



European
Commission

DigComp 2.1

The Digital Competence Framework for Citizens

With eight
proficiency levels
and examples
of use

Authors:
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Riina Vuorikari and
Yves Punie

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Title

DigComp 2.1: The Digital Competence Framework for Citizens with eight proficiency levels and examples of use

Abstract

DigComp 2.1 is a further development of the Digital Competence Framework for Citizens. Based on the reference conceptual model published in DigComp 2.0, we present now eight proficiency levels and examples of use applied to the learning and employment field.



DigComp 2.1

The
Digital
Competence
Framework
for Citizens

With eight
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Preface

JRC research on **Learning and Skills for the Digital Era** started in 2005 with the aim to provide evidence-based policy support to the European Commission and the Member States on harnessing the potential of digital technologies to innovate education and training practices, improve access to lifelong learning and to deal with the rise of new (digital) skills and competences needed for employment, personal development and social inclusion. More than 20 major studies have been undertaken on these issues with more than 100 different publications.

The European Digital Competence Framework for Citizens¹, also known as DigComp, offers a tool to improve citizens' digital competence. DigComp was developed by the JRC as a scientific project and with intensive consultation of stakeholders, initially on behalf of DG EAC and, more recently, on behalf of DG EMPL. First published in 2013, DigComp has become a reference for the development and strategic planning of digital competence initiatives both at European and Member State level. In June 2016 JRC published DigComp 2.0, updating the terminology and conceptual model, as well as showcasing examples of its implementation at the European, national and regional level.

The current version is labelled DigComp 2.1 and it focuses on expanding the initial three proficiency levels to a more fine-grained eight level description as well as providing examples of use for these eight levels. Its aim is to support stakeholders with the further implementation of DigComp.

Other related JRC works on capacity building for the digital transformation of education and learning and for changing requirements on skills and competences has focussed on the development of:

¹ More information on: <https://ec.europa.eu/jrc/en/digcomp>

- digital competence frameworks for educators ([DigCompEdu](#)),
- educational organisations ([DigCompOrg](#)),
- consumers ([DigCompConsumers](#)).

A framework for opening-up Higher Education Institutions ([OpenEdu](#)) was also published in 2016, as well as a competence framework for entrepreneurship ([EntreComp](#)). Some of these frameworks are accompanied by (self-)assessment instruments. Additional research has been undertaken on computational thinking ([CompuThink](#)), [Learning Analytics](#), MOOC learners ([MOOCKnowledge](#)) and MOOCs and free digital learning opportunities for migrants and refugees ([MOOCs4inclusion](#)).

More information from all our studies can be found on the JRC Science hub:

<https://ec.europa.eu/jrc/en/research-topic/learning-and-skills>

Yves Punie

Project Leader

DG JRC Unit Human Capital and Employment

European Commission

DigCompEdu: <https://ec.europa.eu/jrc/en/digcompedu>

DigCompOrg: <https://ec.europa.eu/jrc/en/digcomporg>

DigCompConsumers: <https://ec.europa.eu/jrc/en/digcompconsumers>

OpenEdu: <https://ec.europa.eu/jrc/en/open-education>

EntreComp: <https://ec.europa.eu/jrc/en/entrecomp>

CompuThink: <https://ec.europa.eu/jrc/en/computational-thinking>

Learning Analytics: <http://europa.eu/lcB93Gb>

MOOCKnowledge: <http://moocknowledge.eu>

MOOCs4inclusion: <http://mooocs4inclusion.org>

A decorative graphic consisting of a yellow circle and a dark red curved line that passes through the circle. The text 'Table of Contents' is centered within the yellow circle.

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Introduction

The report presents the latest version of the Digital Competence Framework for Citizens (DigComp)² which was elaborated by the Human Capital and Employment Unit (Joint Research Centre) on behalf of the Directorate General for Employment, Social Affairs and Inclusion of the European Commission.

The DigComp Framework has 5 dimensions:

- Dimension 1:** Competence areas identified to be part of digital competence
- Dimension 2:** Competence descriptors and titles that are pertinent to each area
- Dimension 3:** Proficiency levels for each competence
- Dimension 4:** Knowledge, skills and attitudes applicable to each competence
- Dimension 5:** Examples of use, on the applicability of the competence to different purposes

Two of the dimensions in the earliest version of the Framework (DigComp 1.0 published in 2013) were updated in 2016, namely Dimension 1 (the competence areas) and Dimension 2 (the descriptors and titles). The updated version became DigComp 2.0³. This report presents the latest version of the Framework – DigComp 2.1 – which includes further updates. Dimension 3 now has eight proficiency levels and Dimension 5 has new examples of use⁴.

Section 2 of this report explains the eight proficiency levels and describes the examples of use. Section 3 presents the new Framework in detail. Significant effort has been dedicated to the lay-out and graphical representation of DigComp 2.1 to increase readability for all stakeholders interested in implementing the framework. As a reminder, in the next page an overview of DigComp 2.0 is presented, indicating the changes for DigComp 2.1.

² Information on DigComp: <https://ec.europa.eu/jrc/en/digcomp>

³ DigComp 2.0 is available at: <http://europa.eu/HV34YF>

⁴ DigComp 2.1 does not include an update of dimension 4, we prefer focusing on proving examples of use applied to the field of employment and learning due to their policy relevance.

DigComp 2.0 (year 2016)		DigComp 2.1 (year 2017)	
Competence areas (dimension 1)	Competences (dimension 2)	Proficiency levels (dimension 3)	Examples of use (dimension 5)
1. Information and data literacy	<ul style="list-style-type: none"> 1.1 Browsing, searching and filtering data, information and digital content 1.2 Evaluating data, information and digital content 1.3 Managing data, information and digital content 	Eight proficiency levels for each of the 21 competences	Examples of use of the eight proficiency levels applied to learning and employment scenario in the 21 competences
2. Communication and collaboration	<ul style="list-style-type: none"> 2.1 Interacting through digital technologies 2.2 Sharing through digital technologies 2.3 Engaging in citizenship through digital technologies 2.4 Collaborating through digital technologies 2.5 Netiquette 2.6 Managing digital identity 		
3. Digital content creation	<ul style="list-style-type: none"> 3.1 Developing digital content 3.2 Integrating and re-elaborating digital content 3.3 Copyright and licences 3.4 Programming 		
4. Safety	<ul style="list-style-type: none"> 4.1 Protecting devices 4.2 Protecting personal data and privacy 4.3 Protecting health and well-being 4.4 Protecting the environment 		
5. Problem solving	<ul style="list-style-type: none"> 5.1 Solving technical problems 5.2 Identifying needs and technological responses 5.3 Creatively using digital technologies 5.4 Identifying digital competence gaps 		

The eight proficiency levels and examples of use

DigComp 1.0 Framework had three proficiency levels in Dimension 3 (foundation, intermediate and advanced). These have now been increased to **eight levels** in DigComp 2.1. A wider and more detailed range of proficiency levels supports the development of learning and training materials. It also helps in the design of instruments for assessing the development of citizens' competence, career guidance and promotion at work.

