

Digital competence descriptors: a draft proposal JRC- IPTS

<http://is.irc.ec.europa.eu/pages/EAP/DIGCOMP.html>

DRAFT- WORK IN PROGRESS

AREAS OF DIGITAL COMPETENCE

1. **Information:** identify, locate, access, retrieve, store, organise and analyse digital information, judging its relevance and purpose.
2. **Communication:** communicate in a digital environment, share resources through online tools, link with others and collaborate through digital tools, interact with and participate to communities and networks.
3. **Content-creation:** Creation and editing of new content (from word processing to images and video); integration and re-elaboration of previous knowledge and content, creative expression, media outputs and programming.
4. **Safety:** personal data protection, security measures, safe and sustainable use.
5. **Problem-solving:** identify digital needs and resources, informed decisions on most appropriate digital tools according to the purpose or need, solve digital problems, update own and other's competence.

AREAS AND COMPETENCES

Competence areas	Competences
1. Information	1.1 Information search and feeds 1.2 Information evaluation 1.3 Information storage and retrieval 1.4 Copyright and Licences
2. Communication	2.1 Digital communication 2.2 Sharing of content, knowledge and resources 2.3 Online participation 2.4 Digital collaboration 2.5 Netiquette
3. Content-creation	3.1 Content production 3.2 Integration and re-elaboration of previous knowledge and content 3.3 Creation of digital and multimedia outputs and programming
4. Safety	4.1 Personal data protection, digital Identity and privacy 4.2 Security and safety measures 4.3 Sustainable behaviour
5. Problem-solving	5.1 Identification of appropriate technological responses 5.2 Update of own and other's digital competence 5.3 Solving technical problems

Dimension 1 Name of area		Information		
Dimension 2 Competence title and description	1.1 Information search and feeds To access and search for online information, to find relevant Information, to select resources effectively, to create			
Dimension 3 Proficiency levels	A - Foundation	B- Intermediate	C- Advanced	
	i can search for Information online. I know that not all information is displayed through search engines.	I am developing strategies to search for information online from different devices (computer, smartphone) and can filter the Information I find.	I can use a wide range of strategies when searching for information. I can filter the information I receive.	
Dimension 4				
Knowledge examples	<ul style="list-style-type: none"> • Understands how Information Is generated, managed and made available • Can evaluate own information needs • Is aware of different search engines • Understands which search engines or databases best answer to his/her own information needs • Understands how information can be found In different devices and media • Understands the reliability of different sources • Understands how search engines classify Information • Understands how feeds mechanism works 			
Skills examples	<ul style="list-style-type: none"> • Adjusts searches according to specific needs and to results • Can follow information presented in hyper-linked and non-linear form • Can use filters and agents • Can precise information searches and selects controlled vocabulary specific to the search tool • Has strategic information skills for goal oriented activities • Uses various classification schemes to locate resources and information • Can modify information searches according to how algorithms are built • Is able to adapt search strategies to a specific search engine, application or device 			
Attitude examples	<ul style="list-style-type: none"> • Has a proactive attitude towards looking for information • Values the positive aspects of technologies for information retrieval • Is motivated to seek information for different aspects in his/her life • Is curious about Information systems and their functioning • Is aware of the limitation of searches through technological means 			
Dimension 5 Application to purpose				
Learning	I can use a search engine to find details about a specific type of heat energy	I can find a range of sources of information about a specific form of heat energy, and use a refined search to locate the most appropriate sources	I can find a range of sources of information about a specific form of heat energy using different search engines and advanced searches, and can also use online databases and searches through linked references	
Employment	I can find details of flights using a common search engine	I can find details of flights using a number of search engines, and a number of flight company websites, selecting details that relate to schedule times	I can find details of flights using a number of search engines, flight company web sites, and web sites that compare details of many flight companies, including costs and schedule times	
Leisure				
Social				
Buying and selling				
Citizenship				

