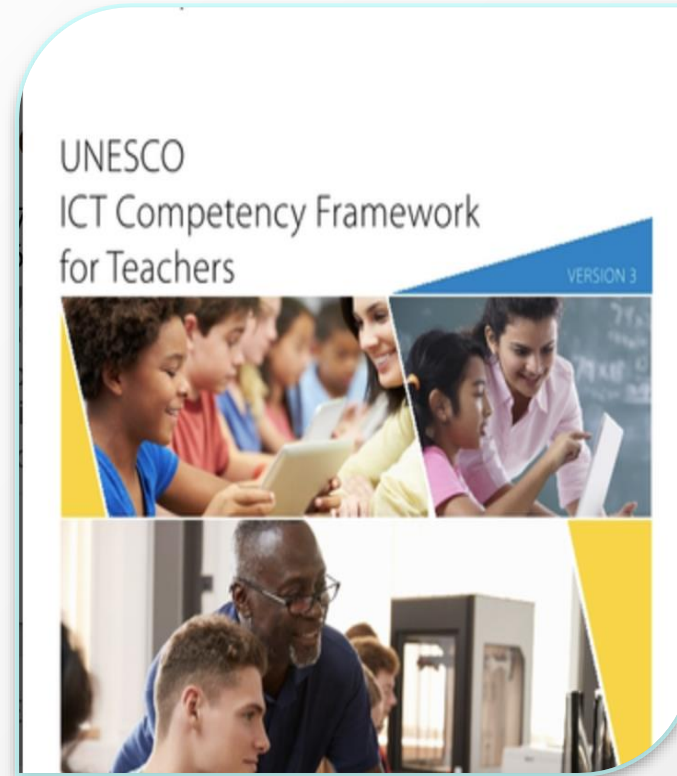
https://joint-research-centre.ec.europa.eu/digcompedu_en

DigCompEdu details 22 competences organised in six Areas

DIGITAL FRAMEWORKS FOR TEACHERS (1)



JRC, 2017
DIGICOMP FOR EDU

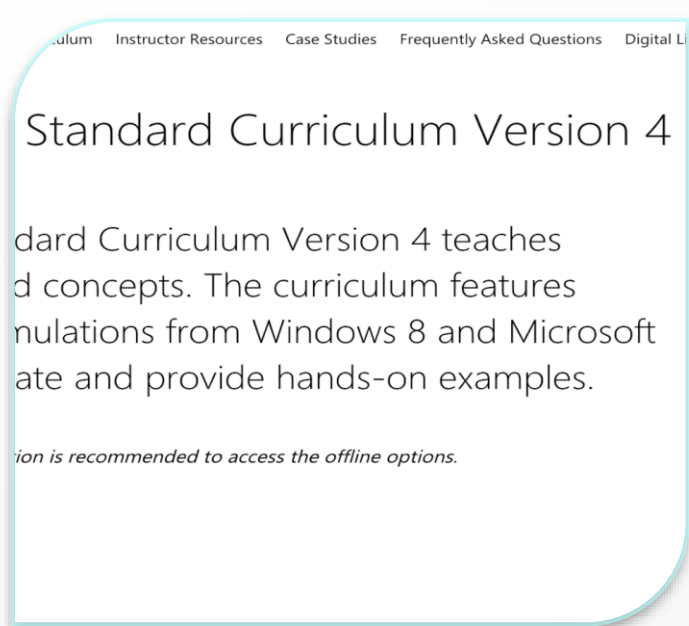


UNESCO, 2018
ICT COMPETENCY FRAMEWORK
FOR TEACHERS



INTEF, 2017
COMMON DIGITAL
COMPETENCE FRAMEWORK
FOR TEACHERS

DIGITAL FRAMEWORKS FOR TEACHERS (2)



MICROSOFT, USA, 2016

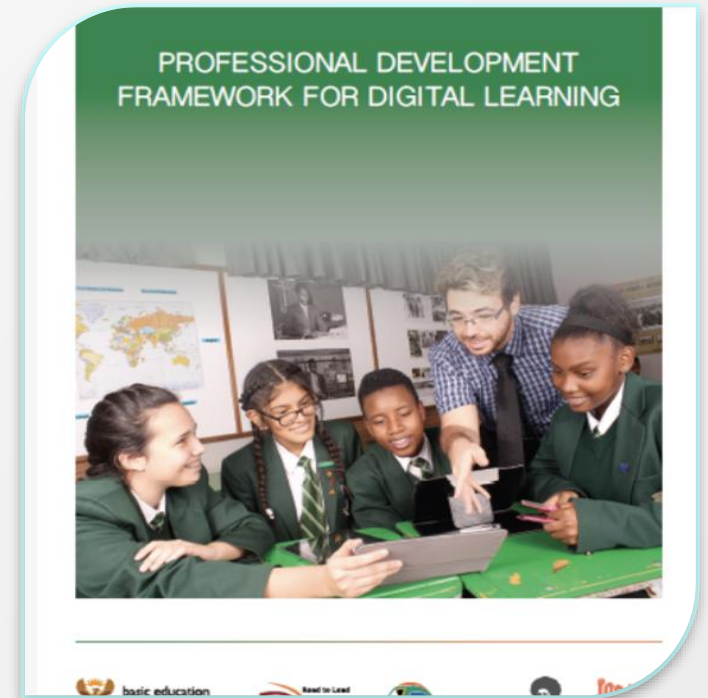
**DIGITAL LITERACY STANDARD
CURRICULUM VERSION 4
TEACHER'S GENERIC ICT SKILLS
AND CONCEPTS**



**Professional Digital Competence
Framework for Teachers**

THE NORWEGIAN CENTRE FOR ICT
IN EDUCATION, NORWAY, 2017

**PROFESSIONAL DIGITAL
COMPETENCE FRAMEWORK FOR
TEACHERS**



SCHOOLNET, SOUTH AFRICA,
2017

**PROFESSIONAL DEVELOPMENT
FRAMEWORK FOR DIGITAL
LEARNING**

DIGITAL FRAMEWORKS FOR TEACHERS (3)

1 DIGITAL LITERACY FRAMEWORK

Beetham and Sharpe
go.nmc.org/jiscdesign

This is a matrix model, with categories in ascending order of cognition.


These categories incorporate ICT capabilities, information/media capabilities, and learning/thinking capabilities. Each matrix node is a first-person statement, such as "I can" and "I do." Overall, the framework thoughtfully blends technical and interpersonal skills.

BEETHAM & SHARP, 2010

DIGITAL LITERACY
FRAMEWORK

EIGHT ESSENTIAL ELEMENTS OF DIGITAL LITERACIES

THE ESSENTIAL ELEMENTS OF DIGITAL LITERACIES
Belshaw
go.nmc.org/belshaw



In a seminal digital literacy analysis, Doug Belshaw organized characteristics and principles of digital literacy that were known at the time, and pushed them further. His framework integrates or builds on existing frameworks for digital literacy development and transformation. An eight-limbed approach was broken down into C-words, or components of digital capacity. The first four are skillsets, while the last four are mindsets.

This work is a derivative of Doug Belshaw's "Essential Elements of Digital Literacies" (digitalliteracies/wiki/Diagrams) under CC 4.0 Attribution license.

BELSHAW, 2014

8 ELEMENTS OF DIGITAL
LITERACY

DIGITAL LITERACY FRAMEWORK

British Columbia
go.nmc.org/bcdf

Literacy is the interest, attitude and ability of individuals to use technology and communication tools appropriately to access, integrate, analyze and evaluate information, construct new knowledge, and create and communicate with others."

The framework draws out technology competence with a large focus on personal and social connections.

BRITISH COLUMBIA, K12,
USA

DIGITAL LITERACY
FRAMEWORK

KEY ASPECTS INCLUDE

- Research and Information Literacy
- Critical Thinking, Problem Solving, and Decision Making
- Creativity and Innovation
- Digital Citizenship
- Communication and Collaboration
- Technology Operations and Troubleshooting

DIGITAL FRAMEWORKS FOR TEACHERS (4)

DIGITAL TRANSFORMATION: A FRAMEWORK FOR ICT LITERACY

ETS National Testing Service
etsdt.org

Understanding how society grapples with digital technology, “ICT literacy is using digital communications tools, and create information in a knowledge society.”

ACCESS knowing about and knowing how to collect and/or retrieve information.	MANAGE applying an existing organizational or classification scheme.	INTEGRATE interpreting and representing information. It involves summarizing, comparing, and contrasting.	EVALUATE making judgments about the quality, relevance, usefulness, or efficiency of information.
--	--	---	---

EDUCATIONAL TESTING SERVICE (ETS), USA, 2001

INFORMATION COMMUNICATION TECHNOLOGY (ICT)

There is a heavy focus on both the social and technological aspects, with digital literacy represented as a structural and variable.

DEVELOPING DIGITAL LITERACIES

Jisc **5**
go.nmc.org/jiscdev

A combination of media, information, and digital literacies, this framework draws upon the work of Beetham and Sharpe. While emphasizing individual ownership of learning, the guide also describes institutional strategies.

Jisc states, “Digital literacies are those capabilities which fit an individual for living, learning and working in a digital society... Digital literacy looks beyond functional IT skills to describe a richer set of digital behaviours, practices and identities. What it means to be digitally literate changes over time and across contexts, so digital literacies are essentially a set of academic and professional situated practices supported by diverse and changing technologies.”

This definition can be used as a starting point to explore what key digital literacies are in a particular context, such as an institution, service, department, subject area or professional environment.

© 2017, NMC An NMC Horizon Project Strategic Brief Page 7

DIGITAL LITERACY FRAMEWORKS

JISK, UK, 2018

DEVELOPING DIGITAL LITERACIES

6 2016 MASSACHUSETTS DIGITAL LITERACY AND COMPUTER SCIENCE (DLCS) CURRICULUM FRAMEWORK

Massachusetts Department of Elementary and Secondary Education
go.nmc.org/massdclcs

There is also perspective on digital literacy implementation as it offers concepts to guide teaching and learner support:

This framework is aimed at K-12 education, but is also relevant to higher education. In spite of the title, it focuses more on digital literacy than computer science, offering four “strands” of topics and standards:

COMPUTING & SOCIETY	COMPUTING SYSTEMS
DIGITAL TOOLS & COLLABORATION	COMPUTATIONAL THINKING

Learning Digital literacy and computer science ideas should be explored in ways that stimulate curiosity, create enjoyment, and develop depth of understanding.	Teaching An effective program is based on a carefully designed set of content standards that are clear and specific, focused, and articulated over time as a coherent sequence.	Equity All students should have a high quality digital literacy and computer science program that prepares them for college and a career.
Literacy Across the Content Areas An effective digital literacy and computer science program builds upon and develops students’ literacy skills and knowledge.	Assessment Assessment of student learning in digital literacy and computer science should take many forms to inform instruction and learning.	Planning and Support An effective digital literacy and computer science program requires coherent district-wide planning and ongoing support for implementation.

