

**Table S1.** Descriptors defined for each digital competence, sub-competences and corresponding levels.

(Competence area) Digital competence and sub-competences	Foundation level	Intermediate level	Advance level
<p>(Information and data literacy) Browsing, searching, and filtering data, information, and digital content: I can:</p> <ul style="list-style-type: none"> <li>• Articulate information needs, search for data, information and content in digital environments, access and navigate through them.</li> <li>• Create and update own search strategies.</li> </ul>	<p>At basic level and with autonomy and appropriate guidance where needed, I can:</p> <ul style="list-style-type: none"> <li>• Identify my information needs.</li> <li>• Find data, information, and content through a simple search in digital environments (also in my smartphone's using an app or not). (Identify the type of search necessary)</li> <li>• Find how to access these data, information and content and navigate between them (also in my smartphone's using an app or not). (Navigate on a website to access the required information or carry out the requested action)</li> <li>• Identify simple personal search strategies (selecting the right source and identifying the keywords that are useful). (Use of bookmarks to store the URLs)</li> </ul>	<p>Independently, according to my own needs, and solving well-defined and non-routine problems, I can:</p> <ul style="list-style-type: none"> <li>• Illustrate information needs. (Identify different types of sources and search engines, identify different areas on a search results page, use of private navigation, Access to bookmarks)</li> <li>• Organise the searches of data, information, and content in digital environments. (Save a video to watch later)</li> <li>• Describe how to access to these data, information, and content, and navigate between them. (Information on websites, videos in YouTube, products in online shops, news, social networks such as Facebook)</li> <li>• Organise personal search strategies (using keywords and find suitable apps on my smartphone that fit with my needs). (use of different types</li> </ul>	<p>At advanced level, according to my own needs and those of others, and in complex contexts, I can:</p> <ul style="list-style-type: none"> <li>• Assess information needs.</li> <li>• Adapt my searching strategy to find the most appropriate data, information, and content in digital environments. (Use of advanced search filters, use of Google Quick searches, use of the advanced search, search for information in a spreadsheet)</li> <li>• Explain how to access to these most appropriate data, information and content and navigate among them.</li> <li>• Vary personal search strategies. (Access to the bookmarks and passwords stored in your Google account from different devices)</li> </ul>

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of filters to search and filter  
information, image-based  
searches, searches on Google  
Maps)

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(Information and data literacy) Evaluating data, information, and digital content:	At basic level and with autonomy and appropriate guidance where needed, I can:	Independently, according to my own needs, and solving well-defined and non-routine problems, I can:	At advanced level, according to my own needs and those of others, and in complex contexts, I can:
<ul style="list-style-type: none"> <li>Analyse, compare and critically evaluate the credibility and reliability of sources of data, information, and digital content.</li> <li>Analyse, interpret and critically evaluate data, information, and digital content.</li> </ul>	<ul style="list-style-type: none"> <li>Detect the credibility and reliability of common sources of data, information, and their digital content. (key elements on websites, emails, online shops, social networks such as Twitter, YouTube, WhatsApp)</li> </ul>	<ul style="list-style-type: none"> <li>Perform the analysis, comparison, and evaluation of sources of data, information, and digital content. (websites, emails, online shops, social networks)</li> <li>Perform the analysis, interpretation and evaluation of data, information, and digital content. (news, publications on social networks such as Twitter and YouTube, information shared via WhatsApp)</li> </ul>	<ul style="list-style-type: none"> <li>Critically assess the credibility and reliability of sources of data, information, and digital content. (websites, emails, online shops, social networks)</li> <li>Critically assess data, information, and digital content. (news, publications on social networks such as Twitter and YouTube, information shared via WhatsApp)</li> </ul>

(Information and data literacy) Managing data, information, and digital content:	At basic level and with autonomy and appropriate guidance where needed, I can:	Independently, according to my own needs, and solving well-defined and non-routine problems, I can:	At advanced level, according to my own needs and those of others, and in complex contexts, I can:
<ul style="list-style-type: none"> <li>Organise, store and retrieve data, information, and content in digital environments. Organise and process them in a structured environment.</li> </ul>	<ul style="list-style-type: none"> <li>Identify how to organise, store and retrieve data, information, and content in a simple way in digital environments. (Windows based environments: folders, order by, open with, etc.)</li> <li>Recognise where to organise them in a simple way in a structured environment.</li> </ul>	<ul style="list-style-type: none"> <li>Organise information, data, and content to be easily stored and retrieved. (manage bookmarks, attachments in emails)</li> <li>Organise information, data, and content in a structured environment (manage information in apps, create a document in Google Docs to be shared and accessed by others).</li> </ul>	<ul style="list-style-type: none"> <li>Adapt the management of information, data and content for the most appropriate easy retrieval and storage.</li> <li>Adapt them to be organised and processed in the most appropriate structured environment.</li> </ul>

(Communication and collaboration) Netiquette:	At basic level and with autonomy and appropriate guidance where needed, I can:	Independently, according to my own needs, and solving well-defined and non-routine problems, I can:	At advanced level, according to my own needs and those of others, and in complex contexts, I can:
<ul style="list-style-type: none"> <li>• Apply basic principles of netiquette in the use of e-mail (e.g. use of BCC, forwarding, etc.).</li> <li>• Apply basic online writing rules (no capital letters, careful spelling, referring to others by their aliases or nicknames, etc.) and use emoticons appropriately when communicating online.</li> <li>• Recognise appropriate behaviours to adopt on social media, such as asking permission before posting or sharing photos of others (especially when children are involved); avoiding SPAM (e.g. sending invitations or other messages to everyone); using carefully sarcasm, irony or words that may be misinterpreted by others.</li> <li>• Recognise socially and ethically inappropriate online behaviour and communications, such as hate speech, trolling, cyber-bullying, online stalking, etc.</li> </ul>	<ul style="list-style-type: none"> <li>• Differentiate simple behavioural norms and know-how while using digital technologies and interacting in digital environments (different situations while using the email, tag people on a photo on social media).</li> <li>• Choose simple communication modes and strategies adapted to an audience (identify bad behaviours, how to respond to unpleasant situations on social media).</li> </ul>	<ul style="list-style-type: none"> <li>• Discuss behavioural norms and know-how while using digital technologies and interacting in digital environments (email, social media such as Twitter, participation in forums).</li> <li>• Discuss communication strategies adapted to an audience (formal/informal emails, participation in forums and on social media).</li> </ul>	<ul style="list-style-type: none"> <li>• Adapt the most appropriate behavioural norms and know-how while using digital technologies and interacting in digital environments (email, social media such as Twitter, participation in forums).</li> <li>• Adapt the most appropriate communication strategies in digital environments to an audience (formal/informal emails, participation in forums and on social media).</li> <li>• Apply different cultural and generational diversity aspects in digital environments.</li> </ul>

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and know how to use basic methods to address negative online interactions (flagging posts to service owners, police, etc.).

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