Eight proficiency levels for each competence have been defined through learning outcomes (using action verbs, following Bloom's taxonomy) and inspired by the structure and vocabulary of the European Qualification Framework (EQF). Moreover, each level description contains knowledge, skills and attitudes, described in one single descriptor for each level of each competence; this equals to 168 descriptors (8 x 21 learning outcomes). An online validation survey helped to revise a first version of the levels, and to produce a final version.

As shown in Table 1 on the following page, each level represents a step up in citizens' acquisition of the competence according to its cognitive challenge, the complexity of the tasks they can handle and their autonomy in completing the task. To illustrate this point, we could say that a citizen at level 2 is able to remember and to carry out a simple task with help from somebody with digital competence only when she/he needs it. A citizen at level 5, however, can apply the knowledge, carry out different tasks and solve problems and also helps others to do so. We can also see that the first six proficiency levels of the new Framework are linked to the three levels originally identified in DigComp 1.0. A new highly-specialised level has been added to the latest version of the Framework which includes levels seven and eight. The information in Table 1 (page 13) is graphically represented on the infographics on page 14 and 15.

Table 1: Main keywords that feature the proficiency levels

Levels in DigComp 1.0	Levels in DigComp 2.1	Complexity of tasks	Autonomy	Cognitive domain
Foundation	1	Simple tasks	With guidance	Remembering
	2	Simple tasks	Autonomy and with guidance where needed	Remembering
Intermediate	3	Well-defined and routine tasks, and straightforward problems	On my own	Understanding
	4	Tasks, and well-defined and non-routine problems	Independent and according to my needs	Understanding
Advanced	5	Different tasks and problems	Guiding others	Applying
	6	Most appropriate tasks	Able to adapt to others in a complex context	Evaluating
Highly specialised	7	Resolve complex problems with limited solutions	Integrate to contribute to the professional practice and to guide others	Creating
	8	Resolve complex problems with many interacting factors	Propose new ideas and processes to the field	Creating

Foundation

Intermediate

Level 1

Level 2

Level 3

Level 4

SIMPLE TASKS

WITH GUIDANCE

REMEMBERING

WELL-DEFINED AND ROUTINE TASKS, AND STRAIGHTFORWARD PROBLEMS

ON MY OWN

UNDERSTANDING



SIMPLE TASKS

AUTONOMY AND WITH GUIDANCE WHERE NEEDED

REMEMBERING

TASKS, AND WELL-DEFINED NON-ROUTINE PROBLEM

INDEPENDENT AND ACCORDING TO MY NEED

UNDERSTANDING

ILLUSTRATION: EL RUBENCIO

COMPLEXITY OF TASKS

AUTONOMY

COGNITIVE DOMAIN

Advanced

Highly-specialised

Level 5

Level 6

Level 7

Level 8

DIFFERENT TASKS AND PROBLEMS

GUIDING OTHERS

APPLYING

RESOLVE COMPLEX PROBLEMS WITH LIMITED SOLUTIONS

INTEGRATE TO CONTRIBUTE TO THE PROFESSIONAL PRACTICE AND TO GUIDE OTHERS

CREATING



MOST APPROPRIATE TASKS

ABLE TO ADAPT TO OTHERS IN A COMPLEX CONTEXT

EVALUATING

RESOLVE COMPLEX PROBLEMS WITH MANY INTERACTING FACTORS

PROPOSE NEW IDEAS AND PROCESSES TO THE FIELD

CREATING

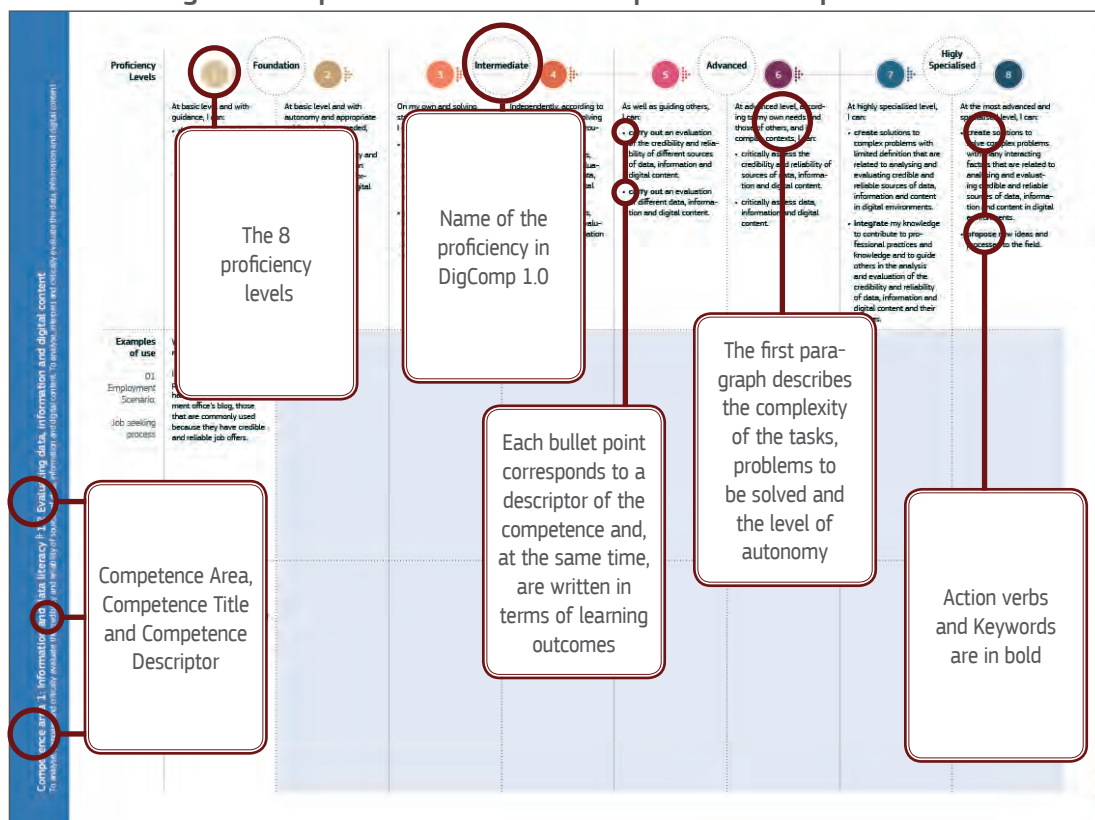
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S

The Figure 1 below gives a detailed explanation of how the competences are presented in the Section 3 of this report.

- The **Competence Areas** (dimension 1) and their **Competence title** and **Competence descriptor** (dimension 2) appear on the vertical banner, which colour changes depending on the Competence area.
- The first row shows the names of the **8 Proficiency Levels** (dimension 3) according to the version 2.1 (level 1, level 2, etc). In parallel, the name of the levels according to DigComp 1.0 is stated (Foundation, Intermediate, etc.).
- In the second row, we can see the description for each proficiency level related to the complexity of the tasks and problems and the level of autonomy, together with the description of the competence in terms of learning outcomes. Each bullet corresponds to one descriptor of the competence, and each action verbs and key words are in bold.

Figure 1: Explanation how the competences are presented



The **examples of use** (dimension 5 of the framework) have also been updated and contextualised in scenarios for two areas of use: **employment and learning**. These illustrate the eight proficiency levels to help future implementation of DigComp 2.1.