MIT, USA, 2016

DIGITAL LITERACY & COMPUTER SCIENCE CURRICULUM FRAMEWORK



Young adults' information literacy skills

Young adults:

- consider themselves to have good information literacy skills, when in fact many do not.
- rely heavily on information obtained from the web and social networks,
- may not be able to judge the authenticity, validity, and reliability of digital information,
- may share misinformation among themselves. (This can be particularly problematic in some contexts, e.g. of health/well-being information).

- Professionals within the fields of librarianship (primarily) and information science are the experts that educate people to develop critical thinking about the credibility of online information.
- Professionals from journalism, information systems and education also contribute to the war against fake news and disinformation





Takeaway - Overview of the combined concept Media and Information Literacy

- ★ *A media/information literate person must not only be a consumer of information and media content, but also a **responsible information seeker**, who is able to take advantage of a diverse **range of information and communication tools and media.** (UNESCO, 2013)*

Resource: <https://tise2015.kku.ac.th/drupal/?q=node/18>



Image source: Dreamstime



Image source: <https://pixabay.com/illustrations/hands-smartphone-social-media-1167618/>



PRACTICE!!



Image by pixabay <https://pixabay.com/illustrations/background-7371258/>



Image by pixabay



2nd Activity: QUIZ Choose the right answer!

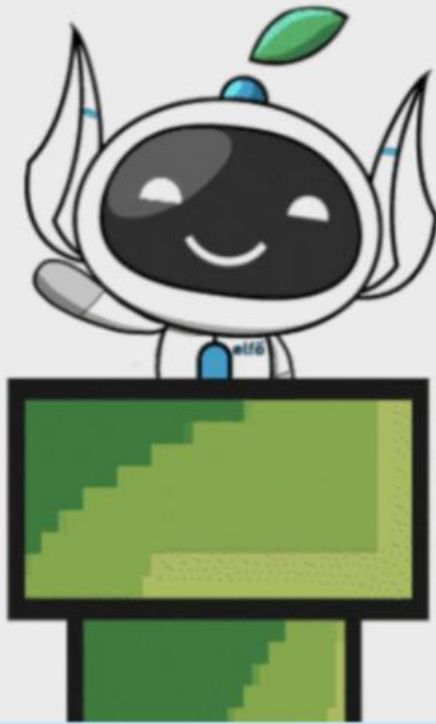


Image by pch.vector on Freepik

2nd ACTIVITY!!





QUIZ! QUESTION 1

1. As members of the digital citizenship, obtaining digital skills helps HE students to:

- a. participate actively, continuously, and responsibly mostly in online communities
- b. participate actively, continuously, and responsibly in local communities
- c. participate actively, continuously, and responsibly in local, national, global, online, and offline communities.
- d. participate actively, continuously, and responsibly only in offline line communities



CORRECT ANSWER

1. As members of the digital citizenship, obtaining digital skills helps HE students to:

a. participate actively, continuously, and responsibly mostly in online communities

b. participate actively, continuously, and responsibly in local communities

c. participate actively, continuously, and responsibly in local, national, global, online, and offline communities.

d. participate actively, continuously, and responsibly only in offline line communities



QUIZ! QUESTION 2

2. "Digital competence is considered to be the person's knowledge, skills and attitudes to 'efficiently' access, use, create & share digital resources, as well as communicate and collaborate with others using digital technologies in order to achieve specific goals". What is 'efficiently access' considered? You can choose more than 1 answer.

- a. Freely
- b. Easily
- c. Safely
- d. Ethically



CORRECT ANSWER

2. "Digital competence is considered to be the person's knowledge, skills and attitudes to 'efficiently' access, use, create & share digital resources, as well as communicate and collaborate with others using digital technologies in order to achieve specific goals". What is 'efficiently access' considered? You can choose more than 1 answer.

- a. Freely
- b. Easily
- c. Safely**
- d. Ethically**



BACK 2 BASICS

BRIDGING THE GAP BETWEEN HIGHER EDUCATION
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Information Literacy

Part 2 – Searching Techniques

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LEARNING OBJECTIVES

->To apply effectively search techniques, using either command search or menus, in various search engines and databases and for various purposes.





WARM UP
ACTIVITY!!



Share with us your experience on helpful search practices!

OPEN DISCUSSION

Image by pch.vector on Freepik



THEORY!!



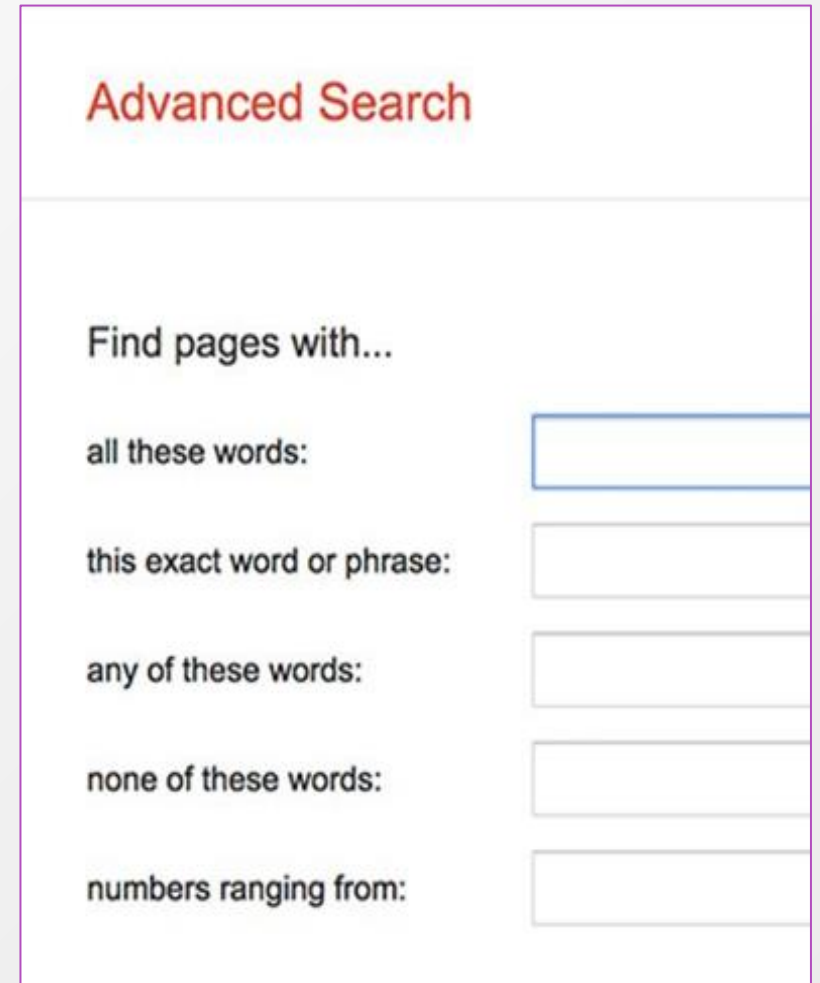
Image by pixabay

What do we mean by advanced searching?

Although popular Google's search engine is very "intelligent", so that by typing keywords it returns the relevant search results for us, it additionally **provides advanced search techniques for more complex searches, in a drop-down list**

- **excluding** keywords
- searching for informational material **in a specific time period**

Check here: https://www.google.com/advanced_search



The image shows a screenshot of the Google Advanced Search interface. At the top, the title "Advanced Search" is displayed in red. Below the title, the heading "Find pages with..." is followed by five search options, each with a corresponding input field:

- all these words:
- this exact word or phrase:
- any of these words:
- none of these words:
- numbers ranging from:

Image source:

<https://newsinitiative.withgoogle.com/resources/trainings/advanced-search-researching-with-precision/>

When do we use advanced searching?

Many databases and search engines offer an **advanced search option**

- Each database or search engine may **use Boolean operators in slightly different ways.**
- Therefore, it is important first to **check** how Boolean operators work in the specific database or search engine you're using.

Source: Boolean Operators | Quick Guide, Examples & Tips

<https://www.scribbr.com/working-with-sources/boolean-operators/>

Advanced search Examples (cont.)

- Use of boolean Operators

Boolean operator	Function	Example
AND	Provides results that contain both or all keywords	paradigm AND syntagm
OR	Provides results that contain either keyword	meteor OR meteorite
NOT or AND NOT	Provides results that contain the first keyword but not the second	football NOT soccer
Quotation marks ""	Provides results with the exact phrase	"Newtonian mechanics"
Parentheses ()	Allows you to group together keywords and control the order in which the terms will be searched	(rural OR urban) AND sociology
Asterisk *	Provides results that contain a variation of the keyword	Develop* This will return results containing words such as "development," "developer," and "developing."

Source: Boolean Operators | Quick Guide, Examples & Tips

<https://www.scribbr.com/working-with-sources/boolean-operators/>

Advanced search examples (cont.)

- Terms exclusion

The screenshot shows a Google search for "universities Thessaloniki -macedonia". The search bar is at the top with the Google logo on the left and search, voice, and image icons on the right. Below the search bar, the first result is from "https://www.auth.gr" with the title "Faculties & Schools – ARISTOTLE UNIVERSITY OF ...". The snippet lists various faculties: Faculty of Education, Faculty of Theology, Faculty of Philosophy, Faculty of Sciences, Faculty of Law, and Faculty of Physical Education and ... The second result is also from "https://www.auth.gr" with the title "Postgraduate Studies – ARISTOTLE UNIVERSITY OF ...". The snippet states: "Currently, there are many Postgraduate Study Programmes operating in the Aristotle University of Thessaloniki, among which there are some Inter-departmental ...". The third result is from "https://www.topuniversities.com" with the title "Aristotle University of Thessaloniki". The snippet says: "Aristotle University of Thessaloniki is one of the top public universities in Thessaloniki, Greece. It is ranked #651-700 in QS World University Rankings 2023." The fourth result is from "https://www.act.edu" with the title "City of Thessaloniki". The snippet says: "Most importantly, Thessaloniki is a lively university town with well over 100,000 university students. Literally, more than 1 out of every 10 residents is a ...". The fifth result is from "https://anatolia.edu.gr" with the title "CTY Greece - Anatolia College". The snippet says: "Help us achieve our goal by giving to our cause, empowering Greek youth through education."

