

Module 4 Turning Digitally Literate



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Modules

1. What is Digital Health Literacy and its relevance

2. Main health issues when landing in a new country

3. National Health Systems

4. Turning digitally literate

5. Navigating the National Health System through internet

6. Being active in the digital health environment

Objectives









Competences

- Knowledge about the differences between Computer,
 Smartphone and Tablet and the different use of it
- Ability to navigate and search information on the internet
- Knowledge about data protection and security on the internet
- Knowledge about communication channels on the internet





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Action 4.1.1 Introduction

Objectives

 You will learn about Digital Health Literacy and how to be active in the digital environment, especially by considering the use of different digital devices and additional skills such as the evaluation of digital information.







What is Digital Health Literacy

Digital Health Literacy (DHL) is defined as

- the ability to seek, find, understand, and appraise health information from electronic sources, and
- apply the knowledge gained to addressing or solving a health problem (WHO Digital Health Literacy, 2017).





What is Digital Health Literacy

Digital Health Literacy covers five different dimensions:

- **1.** Information and data literacy
- **2.** Communication and collaboration
- **3.** Digital content creation
- 4. Safety
- 5. Problem solving



Operational skills for DHL

In this module, we focus on operational skills, and especially:

- 1) how to use a digital device,
- 2) what digital devices are available,
- 3) where to find information on the internet, and
- 4) what rules needed to be considered while acting in the digital environment.

BUT Digital Literacy is more than using digital devices: it is also important to evaluate and critically question digital information!



Action 4.1.2 Practical activity: Getting to know different digital devices

Objectives

 You will learn about the different digital devices you can use for searching for information on the internet.



4.1 4.1.2







Digital Devices

To be active in the digital environment, **a digital device** is necessary.

- There are different digital devices available.
- Each device has its advantages and disadvantages.

Therefore, we are going to discuss, what device is useful for what specific activity.





Digital Devices

To begin with the discussion, please tell what digital devices you know, and you are using.

In the next step, we want to create some profiles for each device, to clarify for what activity each device is useful.





Profile of digital devices (1/3)

1. Computer/Laptop

- Description: A computer is an electronic device used for a variety of purposes, e.g., browsing the web, writing documents, playing video games, etc.
- Useful for: Complex internet research, writing long texts, writing e-mails.
- Not useful for: Doing some internet research or writing small texts while you are on the way.





Profile of digital devices (2/3)

2. Smartphone

- Description: A smartphone is a mobile phone with which it is possible to do a lot more things than just make phone calls. For example, smartphones can connect with the internet, and can take photos or videos. Therefore, it can also be seen as a small computer. The screen of a smartphone is a touchscreen.
- Useful for: Writing short messages, doing small internet research, using social media, such as WhatsApp, Instagram, etc.
- Not useful for: Writing long texts or doing long internet research.





Profile of digital devices (3/3)

3. Tablet

- Description: A tablet is smaller than a computer or laptop but taller than a smartphone. It has a touchscreen but, different from a laptop, no keyboard.
- Useful for: Small research activities, downloading and reading books, playing games, watching videos, checking mails
- Not useful for: Writing long e-mails or other texts, long research activities.





Action 4.1.3 Searching on the internet

Objectives

 The next part is about getting the first insight about how to search for information on the internet.











Introduction

 One activity, which is possible with all the devices, is searching for information on the internet. But related to the research you want to conduct, the devices are

Well, the correct phrase is *"searching information on the* **World Wide Web"**, instead of internet. See next slide.

during the research.

A description of these steps is followed in the next slides. \rightarrow Please see <u>annex 1</u> to find an explanation of the World Wide Web.





Web-browsers

- For searching for information on the Web, you need to open a web browser (step 1). Usually, a web browser is already available on your device.
- Some of the most common web-browsers:
 - o Google Chrome
 - Mozilla Firefox
 - o Microsoft Edge
 - Apple Safari
 - o Opera





Websites (1)

- As mentioned earlier, the websites contain the information. So, the next step (step 2) is to connect to the proper website which contains the information you are looking for.
- For connecting to a website, you have to know its domain name, e.g., healthcare.eu.
- So, the next questions are:
 - *"Which website(s) should I visit to find the information I am looking for?",* and
 - "How can I find the domain name of this/these website(s)?"