As we can see in the Section 3 of this report, the examples of use are presented as follows:

- We include examples of proficiency levels for two areas of use: employment and learning.
- We include scenarios for each competence area and area of use in order to contextualise the examples.
- We have elaborated examples for the two areas of use in each proficiency levels. In this version 2.1, the examples for the 8 levels are only available in the first competence (1.1), for the rest of competences we provide an example per level and area of use⁵.

In order to give examples in the same number of proficiency levels and to have the same number of examples across the levels, we have followed a “cascade” strategy: for one competence we have written the examples for one level, and in the following competence we have written the example in the following level, and so on. For example, competences 1.1 and 1.2 have has an example for level 1, competence 1.3 for level 2, competence 1.4 for level 3, etc.

The progression of the proficiency levels of the competences, their learning outcomes and practical application shown in the “Examples of use” have been made more understandable on the fold-out table (Competence 1.1) at page 19.

⁵ We do not provide examples for all the proficiency levels, because the nature of the framework is descriptive and their aim is to illustrate the proficiency levels.

Here comic strips have been used in order to showcase one example of use for an employment scenario and one example of use for a learning scenario in competence 1.1.

Concretely, the comic strips allow the reader to easily understand the progression in the acquisition of a digital competence, and therefore it is a support for the stakeholders willing to implement the framework.

Proficiency Levels

1

Foundation

2

3

Intermediate

4

5

Advanced

6

7

Highly Specialised

8

Examples of use

01
Employment Scenario:
Job seeking process

- At basic level and with guidance, I can:
- **identify** my information needs,
 - **find** data, information and content through a **simple** search in digital environments,
 - **find** how to access these data, information and content and navigate between them.
 - **identify simple** personal search strategies.

- At basic level and with autonomy and appropriate guidance where needed, I can:
- **identify** my information needs,
 - **find** data, information and content through a **simple** search in digital environments,
 - **find** how to access these data, information and content and navigate between them.
 - **identify simple** personal search strategies.

- On my own and solving straightforward problems, I can:
- **explain** my information needs,
 - **perform well-defined and routine** searches to find data, information and content in digital environments,
 - **explain** how to access them and navigate between them.
 - **explain well-defined and routine** personal search strategies.

- Independently, according to my own needs, and solving well-defined and non-routine problems, I can:
- **illustrate** information needs,
 - **organise** the searches of data, information and content in digital environments,
 - **describe** how to access to these data, information and content, and navigate between them.
 - **organise** personal search strategies.

- As well as guiding others, I can:
- **respond** to information needs,
 - **apply** searches to obtain data, information and content in digital environments,
 - **show** how to access to these data, information and content and navigate between them.
 - **propose** personal search strategies.

- At advanced level, according to my own needs and those of others, and in complex contexts, I can:
- **assess** information needs,
 - **adapt** my searching strategy to find the **most appropriate** data, information and content in digital environments,
 - **explain** how to access to these **most appropriate** data, information and content and navigate among them.
 - **vary** personal search strategies.

- At highly specialised level, I can:
- **create solutions to complex problems with limited definition** that are related to browsing, searching and filtering of data, information and digital content.
 - **integrate** my knowledge **to contribute to professional practice and knowledge and guide others** in browsing, searching and filtering data, information and digital content.

- At the most advanced and specialised level, I can:
- **create solutions to solve complex problems with many interacting factors** that are related to browsing, searching and filtering data, information and digital content.
 - **propose new** ideas and processes to the field.

With help from an employment adviser:
I can identify, from a list, those job portals which can help me look for a job.
I can also find these job portals in my smartphone's app store, and access and navigate between them.
From a list of generic keywords for job seeking available in a blog on job hunting, I can also identify the keywords that are useful for me.

With the help if necessary of an employment adviser:
I can identify, from a list, those job portals which can help me look for a job.
I can also find these job portals in my smartphone's app store, and access and navigate between them.
From a list of generic keywords for job seeking available in a blog on job hunting, I can also identify the keywords that are useful for me.

By myself:
I can name the job portals I routinely use to help me look for a job.
I can use well-defined keywords to find jobs portals in my smartphone's app store, and explain to the employment adviser how I access and navigate between them.
I can explain to the employment adviser why I usually use certain keywords to find job portals and apps in my smartphone.
I can fix problems such as accessing to the wrong portal or job app, or navigating away from portals that I routinely use.

I can give examples to the employment adviser of suitable job portals or apps that I use as for my job seeking needs.
I can organise my own search strategy such as using keywords and checking apps' evaluation, in order to find suitable apps on my smartphone that fit with my job seeking profile.
I can describe to the employment adviser how I access and navigate between the apps I have found through this organised search strategy.
I can organise a list of keywords that are useful for finding job portals and apps with job offers related to my job profile on my smartphone.
While I am doing these activities, I can resolve issues such as evaluate new apps that come up in my smartphone's app store as a result of my search, or add new keywords to my personal search strategy.

When job seeking, I can find job portals and apps related to my job profile in any digital environment, either the routine or new ones (OS, apps, devices).
I can also show a friend how to find apps on her smartphone, using different keywords and evaluation criteria to select those that fit her job profile.
I can explain to her how to access and navigate between these apps to find appropriate job vacancies.
I can offer a friend my tips on job seeking containing the main keywords, job ads, blogs, wikis, apps and portals I use when job seeking, and share it with other job seekers.

I can assess the most appropriate job portals for job vacancies according to my job seeking needs and those of a friend.
I can find the job apps adapted to my job seeking needs and those of a friend. I can differentiate between appropriate and inappropriate apps, and pop-up information or spam while I am accessing and navigating between apps.
I can explain to other job seekers how I perform these searches, and I can overcome unexpected situations that arise in the digital environment (spam, inappropriate job portals, problems with the downloading, etc.) in order to find appropriate job offers on my smartphone.
I can share my tips on job seeking containing the most appropriate keywords, job ads, blogs, wikis, apps and portals adapted to different job profiles, and give examples on how to overcome complex situations when job seeking (e.g. not finding appropriate job ads, fake or old job ads).

I can create a digital collaborative platform (blog, wiki, etc.) which can be used by other job seekers to browse and filter job portals and offers according to their job seeking needs

I can create new apps or platforms for browsing, searching and filtering job portals and offers, according to job seekers' needs.



Proficiency Levels

1

Foundation

2

3

Intermediate

4

5

Advanced

6

7

Highly Specialised

8

- At basic level and with guidance, I can:
- **identify** my information needs,
 - **find** data, information and content through a **simple** search in digital environments,
 - **find** how to access these data, information and content and navigate between them.
 - **identify simple** personal search strategies.

- At basic level and with autonomy and appropriate guidance where needed, I can:
- **identify** my information needs,
 - **find** data, information and content through a **simple** search in digital environments,
 - **find** how to access these data, information and content and navigate between them.
 - **identify** simple personal search strategies.

- On my own and solving straightforward problems, I can:
- **explain** my information needs,
 - **perform well-defined and routine** searches to find data, information and content in digital environments,
 - **explain** how to access them and navigate between them.
 - **explain well-defined and routine** personal search strategies.

- Independently, according to my own needs, and solving well-defined and non-routine problems, I can:
- **illustrate** information needs,
 - **organise** the searches of data, information and content in digital environments,
 - **describe** how to access to these data, information and content, and navigate between them.
 - **organise** personal search strategies.