Advanced search examples (cont.)

- Use of phrases

'Department of Economic studies'

- **Truncation** (e.g. if you are looking for information on gardening you can **broaden** your term by writing:)

*garden**

→ Results will include documents containing the following words:
gardens, garden, gardener, gardening, and so on.

Using parentheses in command search

- You can create more complex queries in command search by **using parentheses**.

(gasoline NOT diesel) AND hybrid electric AND vehicle

- **Priority rules** are similar with those used in mathematical statements.

Mini Quiz

Quiz (answer individually): Search Better - Search Better Quiz

<https://edu.gcfglobal.org/en/search-better-2018/search-better-quiz/1/>

Further reading

- Link: How to Refine Your Google Search and Get Better Results

<https://medium.com/geekculture/how-to-refine-your-google-search-and-get-better-results-c774cde9901c>

- Link: Search Better - Get More Out of Google Search

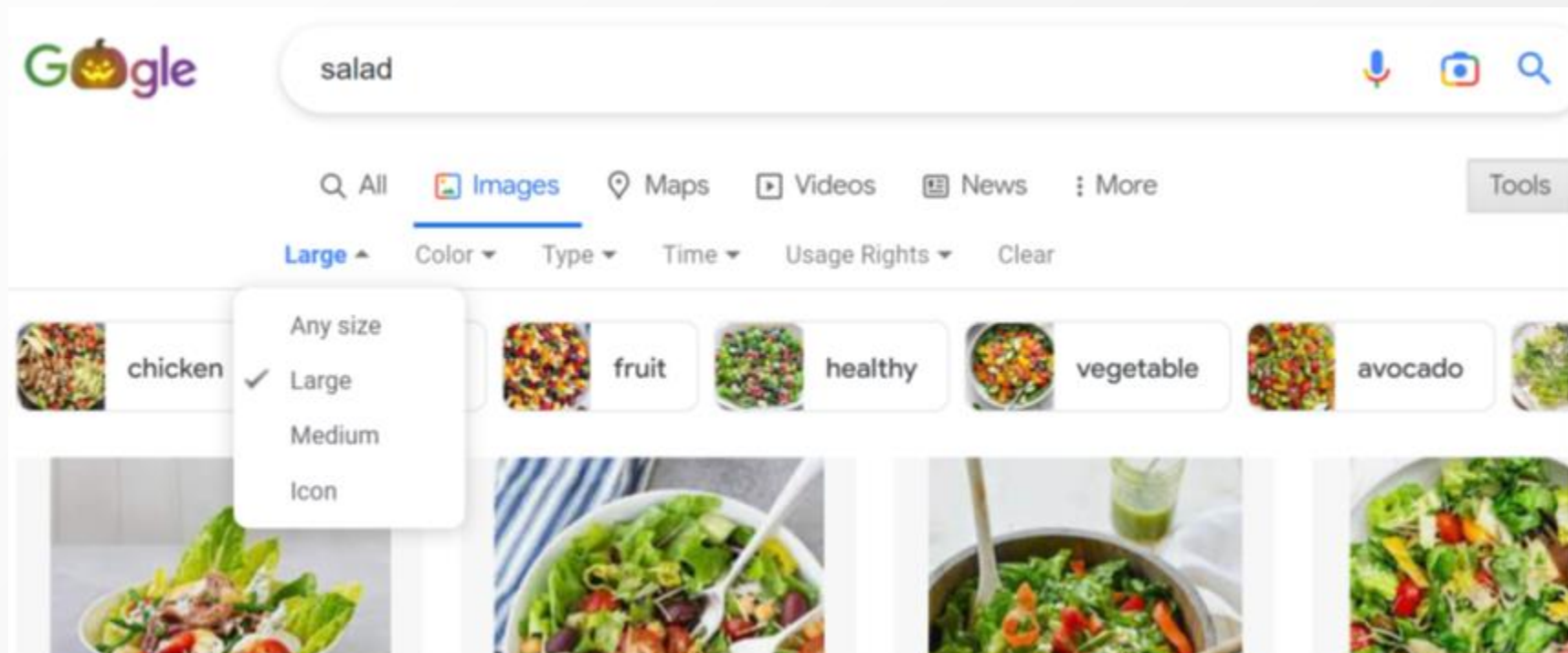
<https://edu.gcfglobal.org/en/search-better-2018/get-more-out-of-google-search/1/>

- Video: How Google Search Works (in 5 minutes)

<https://www.youtube.com/watch?v=0eKVizvYSUQ>

Further reading - Image search

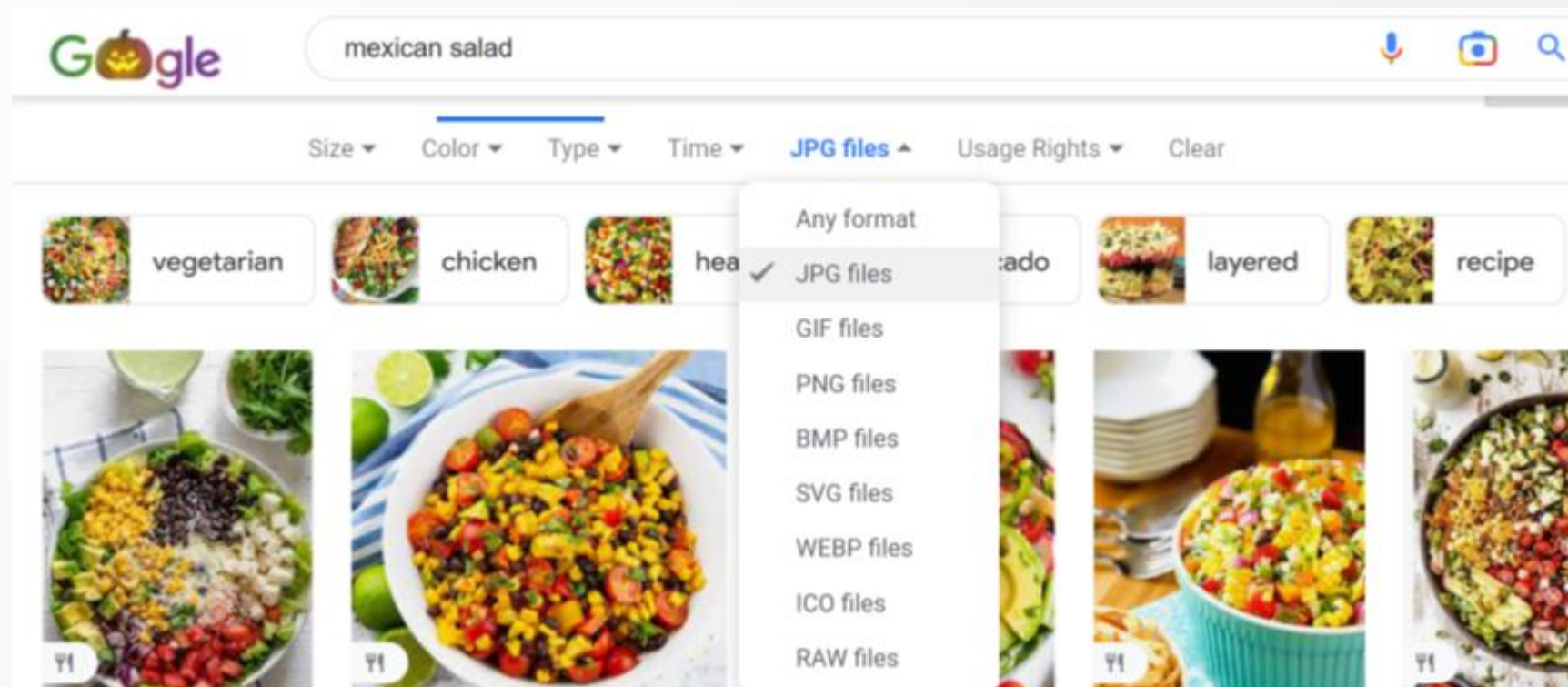
Prefer the **largest image size available** (image.google.com, Tools).



Further reading - Search for specific image file type (1/2)

Let's search for **mexican salad filetype:jpg**,

- One way is to click on **Tools**



Further reading - Search for specific image file type (2/2)

- Another way is to write in **command search**:

mexican salad filetype:jpg

- Caution: use **no spaces!!!**

Advanced Google Image Search

https://www.google.com/advanced_image_search

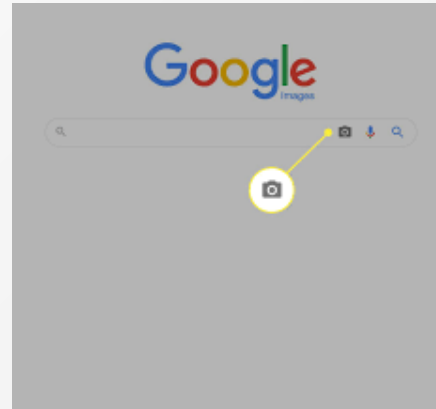


Image source: <https://www.lifewire.com/what-is-reverse-image-search-5205187>

Takeaway - Subsection: Searching techniques for academic, workplace, or everyday life contexts.

- Simple Google command search is not the only searching technique.
- There are effective search techniques using either command search or menus in various search engines, databases and contexts.





PRACTICE!!



Image by pixabay <https://pixabay.com/illustrations/background-7371258/>



Image by pixabay



ACTIVITY 2

2nd Activity: Try a complex search





BACK 2 BASICS

BRIDGING THE GAP BETWEEN HIGHER EDUCATION
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Information Literacy

Part 3 – Popular sources of information and knowledge for academic, workplace, and everyday life contexts.

2021-1-PT01-KA220-HED-000023543

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LEARNING OBJECTIVES

- >To identify and access popular on-line sources of information and knowledge for academic, workplace, and everyday life contexts.
- >To compare different online source types.





**WARM UP
ACTIVITY!!**



Which popular sources of information and knowledge do you use?

OPEN DISCUSSION

Image by pch.vector on Freepik



THEORY!!