Websites (2)

- For the first time,
 - read it somewl
 - o advised from s
- A **search engine** is a service for finding websites. It collects available websites on the Web and associates them with several tags, which are keywords related to the website's main information category.
- 1. The user connects via a browser to the search engine.
- o used a search e

found it in ano

Concluding,

Ο

- 2. Enters the keywords
- 3. The search engine returns a list of websites related to the keywords
- 4. The user chooses to visit one or more websites
- o if you already know της domain name,
 - you may enter it directly into the browser and connect to the website
- o otherwise,
 - use a **search engine** to find it out





Search engines

- For searching information on the internet, you have to connect, with your web browser, to one of the available search engines.
- Some of the most popular search engines are the following:
 - Google.com: You can differentiate your research via google between information, photos or you can use it for navigation.
 - Bing.com: The structure and function are usually similar to Google, but the search results could be different.
 - Yahoo.com: Quite similar to Bing.



4.3 Searching on the internet

Activity





Example: Where is the next doctor for dental health?

Dental health doctor AND Gelsenkirchen"

Please discuss, which of the following search strings are the best ones:

- Information of interest: Do I have to pay for my dental treatment myself as an asylum seeker in Germany?
 - 1. Do I have to pay for my dental
 treatment myself?
 - 2. Payment for dental treatment AND Asylum seeker AND Germany
 - 3. Payment for dental treatment







4.3 Searching on the internet

Activity

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Activity: Search strings

Discuss, which of the following search strings are the best ones:

- Information of interest: Should I get vaccinated against COVID-19?
 - 1. Advantages AND Vaccination
 AND COVID-19
 - 2. Should I get vaccinated against COVID-19?
 - 3. Vaccination









Turning digitally literate

Alternative ways of searching information on Web

- There are also alternatives in finding information about a topic:
 - **Thematic web directories.** They are organized lists that contain websites, even commercial ones, which focus on a specific topic, e.g., health.
 - **Forum.** A forum is another way of communication in the digital environment which allows interaction with other internet users over a specific topic. You may register and join a forum for
 - o asking specific questions and receiving replies, or
 - o looking for replies to similar questions like your question(s)
 - Example: <u>https://www.healthboards.com/</u>
- You may use search engines to find web directories and forums, e.g., by using the keywords
 - O "Forum AND health"





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Activity: Search a forum or Web directory

Example 1: Where can I find a forum for finding a dentist in Madrid?

"Forum AND Dentist AND Madrid"

Example 2: Where can I find a Web Directory for dentists in Madrid?

```
Web AND directory AND Dentist
AND Madrid<sup>®</sup>
```

Please discuss, which of the results search strings are the best ones.

Forum AND Dentist AND Madrid	X 🔮 Q

X 🔮 Q



Find information

How can I find the information I'm interested in?

Aspects to be considered while creating a search string:

- Focus on relevant keywords, especially nouns.
- Specific use of search operators:
 - AND: Linking two or more search terms.
 - **OR**: The search results contain one or the other or all of the search terms.
 - **Brackets**: Brackets can be used to compose requests with the above-mentioned search operators.

─ ↓	×
	×





Only one answer is correct!

A. No specific operators

B. AND + OR + Brackets





Action 4.2.1 Security and Privacy

 Competencies about security and privacy refer to the ability to protect devices, content, personal data, and privacy in the digital environment.



	4.2.1
4.2	



What is Personal Data

Examples of personal data

- a name and surname
- a home address
- ✓ an email address such as
 - o name.surname@company.com
- an identification card number
- Iocation data, for example the location data function on a cell phone)
- ✓ an Internet Protocol (IP) address
- 🗸 a cookie ID
- ✓ the advertising identifier of your phone
- data held by a hospital or doctor, which could be a symbol that uniquely identifies a person.

- Personal data is any information that relates to an identified or identifiable living individual.
- Different pieces of information, which are collected together can lead to the identification of a particular person, also constitute personal data.

Click here for examples !



What personal data is considered sensitive?

The following personal data is considered '**sensitive**' and is subject to specific processing conditions:

- personal data revealing racial or ethnic origin, political opinions, religious or philosophical beliefs
- photos, videos
- trade-union membership
- genetic data, biometric data processed solely to identify a human being
- health-related data
- data concerning a person's sex life or sexual orientation





Is there personal data that is considered particularly sensitive?