- As well as guiding others, I can:
- **respond** to information needs,
 - **apply** searches to obtain data, information and content in digital environments,
 - **show** how to access to these data, information and content and navigate between them.
 - **propose** personal search strategies.

- At advanced level, according to my own needs and those of others, and in complex contexts, I can:
- **assess** information needs,
 - **adapt** my searching strategy to find the most appropriate data, information and content in digital environments,
 - **explain** how to access to these most appropriate data, information and content and navigate among them.
 - **vary** personal search strategies.

- At highly specialised level, I can:
- **create solutions to complex problems with limited definition** that are related to browsing, searching and filtering of data, information and digital content.
 - **integrate** my knowledge **to contribute to professional practice and knowledge and guide others** in browsing, searching and filtering data, information and digital content.

- At the most advanced and specialised level, I can:
- **create solutions to solve complex problems with many interacting factors** that are related to browsing, searching and filtering data, information and digital content.
 - **propose new** ideas and processes to the field.

Examples of use

02

Learning Scenario:

Prepare a short report on a specific topic

With help from my teacher:

I can identify websites, blogs and digital databases from a list in my digital textbook to look for literature on the report topic.

I can also identify literature on the report topic in these websites, blogs and digital databases, and access and navigate among them.

Using a list of generic keywords and tags available in my digital textbook, I can also identify those which would be useful for finding literature on the report topic

In the classroom with my teacher who I can consult whenever I need:

I can identify websites, blogs and digital databases from a list in my digital textbook to look for literature on the report topic.

I can also identify literature on the report topic in these websites, blogs and digital databases, and access and navigate among them.

Using a list of generic keywords and tags available in my digital textbook, I can also identify those which would be useful for finding literature on the report topic.

By myself:

I can name to my teacher websites, blogs and digital databases I routinely access on my computer in order to consult literature for my homework.

I can also use well-defined keywords to find literature resources in websites, blogs and digital databases, and explain how I access and navigate between the results I find.

I can explain to my classmates those keywords and tags I usually use to find literature in digital environments (blogs, websites, databases) to prepare my homework.

I can fix problems such as identifying that I have accessed the wrong website, or that I am navigating away from my routinely-used websites.

I can give examples to my classmates of websites, blogs and digital databases I consult to find the literature on my report topic.

I can organise my own search strategy to find these websites, blogs and digital databases containing literature related to my report topic.

I can describe to my teacher how I access and navigate between websites, blogs and digital database to find the literature I obtained through this organised search.

I can organise, with digital and online sticky notes on my tablet, a list of useful keywords and tags for finding literature related to the report topic.

I can respond to any issue while I am doing these activities. For example, I can add new keywords and tags to my personal search strategies if I don't find appropriate resources related to the report topic.

For preparing the report, I can access websites, blogs and digital databases to find literature related to the topic, using any digital environment, either the routine or new ones (OS, apps, devices).

I can show a classmate how to find on her tablet, websites, blogs and digital databases containing the literature for the report.

I can explain her how to access and navigate between these digital resources in order to find literature for her report.

I can offer a friend my tips on how I find websites, blogs and digital database with literature related to the report using keywords and tags.

I can assess the most appropriate websites, blogs and digital databases to obtain the literature according to my need and those of a friend.

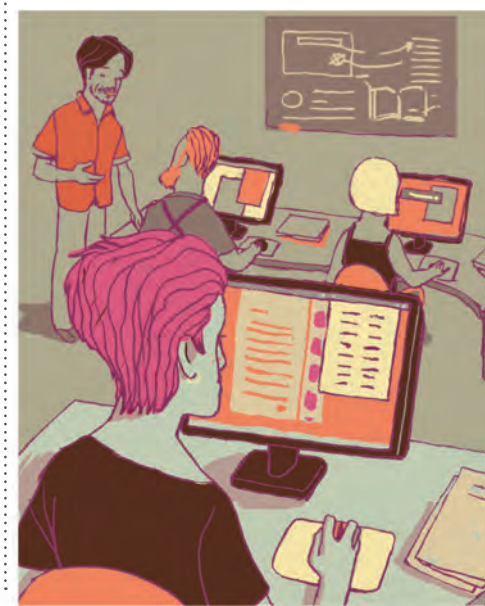
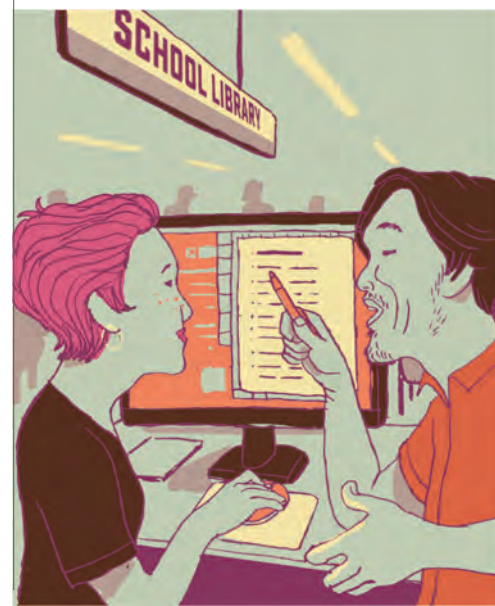
I can find websites, blogs and digital databases adapted to my needs and those of a friend, and differentiate between appropriate and inappropriate digital resources, pop-up information or spam while I am accessing and navigating among them.

I can explain to my teacher how I perform these searches, and overcome unexpected situations that arise on the digital environment (e.g. need a username to access a digital library archives) to find literature for writing the report.

I can give tips highlighting my personal strategy for finding the most appropriate literature in websites, blogs and digital databases, including examples on how I can overcome the complexity that occurs while navigating among these digital resources (e.g. not finding enough literature, junk data).

I can create a digital collaborative platform (blog, wiki, etc.) in the digital learning environment of the school, to share and filter literature I found useful on the topic of the report, guiding my classmates in writing their report.

I can develop a new app or platform for browsing, searching and filtering literature on academic topics to be used by the classroom.



The competences

This section shows each competence of DigComp 2.1 in a table with four dimensions: dimension 1 (competence area), dimension 2 (competence title and descriptor), dimension 3 (proficiency levels), and dimension 5 (examples of use). We remind here that DigComp 2.1 does not include dimension 4 (knowledge, skills and attitudes).

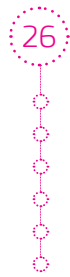
Competence area 1: Information and data literacy

- 1.1 Browsing, searching, filtering data, information and digital content
- 1.2 Evaluating data, information and digital content
- 1.3 Managing data, information and digital content



Competence area 2: Communication and collaboration

- 2.1 Interacting through digital technologies
- 2.2 Sharing through digital technologies
- 2.3 Engaging in citizenship through digital technologies
- 2.4 Collaborating through digital technologies
- 2.5 Netiquette
- 2.6 Managing digital identity



Competence area 3: Digital content creation

- 3.1 Developing digital content
- 3.2 Integrating and re-elaborating digital content
- 3.3 Copyright and licences
- 3.4 Programming



Competence area 4: Safety

- 4.1 Protecting devices
- 4.2 Protecting personal data and privacy
- 4.3 Protecting health and well-being
- 4.4 Protecting the environment



Competence area 5: Problem solving

- 5.1 Solving technical problems
- 5.2 Identifying needs and technological responses
- 5.3 Creatively using digital technologies
- 5.4 Identifying digital competence gaps



A decorative graphic consisting of a yellow circle and a dark red curved line that passes through the circle. The text 'The Competences' is centered within the yellow circle.