Image by pixabay

Popular sources of information or knowledge

Following list items are presented in **proposed order**:

everyday life -> workplace -> academic use

(no discrete limits between items)

- Online Discussion Forums
- Websites (including blogs)
- Generative AI tools (e.g., ChatGPT)
- Crowdsourced encyclopedias (e.g., Wikipedia)
- MOOCs
- Libraries (academic, public)
- Repositories
- Academic and scholarly databases



Image source:
activity3/

<https://sure.nlb.gov.sg/tng/surevivors-activity3/>

Online Discussion Forums

Electronic platforms for:

- discussion,
- participation
- knowledge sharing,
- information dissemination.

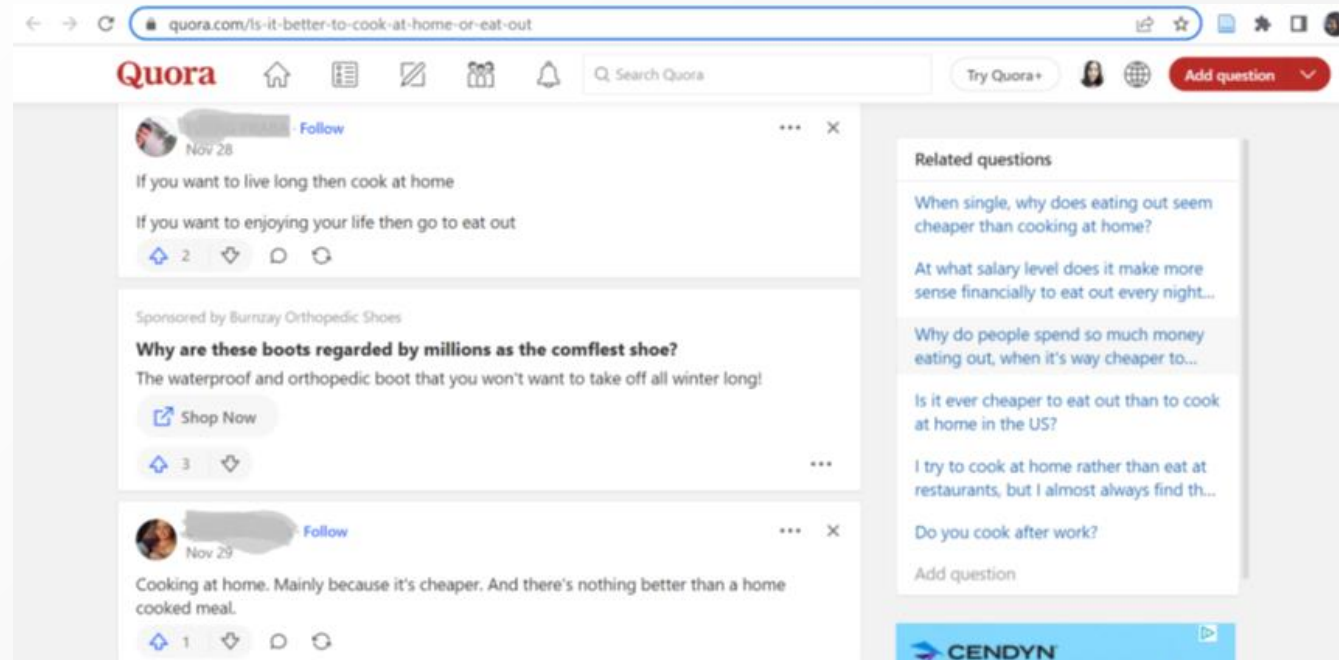
Examples:

- online community forums,
- social media platforms



Image source: <https://elearningindustry.com/how-create-engaging-online-discussion-forums>

Online Discussion Forums (cont.)



Screenshot from *thread* (discussion) at Quora forum (sign-up needed).

Discussion topic: "Is it better to cook at home or eat out?" accessed 12 Dec 2022

Source:

Is it better to cook or eat out in the UK? Quora. (n.d.). Retrieved December 12, 2022, from <https://www.quora.com/Is-it-better-to-cook-or-eat-out-in-the-UK>

Online Discussion Forums (cont.)

- huge quantity of online discussions available
- access to different views and approaches
- support deeper understanding of a topic
- some posts may be of low quality or abusive

(Onyema et al, 2019)



Image source:

<https://universitieservices.wiley.com/9-student-engagement-strategies-for-discussion-forums/>

Use of generative AI tools (e.g., ChatGPT) in academic settings



- While AI can generate useful ideas and **can help** with certain tasks, it should be used as a tool **to supplement, not replace, your academic work.**
- AI-generated text should not replace primary sources or sound academic research.
- However, it can be **a good starting point.**
- You should always **verify the information you obtain from AI** with credible and primary sources.

Video: Using AI Ethically in academic settings (critical approach, ethical use)

<https://monash.au.panopto.com/Panopto/Pages/Viewer.aspx?id=89ed71d3-972c-4939-b6ce-afd50109d15e&start=155.505504>

Further reading:

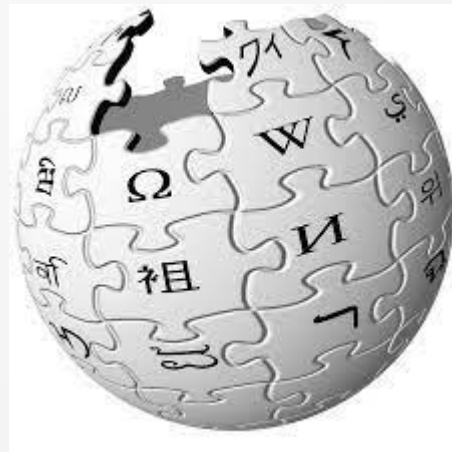
Using artificial intelligence. Learn HQ. (2023, May 2). <https://www.monash.edu/learnhq/build-digital-capabilities/create-online/using-artificial-intelligence> accessed 1st July 2023

Source: OpenAI. "ChatGPT." Version 4.0, 2023, www.openai.com.

Image source: <https://www.vecteezy.com/free-vector/ai-tools>

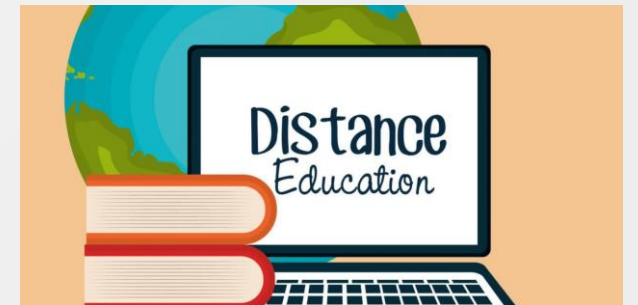
What about Wikipedia?

- Although **Wikipedia** is not considered a reliable source,
- as its content can be edited by anyone,
- however, it **can be a good starting point**,
- for general information and finding other sources.
- **References and further reading section at the bottom** of the Wikipedia article.



Massive Open Online Courses (MOOCs)

- A new model of distance education
- May offer video lessons, announcements, forums, and assessments (quizzes, exercises, etc.) (Hsu, 2021; Gardner & Brooks, 2018).
- Either self-paced (flexible deadlines), or fixed-schedule (Ihantola et al., 2020).
- May offer certificate of completion (with some fee) (Chuang & Ho, 2016).
- Popular English-language MOOC educational platforms include:
 - Coursera,
 - edX,
 - FutureLearn,
 - Udacity
- A popular Greek MOOC platform is <https://mathesis.cup.gr/>



Further reading: Online Courses

Links:

Boosting your Employability through **MOOCs**

<https://libraryblog.wordpress.hull.ac.uk/2022/03/22/boosting-your-employability-through-moocs/> accessed 17 Jan 2023

Useful **guidelines** about **accessing and evaluating** online courses

<https://libguides.hull.ac.uk/digitalstudent/educationaltools> accessed 17 Jan 2023

Academic Libraries

You can find **helpful print sources** in your **institution's library**. These include:

- Journal articles
- Books
- Encyclopedias
- Newspapers and magazines

Visit <https://nmsu.libguides.com/sources/types>

Academic and scholarly databases

- Specialist search engines for **academic and research purposes**.
- Google Scholar, Scopus and ScienceDirect, for example, allow you to search for **academic articles**.

Google Scholar

Google Scholar information and data literacy

Articles About 3,210,000 results (0.09 sec) My profile

Any time
Since 2022
Since 2021
Since 2018
Custom range...

Sort by relevance
Sort by date

Any language
Search English pages

Any type
Review articles

include patents
 include citations

Create alert

Data literacy for researchers and data librarians [PDF] sagepub.com
T Koltay - Journal of Librarianship and Information Science, 2017 - journals.sagepub.com
... This paper describes **data literacy** and emphasizes its importance. **Data literacy** is vital for ...
The main goal of this analysis is to provide a proper definition of **data literacy**, to identify some ...
☆ Save Cite Cited by 163 Related articles All 3 versions

[HTML] Incorporating **data literacy** into undergraduate **information literacy** programs in the social sciences: A pilot project [HTML] emerald.com
E Stephenson, PS Caravello - Reference services review, 2007 - emerald.com
... **data literacy** as a component of **information literacy** in sociology. We describe and analyze the **data literacy** ... of numerical **information** resources and concepts into **information literacy** skill ...
☆ Save Cite Cited by 114 Related articles All 5 versions

[PDF] **Information literacy, statistical literacy, data literacy** [PDF] iassistquarterly.com
M Shields - IASSIST quarterly, 2005 - iassistquarterly.com
... , statistical **literacy** and **data literacy**. As such, all three literacies are inter-related. It is difficult to promote **information literacy** or **data literacy** without promoting statistical **literacy**. While ...
☆ Save Cite Cited by 285 Related articles All 3 versions

Research data literacy [PDF] rero.ch
R Schneider - European Conference on Information Literacy, 2013 - Springer

earch **data**, the paper will mainly ... **information literacy**, namely

Ryan, E. (2022, November 3). *How to find sources: Scholarly articles, books, etc.*. Scribbr. Retrieved December 28, 2022, from <https://www.scribbr.com/working-with-sources/finding-sources/>

Google Scholar

- Popular search engine for **academic and research** purposes.
- You can find books and articles that might be **hard to find in a general-purpose search engine**.
- It is recommended to **be more precise while formulating your search query** in Google Scholar's command search, comparatively to common Google command search, **by using boolean operators, wildcards and so on**.
- Its **"Cited by"** function lets you see the number of times a source has been cited.
- Easy citation creation by clicking on ("Cite)

Digital repositories

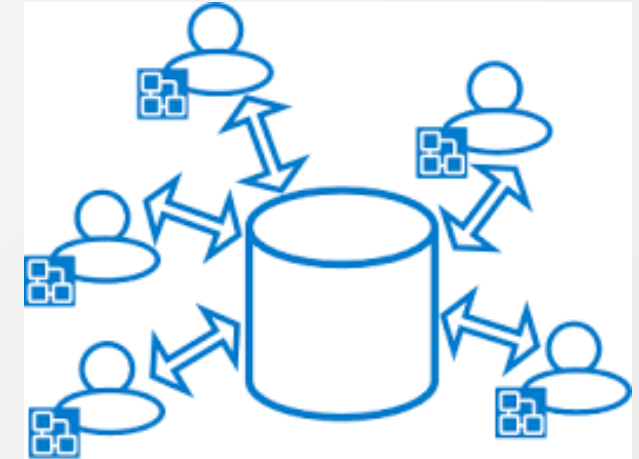
Digital repositories are **information systems** that:

- collect,
- store,
- manage,
- preserve, and
- provide access to **digital content**.