Yes

No



What is Security



- Security is about how to secure, protect your personal data from unauthorized access either to your device or the remote web server or during communication over the internet.
- We use security controls at the technical level to restrict who can access the information. These controls are applied
 - to our devices (PC, tablet, mobile phone), i.e., apply updates of the operating system and software, use strong passwords
 - to the remote web server, i.e., use strong passwords
 - during data transmission over the Internet, i.e., use the secure protocol https



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4 Turning digitally literate

Is the website secure?

- For protecting personal data it is important to assess if the website is secure.
- Secure in this context means that
 - ✓ all **technical security criteria** are met, and
 - we can ensure that the website is original and not a fake one.

What criteria need to be considered for deciding if a webpage is safe?







Is the website secure?

- A secure website has a link in which
 - o the https protocol is used, s means secure /

Click here for more information about the https protocol

- An original website, e.g., a website of a bank, has a link in which
 - the Hypertext Transfer Protocol Secure (HTTPS) is an extension of the Hypertext Transfer Protocol
 it is (HTTP). It is used for secure communication over a computer network and is widely used on the Internet.

The **https** protocol ensures that

- the data are encrypted during the transmission over the Internet, and nobody can read them (encryption)
- the receiver is indeed the receiver and not someone who pretends (authentication)

For more information visit <u>https://en.wikipedia.org/wiki/HTTPS</u>



How to check if https is used

- The **https** is included in the link.
- When a browser is connected to a secure website, a lock symbol appears next to the link.
- This symbol indicates that the website is secure.

← → C
\leftarrow \rightarrow C $$ https://mig-dhl.eu
← → C C Anttps://mig-dhl.eu
< > C 88 🍙 mig-dhl.eu


Non secured websites or links

- The **http** is included in the link.
- When a browser is connected to a not secure website,
 - a "lock with a red line" symbol, or
 - a triangle with the attention mark
 - "Not secure" message

appears next to the link.

 These symbols and messages indicate that the website or link is not secure.













Is a link safe to visit?

- If https is used in a link but the domain name is not close to the official name, then
 - the website could be a fake clone of the original with the purpose to steal your personal data.
- If http is used in a link, *instead of https*, but the domain name is fine, then
 - the transmission of the personal data over the Internet is not secured, so you should not use this website for submitting any personal data.





Is the link safe to visit?

If you receive an email, e.g., by a bank, which urges you to press a link like the following, and submit personal data, such as username, passwords, credit card details, pause and think twice!

http://url5423.eka.de/ls/click?upn=V1OaWNMSPs2Lb0JqHpnyTLRlk2703ToIFpo2vd2MKt5gB6dYAUv w1B-2FnC6T5iVsCdbcug7l6pkTad-2FBfACSIC-2BKw-3D-3DhmuAs-OaWNMSPs2Lb0JqHpn-asDvdva

This link is **not secure** for many reasons:

- a. it uses http instead of https
- b. the domain name is not related to the official bank name
- **C.** the link is suspicious long
- d. the domain name of the link is different from the domain name of the senders' email address
- e. a real bank will never ask you username, passwords, credit card details
- \rightarrow Please see <u>annex 2</u> for more tips for protecting data and devices



Is a website always safe to use if "https" is used in the link?

Yes

No



What is Privacy?



- Privacy is about
 - o how to **control our personal data** and
 - determine **how they are used** by the remote parties who have received it, in a securely.
- Recall the privacy policies you're asked to read and agree to when you access a website or you download a new smartphone app.

 \rightarrow Please see <u>annex 3</u> for a differentiation on Security and Privacy



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Privacy policy

- Is there any policy that the website follows regarding our personal data, that is how the website uses our personal data?
 - This policy is called the **privacy policy** and should be available and easily accessible to us on the website, so we can read it and know how our data are used.

Actions:

- Check and read the Privacy Policy before submitting any personal data.
- Check who is the owner of/responsible for the website? Check and read the "imprint" section.
- Check for contact details.
- Check for the Terms of Use and Legal Notice
- Check for request consent cookies.





Is the website trustable?

- For protecting personal data and privacy it is important to assess if the webpage is trustable.
- Trustability in this context means that the website uses and processes our personal data according to the available privacy policy and regulations.
- For developing a list of criteria to decide if a webpage is trustable, please start the following discussion (you can collect the results on the next slide):

What criteria need to be considered for deciding if a webpage is trustable?



4.4 Security and Privacy



Is the website trustable?

• Start a list:

√.....

Click here to check your list !

What criteria need to be considered for deciding if a website is trustable?