The Competences

Proficiency Levels	Foundation		Intermediate		Advanced		Highly Specialised			
	1	2	3	4	5	6	7	8		
	<p>At basic level and with guidance, I can:</p> <ul style="list-style-type: none"> • identify my information needs, • find data, information and content through a simple search in digital environments, • find how to access these data, information and content and navigate between them. • identify simple personal search strategies. 		<p>On my own and solving straightforward problems, I can:</p> <ul style="list-style-type: none"> • explain my information needs, • perform well-defined and routine searches to find data, information and content in digital environments, • explain how to access them and navigate between them. • explain well-defined and routine personal search strategies. 		<p>As well as guiding others, I can:</p> <ul style="list-style-type: none"> • respond to information needs, • apply searches to obtain data, information and content in digital environments, • show how to access to these data, information and content and navigate between them. • propose personal search strategies. 		<p>At highly specialised level, I can:</p> <ul style="list-style-type: none"> • create solutions to complex problems with limited definition that are related to browsing, searching and filtering of data, information and digital content. • integrate my knowledge to contribute to professional practice and knowledge and guide others in browsing, searching and filtering data, information and digital content. 		<p>At the most advanced and specialised level, I can:</p> <ul style="list-style-type: none"> • create solutions to solve complex problems with many interacting factors that are related to browsing, searching and filtering data, information and digital content. • propose new ideas and processes to the field. 	
<p>Examples of use</p> <p>01 Employment Scenario:</p> <p>Job seeking process</p>	<p>With help from an employment adviser:</p> <p>I can identify, from a list, those job portals which can help me look for a job.</p> <p>I can also find these job portals in my smartphone's app store, and access and navigate between them.</p> <p>From a list of generic keywords for job seeking available in a blog on job hunting, I can also identify the keywords that are useful for me.</p>									
<p>Examples of use</p> <p>02 Learning Scenario:</p> <p>Prepare a short report on a specific topic</p>	<p>With help from my teacher:</p> <p>I can identify websites, blogs and digital databases from a list in my digital textbook to look for literature on the report topic.</p> <p>I can also identify literature on the report topic in these websites, blogs and digital databases, and access and navigate among them.</p> <p>Using a list of generic keywords and tags available in my digital textbook, I can also identify those which would be useful for finding literature on the report topic</p>									

Proficiency Levels	Foundation		Intermediate		Advanced		Highly Specialised	
	1	2	3	4	5	6	7	8
	<p>At basic level and with guidance, I can:</p> <ul style="list-style-type: none"> • detect the credibility and reliability of common sources of data, information and their digital content. 	<p>At basic level and with autonomy and appropriate guidance where needed, I can:</p> <ul style="list-style-type: none"> • detect the credibility and reliability of common sources of data, information and their digital content. 	<p>On my own and solving straightforward problems, I can:</p> <ul style="list-style-type: none"> • perform the analysis, comparison and evaluation of the credibility and reliability of well-defined sources of data, information and digital content. • perform the analysis, interpretation and evaluation of well-defined data, information and digital content 	<p>Independently, according to my own needs, and solving well-defined and non-routine problems, I can:</p> <ul style="list-style-type: none"> • perform the analysis, comparison and evaluation of sources of data, information and digital content. • perform the analysis, interpretation and evaluation of data, information and digital content. 	<p>As well as guiding others, I can:</p> <ul style="list-style-type: none"> • carry out an evaluation of the credibility and reliability of different sources of data, information and digital content. • carry out an evaluation of different data, information and digital content. 	<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"> • critically assess the credibility and reliability of sources of data, information and digital content. • critically assess data, information and digital content. 	<p>At highly specialised level, I can:</p> <ul style="list-style-type: none"> • create solutions to complex problems with limited definition that are related to analysing and evaluating credible and reliable sources of data, information and content in digital environments. • integrate my knowledge to contribute to professional practices and knowledge and to guide others in the analysis and evaluation of the credibility and reliability of data, information and digital content and their sources. 	<p>At the most advanced and specialised level, I can:</p> <ul style="list-style-type: none"> • create solutions to solve complex problems with many interacting factors that are related to analysing and evaluating credible and reliable sources of data, information and content in digital environments. • propose new ideas and processes to the field.
<p>Examples of use</p> <p>01 Employment Scenario: Job seeking process</p>	<p>With help from an employment adviser: I can identify in a list of job portals and apps a friend has found in an employment office's blog, those that are commonly used because they have credible and reliable job offers.</p>							
<p>Examples of use</p> <p>02 Learning Scenario: Prepare a short report on a specific topic</p>	<p>Helped by my teacher: I can identify, from a list in my textbook of blogs and digital databases containing available literature, those that are commonly used because they are credible and reliable.</p>							



Proficiency Levels	Foundation		Intermediate		Advanced		Highly Specialised	
	1	2	3	4	5	6	7	8
	<p>At basic level and with guidance, I can:</p> <ul style="list-style-type: none"> • identify how to organise, store and retrieve data, information and content in a simple way in digital environments. • recognise where to organise them in a simple way in a structured environment. 	<p>At basic level and with autonomy and appropriate guidance where needed, I can:</p> <ul style="list-style-type: none"> • identify how to organise, store and retrieve data, information and content in a simple way in digital environments. • recognise where to organise them in a simple way in a structured environment. 	<p>On my own and solving straightforward problems, I can:</p> <ul style="list-style-type: none"> • select data, information and content in order to organise, store and retrieve in a routine way in digital environments. • organise them in a routine way in a structured environment. 	<p>Independently, according to my own needs, and solving well-defined and non-routine problems, I can:</p> <ul style="list-style-type: none"> • organise information, data and content to be easily stored and retrieved. • organise information, data and content in a structured environment. 	<p>As well as guiding others, I can:</p> <ul style="list-style-type: none"> • manipulate information, data and content for their easier organisation, storage and retrieval. • carry out their organisation and processing in a structured environment. 	<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"> • adapt the management of information, data and content for the most appropriate easy retrieval and storage. • adapt them to be organised and processed in the most appropriate structured environment. 	<p>At highly specialised level, I can:</p> <ul style="list-style-type: none"> • create solutions to complex problems with limited definition that are related to managing data, information, and content for their organisation, storage and retrieval in a structured digital environment. • integrate my knowledge to contribute to professional practices with knowledge and to guide others in managing data, information and digital content in a structured digital environment. 	<p>At the most advanced and specialised level, I can:</p> <ul style="list-style-type: none"> • create solutions to solve complex problems with many interacting factors that are related to managing data, information, and content for their organisation, storage and retrieval in a structured digital environment. • propose new ideas and processes to the field.
<p>Examples of use</p> <p>01 Employment Scenario: Job seeking process</p>	<p>At home with my sister who I ask whenever I need:</p> <p>I can identify how and where to organise and keep track of job ads in a job app (e.g. www.indeed.com) of my smartphone in order to retrieve them when I need them along my job seeking.</p>							
<p>Examples of use</p> <p>02 Learning Scenario: Prepare a short report on a specific topic</p>	<p>In the classroom with my teacher who I can consult whenever I need:</p> <p>I can identify an app in my tablet to organise and store links to those websites, blogs and digital databases related with a specific topic of literature and use it to retrieve them when needed for my report.</p>							