Some repositories provide **open access** at least in part.

(Heery & Anderson 2005)

Image source: <https://www.datanamic.com/repository/>



Institutional repositories (IRs)

Content includes:

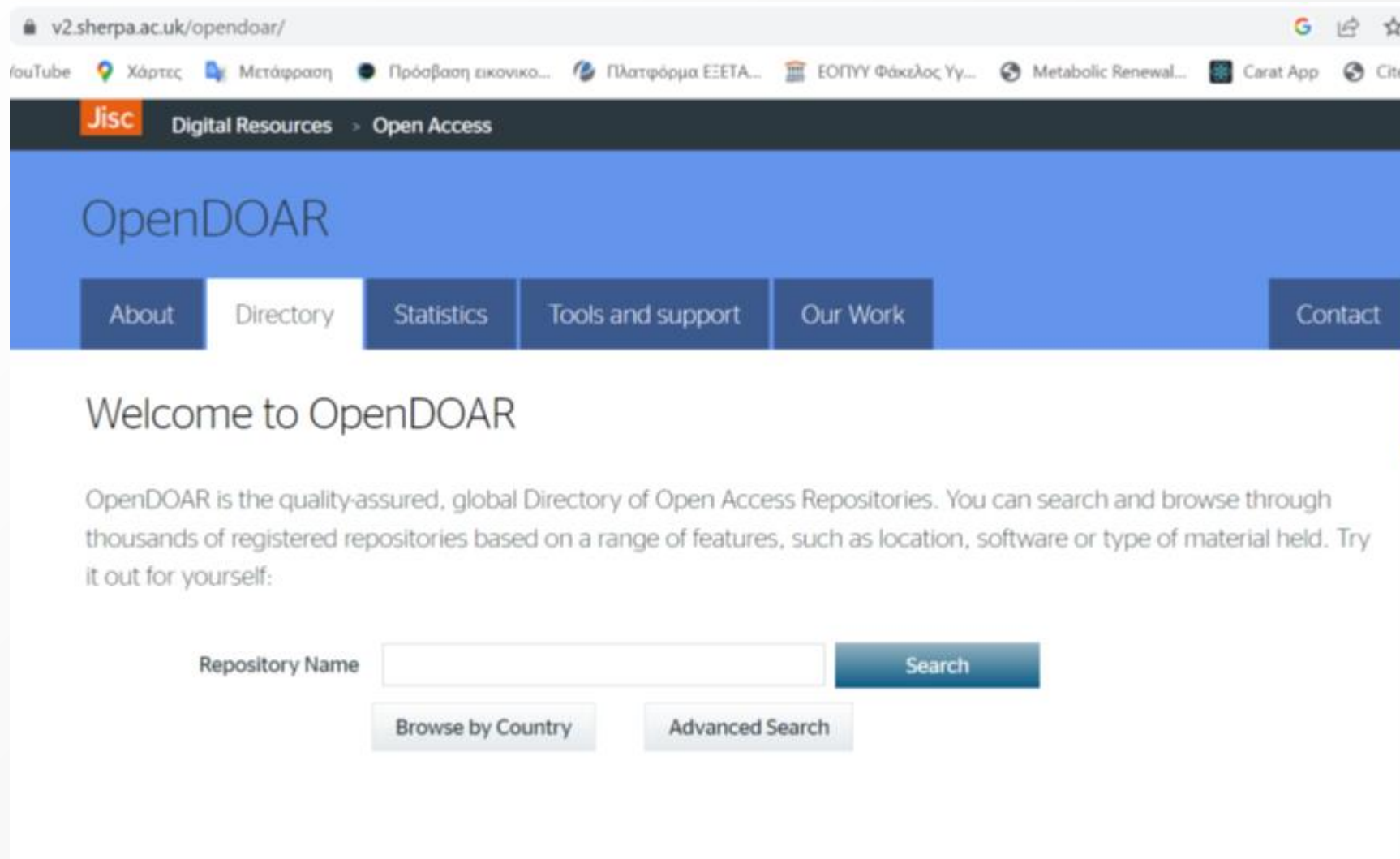
- journal articles,
- conference proceedings,
- symposiums,
- magazines,
- review articles,
- research data,
- dissertations,
- theses,
- teaching material (e.g. course notes), etc.



Image source: University of macedonia Institutional Repository of Academic Research

<https://ruomo.lib.uom.gr/?locale=en>

Further reading - OpenDOAR: Digital Repository of Directory of Open Access Repositories



The screenshot shows the OpenDOAR website homepage. The browser address bar displays 'v2.sherpa.ac.uk/opendoar/'. The page features a dark blue header with the 'Jisc Digital Resources > Open Access' navigation. Below this is a light blue banner with the 'OpenDOAR' logo. A dark blue navigation bar contains buttons for 'About', 'Directory', 'Statistics', 'Tools and support', 'Our Work', and 'Contact'. The main content area has a white background with the heading 'Welcome to OpenDOAR'. A paragraph of text describes the service as a quality-assured, global Directory of Open Access Repositories. Below the text is a search form with a 'Repository Name' label, an input field, and a 'Search' button. Two additional buttons, 'Browse by Country' and 'Advanced Search', are located below the search form.

v2.sherpa.ac.uk/opendoar/

Jisc Digital Resources > Open Access

OpenDOAR

About Directory Statistics Tools and support Our Work Contact

Welcome to OpenDOAR

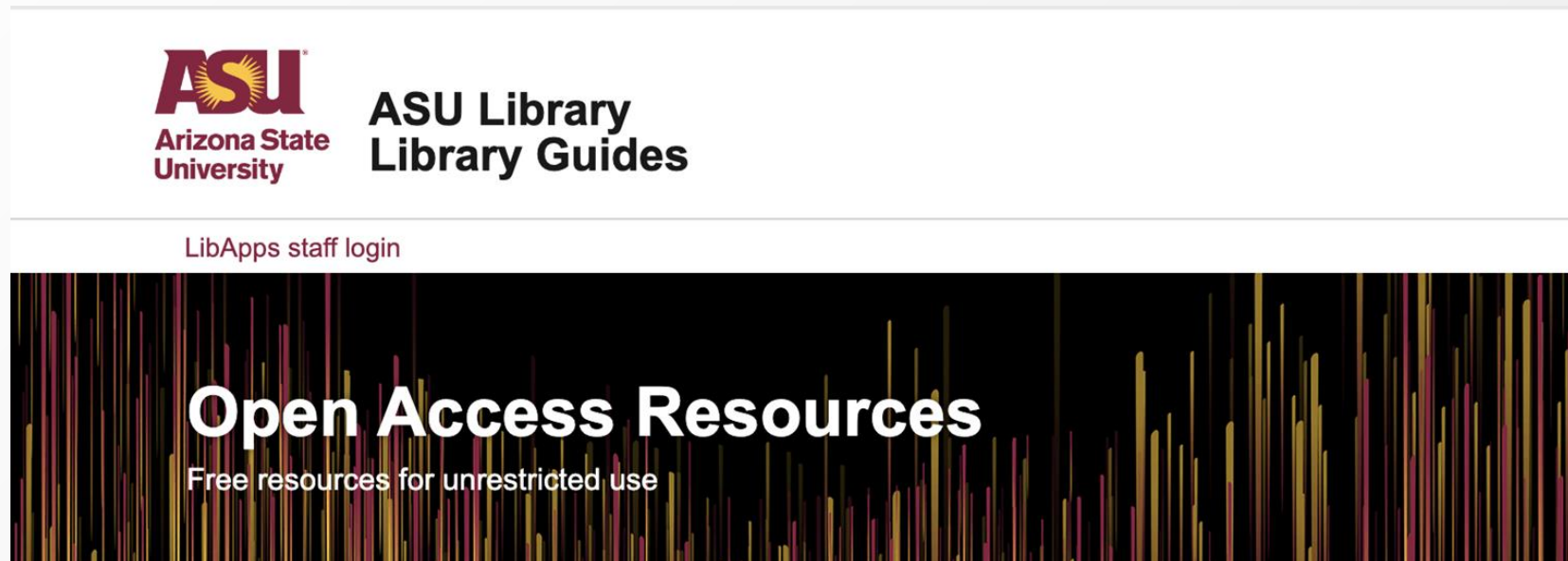
OpenDOAR is the quality-assured, global Directory of Open Access Repositories. You can search and browse through thousands of registered repositories based on a range of features, such as location, software or type of material held. Try it out for yourself:

Repository Name [Search](#)

[Browse by Country](#) [Advanced Search](#)

Open access statistics repositories

LibGuides: Open Access Resources: Statistics: Data Repositories. Library guides. (n.d.). Retrieved January 4, 2023, from <https://libguides.asu.edu/openaccessresources/statistics>



The screenshot shows the ASU Library Library Guides website. At the top left is the ASU Arizona State University logo. To its right is the text "ASU Library Library Guides". Below this is a link for "LibApps staff login". The main content area features a dark background with a pattern of vertical lines in various colors. Overlaid on this background is the text "Open Access Resources" in large white font, with "Free resources for unrestricted use" in smaller white font below it.