- ✓ Who is responsible for the website? Background of the website (e.g., is the site privately or publicly run?). Is available the "imprint"?
 - How can we contact the website? Are adequate contact details and a communication section on the website?
 - Is available the Privacy Policy, Legal Notice, Terms of Use?
 - Is available any request consent cookies.



Is the website reliable?

Reliability in this context means that the content and the information available on the website is valid and we can be based on it

Questions:

- A website could be secure and safe to visit as well as trustable to provide personal data, but is it also reliable regarding the content?
- Can we **consider reliable the** content by default all the websites that are safe and trustable?
- Is the content valid?



4.4 Security and Privacy

Activity



More information: [4]

Activity

Example- Secure, trustable, and reliable website



Check the website

https in the beginning of the link

 \checkmark Contact details are easy to find

✓ It is clearly recognisable who is responsible for the website

✓ Data Protection is listed

✓imprint/legal notice is existing

 \checkmark Copyright sign is used





Example- Website is not secure, trustable or reliable

👌 www.vigiaccess.org				ŝ
VigiAccess™ √	Uppsala Monitoring Centre	WHO Collaborating Centre for International Drug Monitoring	FAQ	
mumps vaccine			Sea	arch
mumps vaccine contains the active Result is presented for the active in Total number of records retrieved: 7	gredient(s).	ps vaccine.		
Distribution ►Adverse drug reactions (ADRs	;]			
◆Geographical distribution				
➤Age group distribution				
▶Patient sex distribution				
►ADR reports per year				

- Check the website
 - ✓No https in the beginning of the link
 - ✓ Contact details are missing
 - ✓ Data Protection is missing
 - ✓imprint/legal notice is missing





Group Dynamic Activity: Case studies- Is the website safe and the content trustable?

You can find some different kinds of websites below, all dealing with the question "Should I get vaccinated against COVID-19?". Please decide in groups of 3-5 persons if the website is safe and trustable. You can use the list of criteria to justify your decision.

- 1. <u>https://www.who.int/emergencies/diseases/novel-coronavirus-2019/covid-19-vaccines/advice</u>
- 2. <u>https://theconversation.com/should-i-get-my-covid-vaccine-booster-yes-it-increases-protection-against-covid-including-omicron-172965</u>
- 3. <u>https://ec.europa.eu/info/live-work-travel-eu/coronavirus-response/safe-covid-19-vaccines-europeans/questions-and-answers-covid-19-vaccination-eu_en</u>



What is <u>not</u> necessary to decide if a webpage is safe and trustable?

Only one answer is correct!

A. Existence of an imprint

B. Compliance with legal requirements

C. "https" in the beginning

D. Website is available in different languages



Linkage to Module 5

The assessment of the security and trustworthiness of websites will be addressed in more detail in Module 5 – "What kind of information can we find online?"



Action 4.2.2 **Digital communication**

Objectives

- There are several ways of communication in the digital environment - from informal options like WhatsApp and Social Media to more formal ones like e-mail.
- The next part will focus on communicating via e-mail or online form, as these are two good options to communicate in a more formally.









Type of communications

- We can say that the communication could be:
 - informal, like the way we communicate with people we are very close to, e.g., our family members and friends
 - formal, which include an official way of communication with organizations and people we do not know
 - semi-formal, that is a between informal and formal,
 e.g., you may consider to using this type in a forum







How to communicate with an organization or professionals

- Each organization or professional has its contact data either to its website look for the "Contact" area - or/and a business card.
- The contact data usually contain:
 - e-mail address, which you may use for sending an e-mail in a formal way
 - o online form, which you may use for writing a text in a formal way and submitting it
 - online form with calendar, which you may use for scheduling, online, your appointment

Please note that for the above you need a valid e-mail account (address)!

- o a **call number**, which you may use for calling via your regular or mobile phone.
 - do not send an SMS or any message via WhatsApp, Viber or other apps, unless the professionally allows it in your face to face appointment

Attention

Be careful!

Do not send via e-mail or post to an online form sensitive personal data, such as health data!