Proficiency Levels	Foundation		Intermediate		Advanced		Highly Specialised	
	1	2	3	4	5	6	7	8
	<p>At basic level and with guidance, I can:</p> <ul style="list-style-type: none"> • select simple digital technologies to interact, and • identify appropriate simple communication means for a given context. 	<p>At basic level and with autonomy and appropriate guidance where needed, I can:</p> <ul style="list-style-type: none"> • select simple digital technologies to interact, and • identify appropriate simple communication means for a given context. 	<p>On my own and solving straightforward problems, I can:</p> <ul style="list-style-type: none"> • perform well-defined and routine interactions with digital technologies, and • select well-defined and routine appropriate digital communication means for a given context. 	<p>Independently, according to my own needs, and solving well-defined and non-routine problems, I can:</p> <ul style="list-style-type: none"> • select a variety of digital technologies to interact, and • select a variety of appropriate digital communication means for a given context. 	<p>As well as guiding others, I can:</p> <ul style="list-style-type: none"> • use a variety of digital technologies in order to interact, • show others the most appropriate digital communication means for a given context 	<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"> • adapt a variety of digital technologies for the most appropriate interaction, and • adapt the most appropriate communication means for a given context. 	<p>At highly specialised level, I can:</p> <ul style="list-style-type: none"> • create solutions to complex problems with limited definition that are related to interacting through digital technologies and digital communication means. • integrate my knowledge to contribute to professional practices and knowledge and to guide others in the interaction through digital technologies. 	<p>At the most advanced and specialised level, I can:</p> <ul style="list-style-type: none"> • create solutions to solve complex problems with many interacting factors that are related to interacting through digital technologies and digital communication means • propose new ideas and processes to the field.
<p>Examples of use</p> <p>01 Employment Scenario:</p> <p>Organise an event</p>			<p>By myself:</p> <p>I can interact with participants and other colleagues using my corporate email account app on my smartphone in order to organise an event for my company.</p> <p>I can also select options available in my email suite to organise the event, such as sending calendar invitations.</p> <p>I can fix problems, e.g. an incorrect email address.</p>					
<p>Examples of use</p> <p>02 Learning Scenario:</p> <p>Prepare group work with my classmates</p>			<p>By myself:</p> <p>I can use a commonly-used chat on my smartphone (e.g. Facebook messenger or WhatsApp) to talk to my classmates and organise group work.</p> <p>I can choose other digital communication means on the classroom tablet (e.g. my classroom forum) that could be useful to talk about the details of organising group work.</p> <p>I can fix problems such as adding or deleting members to the chat group.</p>					



Proficiency Levels	Foundation		Intermediate		Advanced		Highly Specialised	
	1	2	3	4	5	6	7	8
	<p>At basic level and with guidance, I can:</p> <ul style="list-style-type: none"> • recognise simple appropriate digital technologies to share data, information and digital content. • identify simple referencing and attribution practices. 	<p>At basic level and with autonomy and appropriate guidance where needed, I can:</p> <ul style="list-style-type: none"> • recognise simple appropriate digital technologies to share data, information and digital content. • identify simple referencing and attribution practices. 	<p>On my own and solving straightforward problems, I can:</p> <ul style="list-style-type: none"> • select well-defined and routine appropriate digital technologies to share data, information and digital content. • explain how to act as an intermediary for sharing information and content through well-defined and routine digital technologies, • illustrate well-defined and routine referencing and attribution practices. 	<p>Independently, according to my own needs, and solving well-defined and non-routine problems, I can:</p> <ul style="list-style-type: none"> • manipulate appropriate digital technologies to share data, information and digital content. • explain how to act as an intermediary for sharing information and content through digital technologies, • illustrate referencing and attribution practices. 	<p>As well as guiding others, I can:</p> <ul style="list-style-type: none"> • share data, information and digital content through a variety of appropriate digital tools, • show others how to act as an intermediary for sharing information and content through digital technologies. • apply a variety of referencing and attribution practices. 	<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"> • assess the most appropriate digital technologies to share information and content. • adapt my intermediation role, • vary the use of the more appropriate referencing and attribution practices. 	<p>At highly specialised level, I can:</p> <ul style="list-style-type: none"> • create solutions to complex problems with limited definition that are related to sharing through digital technologies. • integrate my knowledge to contribute to professional practices and knowledge and guide others in sharing through digital technologies. 	<p>At the most advanced and specialised level, I can:</p> <ul style="list-style-type: none"> • create solutions to solve complex problems with many interacting factors that are related to sharing through digital technologies. • propose new ideas and processes to the field.
<p>Examples of use</p> <p>01 Employment Scenario: Organise an event</p>				<p>I can use my company's digital storage system to share the event's agenda with the list of participants I created on my PC.</p> <p>I can show my colleagues on their smartphones how to access and share the agenda using my organisation's digital storage system.</p> <p>I can show my boss examples on her tablet of the digital sources I use to design the event's agenda.</p> <p>I can respond to any issue while I am doing these activities, such as unexpected problems with sharing the agenda with the participants.</p>				
<p>Examples of use</p> <p>02 Learning Scenario: Prepare group work with my classmates</p>				<p>I can use a cloud-based storage system (e.g. Dropbox, Google Drive) to share material with other members of my group.</p> <p>I can explain to other members of my group, using the class laptop, how I share the material in the digital storage system.</p> <p>I can show my teacher, on her tablet, the digital sources I use to prepare the material for group work.</p> <p>While I am doing these activities, I can solve any issue that may arise such as solving problems to do with storage or sharing material with other members of my group.</p>				