An example of a search strategy

Search strategy for scientific purposes using boolean searching (Smits et al., 2022)

- Researchers searched for academic papers in the following scientific databases: ACM Digital Library, PubMed, Web of Science, IEEEXplore, PhilPapers, and Google Scholar.
- More specifically, they searched for the existence of the following terms in the title or abstract of the papers by using boolean operators:

("well-being OR wellbeing") AND ("patient") AND ("design" OR "moral*" OR "ethic*") AND ("technology" OR "digital" OR "ehealth" OR "mhealth" OR "telemedicine" OR "telehealth" OR "electronic health" OR "mobile health" OR "Mobile*" OR "smart*" OR "internet")*

Source: Smits, M., Kim, C. M., van Goor, H., & Ludden, G. D. (2022). From Digital Health to Digital Well-being: Systematic Scoping Review. *Journal of medical Internet research*, 24(4), e33787.

Takeaway - Popular sources of information and knowledge .

There is a variety of online sources.

Following list items are in proposed order:

everyday life -> workplace -> academic use

(no discrete limits between items)

1. Online Discussion Forums
2. Websites (including blogs)
3. Generative AI tools (e.g., ChatGPT)
4. Crowdsourced encyclopedias like Wikipedia
5. MOOCs
6. Libraries
7. Repositories
8. Academic and scholarly databases



PRACTICE!!



Image by pixabay <https://pixabay.com/illustrations/background-7371258/>



Image by pixabay



ACTIVITY 2



Activity: Visit a forum

1. Visit <https://it-maniacs.com/best-and-most-popular-forums-message-boards-and-online-communities-top-30/>
2. Select Quora (sign-up needed).
3. Select a discussion of your choice. Examples:
 1. First year in college
 2. Master in Information Systems

Image by pch.vector on Freepik

Share your comments!



ACTIVITY 3



Activity: Compare online sources

Share with us your perspectives on the advantages and drawbacks of various online source types you have used.



BACK 2 BASICS

BRIDGING THE GAP BETWEEN HIGHER EDUCATION
AND LABOR MARKET BY FOSTERING DIGITAL SKILLS

Information Literacy

Part 4 - Guidelines for evaluating online content

2021-1-PT01-KA220-HED-000023543

This project has been funded with support from the European Commission. This publication and all its contents reflect the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.



**Co-funded by
the European Union**

LEARNING OBJECTIVES

- > Recognize the importance of thinking critically about the online information.
- > Evaluate on-line content using the CRAAP test.
- > Discern credible from non-credible online content.
- > Develop critical attitude against online content credibility.





WARM UP ACTIVITY!!



Can you think of some criteria for evaluating online content?

OPEN DISCUSSION

Image by pch.vector on Freepik



THEORY!!



Image by pixabay

Online content evaluation issues

- Absence of information quality standards,
- Ease in altering data/information,
- Some online content is authoritative...
- ...some other is merely opinionated.
- Be aware of *confirmation bias*
 - we tend to seek out and prefer information that supports our preexisting beliefs, ignoring any information that contradicts those beliefs.
- There is need to develop critical approach towards online content and even our own thinking.



Source:

Viviani, M., & Pasi, G. (2017). Credibility in social media: opinions, news, and health information—a survey. *Wiley interdisciplinary reviews: Data mining and knowledge discovery*, 7(5), e1209.

Links:

<https://www.allsides.com/media-bias>

<https://www.scribbr.com/faq-category/research-bias/>

The CRAAP test

The CRAAP test helps you evaluate the credibility of a source:

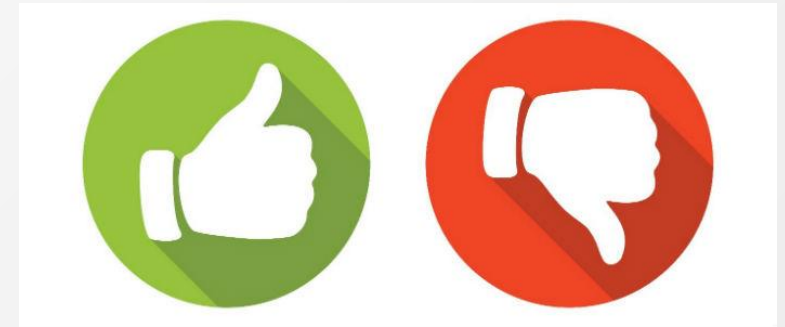
The 5 components of the CRAAP test

- **Currency:** Is the source up-to-date?
- **Relevance:** Is the source relevant to your research?
- **Authority:** Where is the source published? Who is the author? Are they considered reputable and trustworthy in their field?
- **Accuracy:** Is the source supported by evidence? Are the claims **cited** correctly?
- **Purpose:** What was the motive behind publishing this source?

Screenshot taken by <https://www.scribbr.com/working-with-sources/craap-test/>

Tips to discern credible from non-credible online content (1/2)

- Is the author **expert** in the field?
- Is there an “**About Us**” **section**?
- Some **way to contact** the author or organization provided?
- Are the **original sources** mentioned?
- Are there **any links or citations** to other/original sources?
- **Credibility of cited** sources and links?
- Are the **sources** mentioned in an **accurate context**?
- Has the information **been reviewed** by other experts?
- **Too emotive or subjective** writing?
- **Neutral or biased tone** of the **article**?
- **Neutral or biased tone** of the **sources**? The sources the author cited should be unbiased.



Tips to discern credible from non-credible online content (2/2)

- Serious grammatical or orthographic errors?
- Use of vague* terms?
- Use of buzzwords?
- Does the layout look professional? For web sources, the URL and layout should signify that it is trustworthy.
- Author's motivations?
- Does author try to convince you to purchase something? Does the website have sponsored content? This could be a sign of bias.
- Comments-reactions-reviews of readers/audience?

*If something written or spoken is vague, it does not explain or express things clearly. Some examples are: big, small, good, great, light, limited... <https://www.blinn.edu/writing-centers/pdfs/Vague-Words-Tables.pdf>

Source: What Are Credible Sources & How to Spot Them | Examples

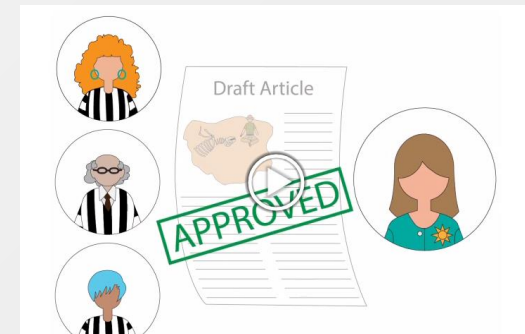
<https://www.scribbr.com/working-with-sources/credible-sources/>

Caution tips when checking online content (1/2)

- Reliability of online (news) sources can vary enormously.
- Beware of grandiose (exaggerated) claims , and critically analyze anything not cited or not backed up by evidence.
- Academic journals are often considered among the most credible sources. Check that they are peer-reviewed* and published in a reputable journal to ensure reliability and high quality.

*A panel of reviewers in the same subject area decide whether a submission should be accepted for publication.

Image source: <https://guides.library.pdx.edu/c.php?g=271329&p=1811862>



Caution tips when checking online content (2/2)

- Search the Internet to find out what other sources say about the site.

Trusted (in general) website domain extensions:

- .edu (educational),
- .gov (government-related),
- .org (non-profit organizations)



References and web links::

Breakstone, J., McGrew, S., Smith, M., Ortega, T., & Wineburg, S. (2018). Why we need a new approach to teaching digital literacy. *Phi Delta Kappan*, 99(6), 27-32.

What Are Credible Sources & How to Spot Them | Examples

<https://www.scribbr.com/working-with-sources/credible-sources/>

Takeaway - Evaluating online content

- Online information evaluation skills develop gradually,
- by **exercising in approaching critically online content**
- The CRAAP test helps you evaluate the credibility of a source.

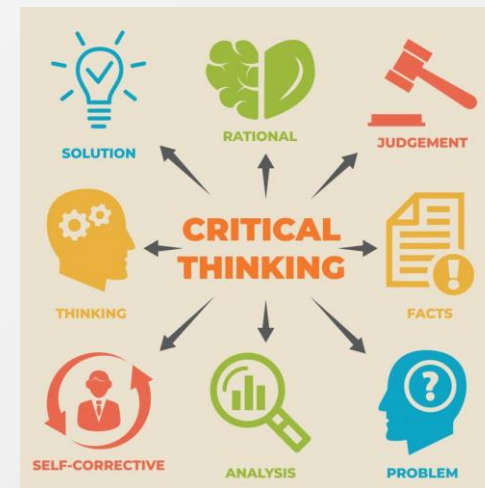


Image source: https://www.pdcourses.net/pdc-news.php?b_id=38&u=prepare-your-students-to-think-critically



PRACTICE!!



Image by pixabay



Image by pixabay <https://pixabay.com/illustrations/background-7371258/>



ACTIVITY 2



Work in pairs! Examine the credibility in each of the following situations.

1. An educational institution's well-written guidelines by its librarian staff about information literacy were last updated in 2009.
2. A blogger writes his experience with climbing, and includes photos and videos in his posts. He also promotes climbing equipment to gain some revenue. He allows commenting to engage readers and build popularity and content freshness. Shall we reject his articles and his climbing experience and related tips/guidelines?
3. Research paper about Information Systems written in 1994. Accessed through Google Scholar.

Image by pch.vector on Freepik



BACK 2 BASICS

BRIDGING THE GAP BETWEEN HIGHER EDUCATION
AND LABOR MARKET BY FOSTERING DIGITAL SKILLS

Information Literacy

Part 4 - Ethical issues related to the use of online information. How to avoid plagiarism.

2021-1-PT01-KA220-HED-000023543

This project has been funded with support from the European Commission. This publication and all its contents reflect the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.



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LEARNING OBJECTIVES

- >Be aware of what is considered as plagiarism.
- >Avoid plagiarism.
- >Cite sources of various types (e.g., text, generative AI, images, diagrams and tables) quickly and effectively.





WARM UP
ACTIVITY!!



What is considered plagiarism? Is this a serious problem?

OPEN DISCUSSION

Image by pch.vector on Freepik



THEORY!!



Image by pixabay

When should we give credit to the ideas of others, and how?

Video (2:53) When should I give credit to the ideas of others?

https://www.youtube.com/watch?v=XQ1hXDwr_7c

Image source:

<https://www.universitystudent.org/memes/plagiarism>

Me waiting for the percentage of plagiarism to be revealed on my assignment



What is considered as plagiarism?