Activit



Practical Activity: Set-up an e-mail account

- **Practical Activity 1:** Everyone creates a personal e-mail address.
 - Decide where to create a personal e-mail account
 - yahoo.de; googlemail.com; etc
 - Use a serious name for your e-mail account
 - e.g., first name and surname: <u>maxmustermann@yahoo.de</u>; instead of <u>maxiking85@yahoo.de</u>)
 - Create a safe password
 - Make it long
 - Use a mix of characters
 - Don't use memorable keyboard paths (like: qwerty)



Activit



Practical Activity: Find e-mail addresses

- Practical Activity 2: Please find e-mail addresses related to the following topics:
 - You want to get a vaccination against COVID-19.
 - You want to know the e-mail address of your doctor or a Healthcare-related service







Practical Activity: Find an online form

- Practical Activity 3: Please find online forms related to the following topics:
 - You want to schedule a vaccination against COVID-19.
 - You want to communicate with your doctor or a Healthcarerelated service via an online form.



Linkage to Module 6

Module 6 - "Being active in the digital environment" deals with writing emails and forum posts



Action 4.2.3 **Closure**

Objectives

- Summary
- Doubts and questions?
- Explanation of the online session







Summary

In this module you have learned:

- ✓ What the difference between different digital devices is
- How to search on the internet
- Some concepts and basic tips on security and privacy in the digital environment
- About some tools for formal communication in the digital environment







Doubts and questions?



Now it's time to discuss your questions and to clarify any doubts!



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Explanation of the online session



Let's explain how to use the online training service!



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References and further reading

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Annex

Here you can find some additional information on the topics discussed in module 4.

Content:

- Annex 1: What is the World Wide Web?
- Annex 2: Security: Tips for protecting data and devices
- Annex 3: Summary of differences between security and privacy
- Annex 4: What is and who must comply with the GDPR?





Annex 1

What is the World Wide Web (WWW) (1)

- The World Wide Web (WWW), or simply Web, is an *information system* that contains documents and other resources with information.
- These Web documents or resources are
 - o stored in Web servers
 - *interlinked,* over the internet, with other
 Web documents or resources through
 hyperlinks.





What is the World Wide Web (WWW) (2)

- A website is a collection of related web resources including web pages, multimedia content, typically identified with a common domain name, e.g., google.com, and stored and published on a web server.
- Millions of *interlinked websites* exist in all countries, forming with their hyperlinks the World Wide Web, like a spider web, that is why the world "web" is used.





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What is the World Wide Web (WWW) (3)

- For accessing the Web, that is reaching the information stored on the websites, a software called **web browser** shall be used.
- The web browser needs the domain name of a website for accessing it and uses the http (or https) protocol for exchanging data with the webserver, who hosts the website.

Find more information for WWW <u>here</u>.





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The World Wide Web is an information system which contains documents and other resources with information.

True

False



Annex 2

Security: Tips for protecting data and devices

- Use a strong password
 - Long
 - Mix of characters
 - Don't use memorable keyboard paths (like: qwerty)
- Use the latest versions of an operating system, install antivirus and firewall software and check for updates regularly.
- Avoid downloading free software from sites that are not known or trusted. Download software only from well-known and trusted companies. Many free programs (applications) may deliver adware and spyware to a computer or mobile device.





Annex 3 Security and Privacy

- Security is about the safeguarding of data, whereas privacy is about the safeguarding of user identity.
- For example, hospital and clinic staff use secure systems to communicate with patients about their health, instead of sending information via personal email accounts.
 - This type of data transmission is an example of security.
 - On the other hand, privacy provision might limit patient health record access to specific hospital staff members, such as doctors, nurses, and medical assistants.

- We understand that it is
 - o possible to have security without privacy,
 - personal data may be transmitted and stored to a website securely, but the website may sell them
 - but impossible to have privacy without security.
 - a hacker may have unauthorized access to your device, web server or your transmitted data and steal your personal data



Annex 4 What is and who must comply with the GDPR?



What is the GDPR?

The General Data Protection Regulation is a European Union law that was implemented May 25, 2018, and requires organizations to safeguard personal data and uphold the privacy rights of anyone in EU territory.

Who must comply with the GDPR?

- Any organization that processes the personal data of people in the EU must comply with the GDPR.
- "Processing" is a broad term that covers just about anything you can do with data: collection, storage, transmission, analysis, etc.
- "Personal data" is any information that relates to a person, such as names, email addresses, IP addresses, eye color, political affiliation, and so on.
- Even if an organization is not connected to the EU itself, if it processes the personal data of people in the EU (via tracking on its website, for instance), it must comply. The GDPR is also not limited to for-profit companies.



Source: https://gdpr.eu/faq/



Congratulations! You have completed this module!





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