Proficiency Levels	Foundation		Intermediate		Advanced		Highly Specialised	
	1	2	3	4	5	6	7	8
	<p>At basic level and with guidance, I can:</p> <ul style="list-style-type: none"> • identify simple digital services in order to participate in society. • I can recognise simple appropriate digital technologies to empower myself and to participate in society as a citizen. 	<p>At basic level and with autonomy and appropriate guidance where needed, I can:</p> <ul style="list-style-type: none"> • identify simple digital services in order to participate in society. • recognise simple appropriate digital technologies to empower myself and to participate in society as a citizen. 	<p>On my own and solving straightforward problems, I can:</p> <ul style="list-style-type: none"> • select well-defined and routine digital services in order to participate in society. • indicate well-defined and routine appropriate digital technologies to empower myself and to participate in society as a citizen. 	<p>Independently, according to my own needs, and solving well-defined and non-routine problems, I can:</p> <ul style="list-style-type: none"> • select digital services in order to participate in society. • discuss appropriate digital technologies to empower myself and to participate in society as a citizen. 	<p>As well as guiding others, I can:</p> <ul style="list-style-type: none"> • propose different digital services to participate in society. • use appropriate digital technologies to empower myself and to participate in society as a citizen. 	<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"> • vary the use of the most appropriate digital services in order to participate in society. • vary the use of the most appropriate digital technologies to empower myself and to participate in society as a citizen. 	<p>At highly specialised level, I can:</p> <ul style="list-style-type: none"> • create solutions to complex problems with limited definition that are related to engaging in citizenship through digital technologies. • integrate my knowledge to contribute to professional practices and knowledge and guide others in engaging in citizenship through digital technologies. 	<p>At the most advanced and specialised level, I can:</p> <ul style="list-style-type: none"> • create solutions to solve complex problems with many interacting factors that are related to engaging in citizenship through digital technologies. • propose new ideas and processes to the field.
<p>Examples of use</p> <p>01 Employment Scenario: Organise an event</p>					<p>I can propose and use different media strategies (e.g. Survey on FaceBook, Hastags on Instagram and Twitter) to empower the citizens of my city to participate in defining the main topics of an event on the use of sugar in food production.</p> <p>I can inform my colleagues about these strategies and show them how to use a particular one to empower citizens to participate.</p>			
<p>Examples of use</p> <p>02 Learning Scenario: Prepare group work with my classmates</p>					<p>I can propose and use different micro-blogs (e.g. Twitter), blogs and wikis, for a public consultation regarding social inclusion of migrants in my neighbourhood to collect proposals on the topic of the group work.</p> <p>I can inform my classmates about these digital platforms and guide them on how to use a particular one to empower citizenship participation in their neighbourhood.</p>			



Proficiency Levels	Foundation		Intermediate		Advanced		Highly Specialised	
	1	2	3	4	5	6	7	8
	<p>At basic level and with guidance, I can:</p> <ul style="list-style-type: none"> • choose simple digital tools and technologies for collaborative processes. 	<p>At basic level and with autonomy and appropriate guidance where needed, I can:</p> <ul style="list-style-type: none"> • choose simple digital tools and technologies for collaborative processes. 	<p>On my own and solving straightforward problems, I can:</p> <ul style="list-style-type: none"> • select well-defined and routine digital tools and technologies for collaborative processes. 	<p>Independently, according to my own needs, and solving well-defined and non-routine problems, I can:</p> <ul style="list-style-type: none"> • select digital tools and technologies for collaborative processes. 	<p>As well as guiding others, I can:</p> <ul style="list-style-type: none"> • propose different digital tools and technologies for collaborative processes. 	<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"> • vary the use of the most appropriate digital tools and technologies for collaborative processes. • choose the most appropriate digital tools and technologies for co-constructing and co-creating data, resources and knowledge. 	<p>At highly specialised level, I can:</p> <ul style="list-style-type: none"> • create solutions to complex problems with limited definition that are related to using collaborative processes and co-construction and co-creation of data, resources and knowledge through digital tools and technologies. • integrate my knowledge to contribute to professional practice and knowledge and guide others in collaborating through digital technologies. 	<p>At the most advanced and specialised level, I can:</p> <ul style="list-style-type: none"> • create solutions to solve complex problems with many interacting factors that are related to using collaborative processes and co-construction and co-creation of data, resources and knowledge through digital tools and technologies. • propose new ideas and processes to the field.
<p>Examples of use</p> <p>01 Employment Scenario:</p> <p>Organise an event</p>						<p>I can use the most appropriate digital tools at work (e.g. Dropbox, Google Drive, wiki) to create with my colleagues a leaflet and a blog on the event.</p> <p>I can also differentiate between appropriate and inappropriate digital tools for collaborative processes. The latter are those tools that do not address the purpose and scope of the task - e.g. two people editing text simultaneously using a wiki is impractical.</p> <p>I can overcome unexpected situations that can arise in the digital environment when co-creating the leaflet and the blog (e.g. controlling access to edit documents or a colleague cannot save changes to the material).</p>		
<p>Examples of use</p> <p>02 Learning Scenario:</p> <p>Prepare group work with my classmates</p>						<p>I can use the most appropriate digital resources in order to create a video related to the work on my tablet with my classmates. I can also differentiate between appropriate and inappropriate digital resources to create this video and work in a digital environment together with classmates.</p> <p>I can overcome unexpected situations that arise on the digital environment when co-creating data and content and making a video on group work. (e.g. a file is not updating the changes made by the members, a member doesn't know how to upload a file in the digital tool).</p>		

Proficiency Levels	Foundation		Intermediate		Advanced		Highly Specialised	
	1	2	3	4	5	6	7	8
	<p>At basic level and with guidance, I can:</p> <ul style="list-style-type: none"> • differentiate simple behavioural norms and know-how while using digital technologies and interacting in digital environments. • choose simple communication modes and strategies adapted to an audience and • differentiate simple cultural and generational diversity aspects to consider in digital environments. 	<p>At basic level and with autonomy and appropriate guidance where needed, I can:</p> <ul style="list-style-type: none"> • differentiate simple behavioural norms and know-how while using digital technologies and interacting in digital environments. • choose simple communication modes and strategies adapted to an audience and • differentiate simple cultural and generational diversity aspects to consider in digital environments. 	<p>On my own and solving straightforward problems, I can:</p> <ul style="list-style-type: none"> • clarify well-defined and routine behavioural norms and know-how while using digital technologies and interacting in digital environments. • express well-defined and routine communication strategies adapted to an audience and • describe well-defined and routine cultural and generational diversity aspects to consider in digital environments. 	<p>Independently, according to my own needs, and solving well-defined and non-routine problems, I can:</p> <ul style="list-style-type: none"> • discuss behavioural norms and know-how while using digital technologies and interacting in digital environments. • discuss communication strategies adapted to an audience and • discuss cultural and generational diversity aspects to consider in digital environments. 	<p>As well as guiding others, I can:</p> <ul style="list-style-type: none"> • apply different behavioural norms and know-how while using digital technologies and interacting in digital environments. • apply different communication strategies in digital environments adapted to an audience and • apply different cultural and generational diversity aspects to consider in digital environments. 	<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"> • adapt the most appropriate behavioural norms and know-how while using digital technologies and interacting in digital environments. • adapt the most appropriate communication strategies in digital environments to an audience and • apply different cultural and generational diversity aspects in digital environments. 	<p>At highly specialised level, I can:</p> <ul style="list-style-type: none"> • create solutions to complex problems with limited definition that are related to digital etiquettes respectful to different audiences and cultural and generational diversity. • integrate my knowledge to contribute to professional practice and knowledge and guide others in digital etiquette. 	<p>At the most advanced and specialised level, I can:</p> <ul style="list-style-type: none"> • create solutions to solve complex problems with many interacting factors that are related to digital etiquettes respectful to different audiences and cultural and generational diversity. • propose new ideas and processes to the field.
<p>Examples of use</p> <p>01 Employment Scenario: Organise an event</p>							<p>While organising an event for my organisation, I can solve problems that arise while writing and communicating in digital environments, (e.g. inappropriate comments about my organisation in a social network).</p> <p>I can create rules from this practice for my current and future colleagues to implement and use as a guide.</p>	
<p>Examples of use</p> <p>02 Learning Scenario: Prepare group work with my classmates</p>							<p>I can solve problems of etiquette that arise with my classmates while using a digital collaborative platform (blog, wiki, etc.) for group work (e.g. classmates criticising each other).</p> <p>I can create rules for appropriate behaviour while working online as a group which can be used and shared in the school's digital learning environment. I can also guide my classmates as to what constitutes appropriate digital behaviour while working with others on a digital platform.</p>	



Competence area 2: Communication and collaboration # 2.6 Managing digital identity

To create, and manage one or multiple digital identities, to be able to protect one's own reputation, to deal with the data that one produces through several digital tools, environments and services.