- the use of material or ideas from a source without referencing it (properly)
 - (copy-paste) material from a textbook, a journal, the Web,
 - (copy-paste) course material (lecture notes),
 - computer programming source code,
 - other student's work (presentation, source code etc),

Plagiarism is:

- a form of cheating,
- an academic offense,

Link: [6 Consequences of Plagiarism](#)

<https://www.ithenticate.com/resources/6-consequences-of-plagiarism> accessed 15 December 2022



Plagiarism identification

- Turnitin is a tool that identifies levels of *similarity* between your writing and other students assignments or published work.
- You can read more about **using Turnitin in higher education** at <https://lo.unisa.edu.au/mod/book/tool/print/index.php?id=252146>



How to avoid committing plagiarism (1/2)

- **Store** (e.g., write down) **your sources** while accessing and gathering content.
- **Credit** and **cite** your sources.
- You still must cite the sources of information or ideas while:
 - paraphrasing (that is, giving the meaning in different words) or
 - summarizing
- Insert exact text **in quotation marks**:
 - 'exact text from another source'



How to avoid committing plagiarism (2/2)

You can use:

- an online *citation generator*.
- a **plagiarism checking tool** (free versions available).
 - <https://www.scribbr.com/plagiarism-checker/>
 - <https://www.grammarly.com/plagiarism-checker>



VISIT Link Avoiding Plagiarism (nice video with the legal aspect of plagiarism in 3rd screen)

<https://www.oercommons.org/courses/avoiding-plagiarism/view> accessed 15 December 2022

An example of plagiarism checker tool usage

The screenshot shows the Grammarly website interface for a plagiarism scan report. At the top, the Grammarly logo and navigation menu are visible, including 'Instant Grammar Checker' with sub-items: '1 Correctness', '2 Tone suggestions', '3 Full-sentence rewrites', and '4 Custom style guides'. A 'Try Now' button is highlighted. The main heading is 'Plagiarism Scan Report'. Below it are two buttons: 'Check Grammar' and 'Make it Unique'. The scan statistics are: Characters: 355, Words: 52, Sentences: 3, and Speak Time: 1 Min. On the right, there are two circular progress indicators: a red one for '0% Plagiarized' and a green one for '100% Unique'. Below these is a blue progress bar showing 100% completion. At the bottom right, there is a 'View Plagiarized Sources' link. The bottom navigation bar includes 'GO PRO' with a diamond icon, 'Deep Search', 'NO ADS', 'SUPPORT', 'Accurate Reports!', and a 'Go Pro' button.

Activity: Create your citation by using an online tool!

Let's say that we want to create a citation for the following URL:

<https://liquid-state.com/healthcare-needs-digital-health-apps/>

1. Visit <https://www.citethisforme.com/> .
2. Click on “Create citations” button.
3. Choose your source: Website.
4. Insert URL and click Search.
5. Click Cite.
6. Check the result and fill-in additional available details if needed.

Differences between citation, references, and bibliography (-> image in next slide)

- **Citation:** the disclosing within the main body of your project (such as article or assignment) that specific content (e.g. text, image, statistics etc) is taken from another source.
- **References:** a list containing all sources cited while writing the report. Includes only in-text citations.
- **Bibliography:** a list of the sources that you used for your document (e.g. for idea generation and consultation), whether cited or not.

Source: Difference Between Reference and Bibliography

<https://keydifferences.com/difference-between-reference-and-bibliography.html>

In-text citation vs reference list

In-text Citations

You use only a few basic details

The researcher describes a virtuous person as one “who acts and feels as he or she should, for the right reason considering the circumstances” (Alvaro, 2017, p.770).

Reference List

You use ALL of the details

Alvaro, C. (2017). Ethical veganism, virtue and greatness of the soul. *Journal of Agricultural and Environmental Ethics*, 30(6), 765-781. <https://doi.org/10.1007/s10806-017-9698-z>

Image source: <https://kpu.pressbooks.pub/apastyle/chapter/two-types-of-citation/>

Citation styles

There are **many ways (styles)** of citing sources for your project. The citation style sometimes **depends on the academic discipline** involved. For example:

- **APA**
- **MLA**
- **Chicago/Turabian**

You will need to **consult with your professor** to determine what is required in your specific course.

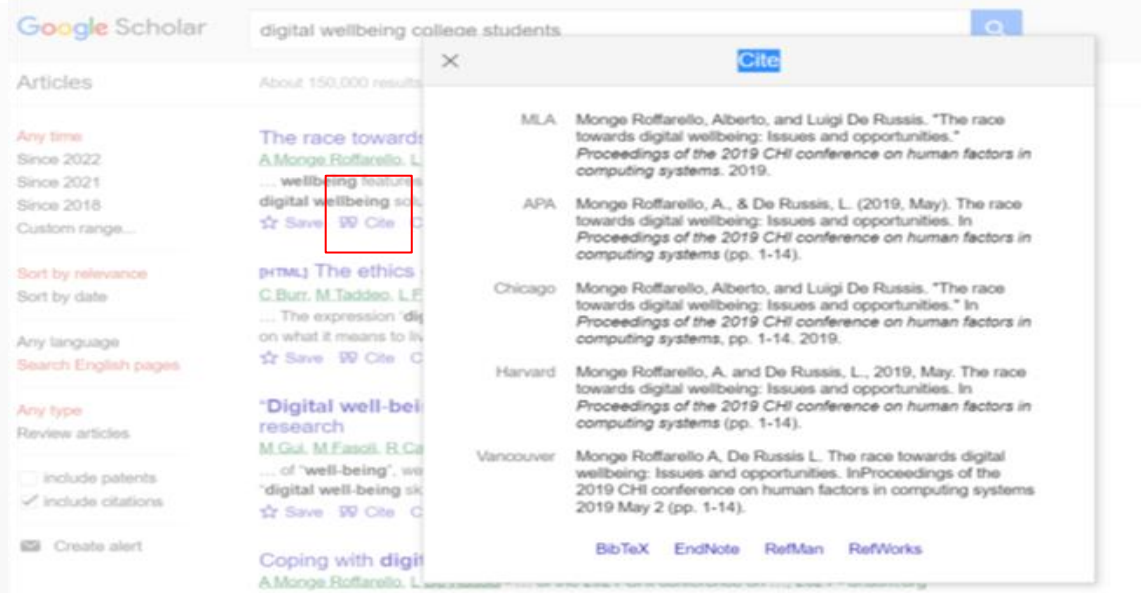
Source: How to do I choose a citation style?

<https://pitt.libguides.com/citationhelp/overview>



How to cite easily when using Google Scholar

1. Click on the “Cite link below a reference item.
2. Select your citation style and press **Ctrl+C**.
3. Paste (**Ctrl+V**) the citation into your working document.



An example of image citation

Using Sources Correctly

Crediting and Citing Your Sources

Now that you've just summarized or paraphrased or directly quoted a source, is there anything else you need to do with that source? Well, it turns out there is. There are some standard ways of using sources that let your readers know this material is from other texts rather than original ideas from your own brain. Following these guidelines also allows us, your readers, to locate those sources if we are interested in the topic and would like to know more about what they say.



"Old library of Trinity College, Dublin" by Francesc González is licensed under CC BY-NC-ND 2.0

Screenshot source:

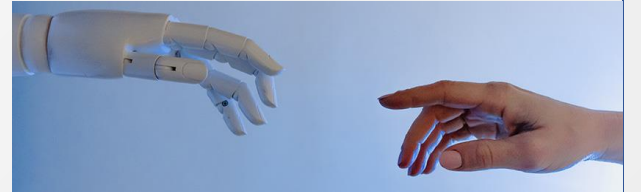
<https://openoregon.pressbooks.pub/wrd/chapter/crediting-your-sources/>

Acknowledging the use of generative AI

You should **acknowledge** when you've used generative AI tools like ChatGPT.

Examples of citations are the following:

- **APA (7th Edition):**
OpenAI. (2023). ChatGPT (Version 4.0) [Computer software]. <https://www.openai.com>
- **MLA (8th Edition):**
OpenAI. "ChatGPT." Version 4.0, 2023, www.openai.com.
- **Chicago (17th Edition):**
OpenAI. 2023. "ChatGPT." Version 4.0. <https://www.openai.com>.



You should clarify in your text that the content was generated by an AI tool. For example, you might write, "**As generated by the AI model ChatGPT**, the possible implications of this event could include..."

Further reading:

Acknowledging the use of Generative Artificial Intelligence. Learn HQ. (2023a, April 18).
https://www.monash.edu/learnhq/build-digital-capabilities/create-online/acknowledging-the-use-of-generative-artificial-intelligence#tabs_3254796-03 accessed 1st July 2023

Further reading: How to cite various content types

- **Citing Images, Diagrams and Tables**

<https://www.student.unsw.edu.au/citing-images-and-tables-found-online>

- **How to Cite a Picture or Image in APA**

<https://www.easybib.com/guides/citation-guides/apa-format/how-to-cite-a-photo-digital-image-apa>

Takeaway - Plagiarism

- Plagiarism is in general the immoral **use of material taken by another source without referencing** it properly.
- It **can be identified** by plagiarism detection SW (e.g., Turnitin).
- **Don't forget to store your sources** while accessing and gathering content.
- **Cite** your various source types properly to **give credit to others' ideas**.
- You may also use **online tools that facilitate** citation.

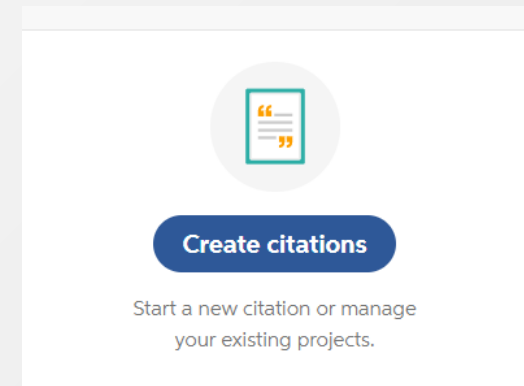


Image source:
<https://www.citethisforme.com/>



Let's say that we want to create a citation for the following URL:

<https://liquid-state.com/healthcare-needs-digital-health-apps>

1. Visit <https://www.citethisforme.com/> .
2. Click on “**Create citations**” button.
3. Choose your source: **Website**.
4. **Insert URL** and click **Search**.
5. Click **Cite**.
6. Check the result and fill-in additional available details if needed.