	A - Foundation	B- Intermediate	C-Advanced
Information	<ul style="list-style-type: none"> • I can search for information online. • I know how to save or store files and content (e.g. texts, pictures, music, videos, and web pages). • I know that not all online information can be trusted. • I know that some of the content I find can be covered by copyright. • I know how to go back to the content I saved. 	<ul style="list-style-type: none"> • I am developing strategies to search for information online from different devices (computer, smartphone) and can select the appropriate information I find. • I know how to evaluate online information sources. • I know how to save, store and tag files, content and information in more than one way. • I know the differences about copyright, copyleft and creative commons. I am developing strategies for the retrieval of the information I saved. 	<ul style="list-style-type: none"> • I can use a wide range of strategies when searching for information. • I am critical about the information I find and I can cross-check its validity. • I can filter the information I receive. • I can apply different methods and tools to organise files, content and information. • I know how different types of licences apply to the information and resources I use. • I know whom to follow in online information sharing places (e.g. micro-blogging). • I can deploy a set of strategies for retrieving the content I or others have organised and stored.
Communication	<ul style="list-style-type: none"> • I can communicate with others using at least one device, tool, or application (e.g. mobile phone, VoIP, chat, email). • I understand how technologies can be used to cooperate with others and I know how to interact with others in line with basic principles. • I can use at least an online service (e.g. online banking, eGovernment, buying and selling online, online health services). 	<ul style="list-style-type: none"> • I can use more than one digital tool to communicate with others (e.g. mobile phone, VoIP, chat, email). • I know how to participate in social networking sites and online communities. • I can discuss and create things in collaboration with others using simple digital means. • I can use at least two online services (e.g. online banking, eGovernment services, eCommerce). • I know the principles of online etiquette and I am able to apply them to my own context. 	<ul style="list-style-type: none"> • I can use a wide range of tools for online communication (emails, chats, SMS, instant messaging, blogs, micro-blogs, SNS). • I can adopt digital modes and ways of communication that best fit the purpose. • I can actively share information, content and resources with others through online communities, networks and collaboration platforms. • I know how to get actively engaged in online participation and I can use several online services (e.g. online banking, eGovernment services, eCommerce). • I can apply the various aspects of online etiquette to different digital communication spaces and contexts
Content-creation	<ul style="list-style-type: none"> • I can produce simple digital content in at least one format (e.g. text, tables, images, audio, etc.) and in at least one environment (e.g. computer, tablet, smartphone). • I can make basic changes to the content that others have produced 	<ul style="list-style-type: none"> • I can produce digital content in at least two different formats (e.g. text, tables, images, audio, etc.) and in at least two different environment (e.g. computer, tablet, smartphone). • I can edit, refine and modify the content I or others have produced. 	<ul style="list-style-type: none"> • I can produce digital content in different formats, platforms and environments. • I have expertise in the production of content using various multi-media application tools. • I can mash-up existing items of content to create new ones. • I can produce original and creative digital and multi-media outputs
Safety	<ul style="list-style-type: none"> • I can take basic actions to protect my online privacy (e.g. sharing only certain type of information with others). • I can use basic steps to protect my devices (for instance: using anti-viruses, passwords, etc.). • I know how to protect myself from cyberbullying. 	<ul style="list-style-type: none"> • I can protect my own online privacy. • I have some understanding of privacy issues and I have some knowledge of how my private data is collected and used. • I know how to protect my digital devices. • I know how to protect myself and others from cyberbullying and I understand the risks associated with the use of technologies (from health related issues to digital identity fraud). 	<ul style="list-style-type: none"> • I apply several protection strategies to manage my online identity and privacy and those of others. • I often change the default privacy settings of online services to enhance my privacy protection. • I have an informed and wide understanding of online privacy issues and how my private data is collected and used. • I can update my security strategies. • I know how to keep informed about the impact of technologies on everyday life, online consumption, and the environment
Problem-solving	<ul style="list-style-type: none"> • I know that several technologies are available. • I can ask for support and assistance when technologies do not work or when using a new device, programme or application. 	<ul style="list-style-type: none"> • I can choose the right technological tool according to the purpose. • I can solve easy problems that arise when technologies do not work. • I know how to learn to use a new technological tool. 	<ul style="list-style-type: none"> • I can make informed decisions when choosing a tool, device, application, software or service. • I can solve complex problems that arise when technologies do not work (trouble-shooting). • I keep up to date with new technological developments and consequently update my digital competence needs.