Share your findings with us!

ACTIVITY 2





BACK 2 BASICS

BRIDGING THE GAP BETWEEN HIGHER EDUCATION
AND LABOR MARKET BY FOSTERING DIGITAL SKILLS

Information Literacy

Part 5 - Disinformation, fake news, and the role of social media

2021-1-PT01-KA220-HED-000023543

This project has been funded with support from the European Commission. This publication and all its contents reflect the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.



**Co-funded by
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LEARNING OBJECTIVES

- > Describe disinformation and its impact on society.
- > Understand the role of social media in spreading mis/disinformation.
- > Develop critical attitude against received information.
- > Take actions to reduce or prevent the spreading of disinformation (e.g., by fact-checking information).
- > Develop responsible attitude regarding participation and sharing in social media and the online world, in general.





WARM UP ACTIVITY!!



- Which online news media do you use?
- Write down sources of news and information you access.
- What do you think of them in general, in terms of reliability?
- Share with us an experience of exposure to disinformation.

OPEN DISCUSSION

Image by pch.vector on Freepik



THEORY!!



Image by pixabay

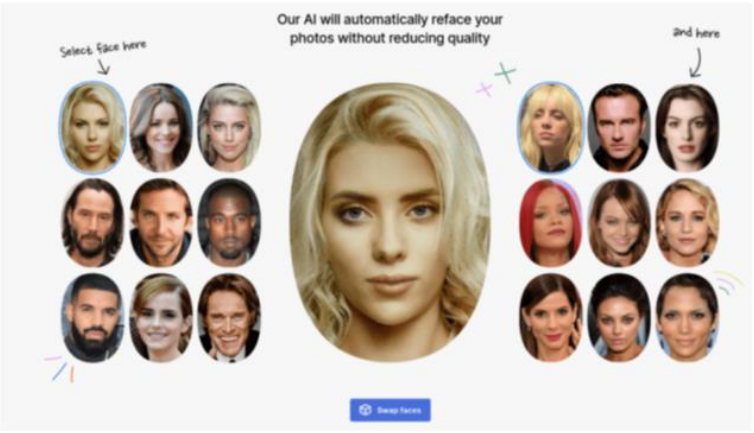
What is considered as disinformation



- Commonly referred to as “**fake news**”.
- Verifiably false or misleading information
 - disseminated for economic gain or to intentionally deceive the public.
- Fiction, false information, and **opinions*** are promoted as ‘the truth’
 - facts vs opinions: ‘it is zero degrees outside’ vs ‘it is too cold outside’.
- can spread significantly faster than real information.
- may cause harm to individuals, groups, and society.

Cheapfakes

- altered material (such as images or audio-visual material) easily,
- by humans,
- e.g., face swapping



The screenshot shows a web interface for a face swap tool. At the top, it says "Our AI will automatically reface your photos without reducing quality". Below this, there is a large central image of a woman's face. To the left of this central image is a grid of 12 smaller face images, with an arrow pointing to the top-left one and the text "Select face here". To the right of the central image is another grid of 12 smaller face images, with an arrow pointing to the top-right one and the text "2nd here". Below the central image is a blue button with a plus sign and the text "Swap faces".

This face swap online website uses the **AI technology** to detect faces on the photos and will change them with any faces of your choosing. This can be a photo of another person, celebrities, and others.

Deepfakes

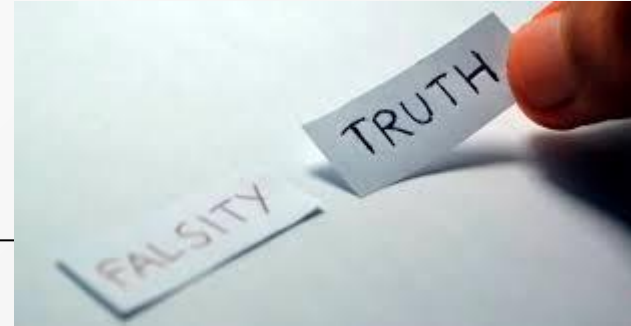
- **Material** (images, videos, audio, text),
- *artificially generated by AI* deep learning
- **often impossible to distinguish** from the real ones.
- An example of deceiving fake comment:

Was the following comment created by a bot or a human?

I am writing to you with regard to Idaho's proposed Medicaid waiver which has problems as it is currently written. Many Idahoans depend on Medicaid when they are sick and need help. Implementing the proposed waiver would mean taking away health care when people are most vulnerable. If someone has low income and becomes ill and cannot work that is not the time to take away their coverage.

Source: Max Weiss, 'Deepfake bot submissions to federal public comment websites cannot be distinguished from human submissions', *Technology Science*, 18 December 2019, online. Cited in Smith and Mansted (2020).

Text generation



- artificial,
- human speech-like text,
- enough convincing to deceive humans,
- examples: comments on social media, web forums, news posts, reviews, opinion articles.

Weiss, M. (2019). Deepfake bot submissions to federal public comment websites cannot be distinguished from human submissions. *Technology Science*

DEMO AI-based automatic text generation at:

King A. Talk to Transformer. (Demonstration of OpenAI's model GPT-2) <https://talktotransformer.com/>

Common characteristics of disinformation



- **Speaks to the emotions** of the targeted person.
- People share false news items with sentiments of **surprise** and **disgust**.
- This makes it **harder for the person to think logically** and critically.
- Contributes to polarization growth by **promoting 'Us versus Them'** views.
- **Simplifies facts**.
- **Presents only one side** of something.
- Makes **use of famous people** and celebrities that the target group admires.

A disinformation example



Vodafone have their say on 5G co...
dailypost.co.uk



Fact Check: Are 5G experiments responsible...
republicworld.com



Hundreds of birds were found dead in the Ne...
fullfact.org

Debunking of Birds “Dying Due to 5G” at:

<https://www.thequint.com/news/webqoof/photo-shows-birds-dying-due-to-5g-testing-fact-check>

The role of technology to polarization growth

Algorithmic technology also **contributes** to reinforcement of polarizing views

- by **supporting** **exposal** to “preferred” content (aligned with pro-existing beliefs)
- so, **subjective content is echoed online** by users.

Popularity of social media contributes,
by facilitating the spread of fake news stories.



Therefore, we talk about **the epidemic of fake news**

Image source: <https://www.agilitypr.com/pr-news/public-relations/disinformation-in-society-new-institute-of-pr-research-examines-and-tracks-its-spread/>

Impact of university students' engagement with fake news to their personal well-being

Some examples of university students' reported experiences about their engagement with fake news that affected their self-confidence and well-being

Deception and trouble

- "It harmed my computer"
- "fake news scammed me"
- "finally, it wasn't a job opportunity"

Disappointment and inconvenience

- "Professor got angry upon hearing about that post. It was not reliable at all."
- "Everybody in class laughed. It was just fake news."

Information Literacy against fake news

Information literacy has been identified as **one of the most effective methods in combating fake news**.

- **Be skeptical** about the **creator**, the **content** and the **purpose** of information posted on social media
 - **Evaluate** online content **before sharing**
- Are **all sides presented fairly**?
- Reduce time spent on social media to **reduce information overload**
- Read news from **a few** rigorous and **trustworthy sources**
- **Fact-check** (explained later)
- **Remove content**, if needed, to avoid spread of false information.
- **Report** other **users** suspected of spreading false information, either knowingly or unknowingly.



Image source: EU guidelines, 2022

How can technology support against polarization?

- AllSides is a website which provides tools and services against bias and polarization, for example it **exposes people to information and ideas from all sides** about a specific topic to prevent polarization.



*Don't be fooled by
media bias & misinformation.*

Image source: <https://www.allsides.com/about>

Takeaway - Disinformation, fake news, and the role of social media

Online disinformation (fake news):

- is pervasive (penetrating)
- spreads quickly
- causes harm

Tip: think and check before sharing

Image source: <https://south.euneighbours.eu/story/be-aware-disinformation-think-you-share/>



Sources (References and web links):

De Paor, S., & Heravi, B. (2020). Information literacy and fake news: How the field of librarianship can help combat the epidemic of fake news. *The Journal of Academic Librarianship*, 46(5), 102218.

Igbinovia, M. O., Okuonghae, O., & Adebayo, J. O. (2020). Information literacy competence in curtailing fake news about the COVID-19 pandemic among undergraduates in Nigeria. *Reference Services Review*.

Islam, A. N., Laato, S., Talukder, S., & Sutinen, E. (2020). Misinformation sharing and social media fatigue during COVID-19: An affordance and cognitive load perspective. *Technological forecasting and social change*, 159, 120201.

Countering disinformation: improving the Alliance's digital resilience

<https://www.nato.int/docu/review/articles/2021/08/12/countering-disinformation-improving-the-alliances-digital-resilience/index.html>

Study: False news spreads faster than the truth. MIT Sloan. (2018, March 8). Retrieved November 28, 2022, from <https://mitsloan.mit.edu/ideas-made-to-matter/study-false-news-spreads-faster-truth>

Johns Hopkins University, I. C. L. & G. I. of T. (2021, August 12). *Countering disinformation: Improving the alliance's digital resilience*. NATO Review. Retrieved December 22, 2022, from <https://www.nato.int/docu/review/articles/2021/08/12/countering-disinformation-improving-the-alliances-digital-resilience/index.html>

Perifanou, M., & Economides, A. (2019). The digital competence actions framework.

Smith, H., & Mansted, K. (2020). Weaponised deep fakes. <http://ad-aspi.s3.amazonaws.com/2020-04/Weaponised%20deep%20fakes.pdf>

Viviani, M., & Pasi, G. (2017). Credibility in social media: opinions, news, and health information—a survey. *Wiley interdisciplinary reviews: Data mining and knowledge discovery*, 7(5), e1209.

Walsh, D. (2020, March 23). *Study: 'Accuracy nudge' could curtail COVID-19 misinformation online*. MIT Sloan. <https://mitsloan.mit.edu/ideas-made-to-matter/study-accuracy-nudge-could-curtail-covid-19-misinformation-online> accessed 28.11.2022

Weiss, M. (n.d.). *Deepfake bot submissions to federal public comment websites cannot be distinguished from human submissions*. Technology Science. <https://techscience.org/a/2019121801/>



THANKS!
Any questions?