Proficiency Levels	Foundation		Intermediate		Advanced		Highly Specialised	
	1	2	3	4	5	6	7	8
	<p>At basic level and with guidance, I can:</p> <ul style="list-style-type: none"> • identify a digital identity, • describe simple ways to protect my reputation online, • recognise simple data I produce through digital tools, environments or services. 	<p>At basic level and with autonomy and appropriate guidance where needed, I can:</p> <ul style="list-style-type: none"> • identify a digital identity, • describe simple ways to protect my reputation online, • recognise simple data I produce through digital tools, environments or services. 	<p>On my own and solving straightforward problems, I can:</p> <ul style="list-style-type: none"> • discriminate a range of well-defined and routine digital identities, • explain well-defined and routine ways to protect my reputation online, • describe well-defined data I routinely produce through digital tools, environments or services. 	<p>Independently, according to my own needs, and solving well-defined and non-routine problems, I can:</p> <ul style="list-style-type: none"> • display a variety of specific digital identities, • discuss specific ways to protect my reputation online, • manipulate data I produce through digital tools, environments or services. 	<p>As well as guiding others, I can:</p> <ul style="list-style-type: none"> • use a variety of digital identities, • apply different ways to protect my reputation online, • use data I produce through several digital tools environment and services. 	<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"> • discriminate multiple digital identities, • explain the more appropriate ways to protect one's own reputation, • change the data produced through several tools, environments and services. 	<p>At highly specialised level, I can:</p> <ul style="list-style-type: none"> • create solutions to complex problems with limited definition that are related to managing digital identities and protection of people's online reputation. • integrate my knowledge to contribute to professional practice and knowledge and guide others in managing digital identity. 	<p>At the most advanced and specialised level, I can:</p> <ul style="list-style-type: none"> • create solutions to solve complex problems with many interacting factors that are related to managing digital identities and protection of people's online reputation. • propose new ideas and processes to the field.
<p>Examples of use</p> <p>01 Employment Scenario: Organise an event</p>								<p>I can propose to my boss a new social media procedure that avoids actions which could harm our company's digital reputation (e.g. spam) when promoting the company's events.</p>
<p>Examples of use</p> <p>02 Learning Scenario: Prepare group work with my classmates</p>								<p>I can propose a new procedure to my school that avoids the publication of digital content (texts, pictures, videos), that can harm the students' reputation.</p>

Proficiency Levels	Foundation		Intermediate		Advanced		Highly Specialised	
	1	2	3	4	5	6	7	8
	<p>At basic level and with guidance, I can:</p> <ul style="list-style-type: none"> • identify ways to create and edit simple content in simple formats, • choose how I express myself through the creation of simple digital means. 	<p>At basic level and with autonomy and appropriate guidance where needed, I can:</p> <ul style="list-style-type: none"> • identify ways to create and edit simple content in simple formats, • choose how I express myself through the creation of simple digital means. 	<p>On my own and solving straightforward problems, I can:</p> <ul style="list-style-type: none"> • indicate ways to create and edit well-defined and routine content in well-defined and routine formats, • express myself through the creation of well-defined and routine digital means. 	<p>Independently, according to my own needs, and solving well-defined and non-routine problems, I can:</p> <ul style="list-style-type: none"> • indicate ways to create and edit content in different formats, • express myself through the creation of digital means. 	<p>As well as guiding others, I can:</p> <ul style="list-style-type: none"> • apply ways to create and edit content in different formats, • show ways to express myself through the creation of digital means. 	<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"> • change content using the most appropriate formats, • adapt the expression of myself through the creation of the most appropriate digital means. 	<p>At highly specialised level, I can:</p> <ul style="list-style-type: none"> • create solutions to complex problems with limited definition that are related to content creation and edition in different formats, and self-expression through digital means. • integrate my knowledge to contribute to professional practice and knowledge and guide others in developing content. 	<p>At the most advanced and specialised level, I can:</p> <ul style="list-style-type: none"> • create solutions to solve complex problems with many interacting factors that are related to content creation and edition in different formats, and self-expression through digital means. • propose new ideas and processes to the field.
<p>Examples of use</p> <p>01 Employment Scenario:</p> <p>Develop a short course (tutorial) to train the staff on a new procedure to be applied in the organisation</p>	<p>Helped by a colleague who has advanced digital competence:</p> <p>I can identify, from a tutorial video on YouTube, how to create a brief support video on my tablet to present the new organisational procedure to the staff on our intranet.</p> <p>From a list already prepared that my colleague found in a wiki, I can also identify alternative digital means to create the procedure to the staff.</p>							
<p>Examples of use</p> <p>02 Learning Scenario:</p> <p>Prepare a presentation on a certain topic that I will make to my classmates</p>	<p>Helped by my teacher:</p> <p>I can find out how to create a digital animated presentation, using a video tutorial from YouTube provided by my teacher to help me to present my work to my classmates.</p> <p>I can also identify other digital means from an article in my textbook that can help me to present the work as an animated digital presentation to my classmates on the interactive digital whiteboard.</p>							



Proficiency Levels	Foundation		Intermediate		Advanced		Highly Specialised	
	1	2	3	4	5	6	7	8
	<p>At basic level and with guidance, I can:</p> <ul style="list-style-type: none"> • select ways to modify, refine, improve and integrate simple items of new content and information to create new and original ones. 	<p>At basic level and with autonomy and appropriate guidance where needed, I can:</p> <ul style="list-style-type: none"> • select ways to modify, refine, improve and integrate simple items of new content and information to create new and original ones 	<p>On my own and solving straightforward problems, I can:</p> <ul style="list-style-type: none"> • explain ways to modify, refine, improve and integrate well-defined items of new content and information to create new and original ones. 	<p>Independently, according to my own needs, and solving well-defined and non-routine problems, I can:</p> <ul style="list-style-type: none"> • discuss ways to modify, refine, improve and integrate new content and information to create new and original ones. 	<p>As well as guiding others, I can:</p> <ul style="list-style-type: none"> • operate with new different items of content and information, modifying, refining, improving and integrating them in order to create new and original ones. 	<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"> • assess the most appropriate ways to modify, refine, improve and integrate specific new items of content and information to create new and original ones. 	<p>At highly specialised level, I can:</p> <ul style="list-style-type: none"> • create solutions to complex problems with limited definition that are related to modifying, refining, improving and integrating new content and information into existing knowledge to create new and original ones. • integrate my knowledge to contribute to professional practice and knowledge and guide others in integrating and re-elaborating content 	<p>At the most advanced and specialised level, I can:</p> <ul style="list-style-type: none"> • create solutions to solve complex problems with many interacting factors that are related to modifying, refining, improving and integrating new content and information into existing knowledge to create new and original ones. • propose new ideas and processes to the field.
<p>Examples of use</p> <p>01 Employment Scenario:</p> <p>Develop a short course (tutorial) to train the staff on a new procedure to be applied in the organisation</p>	<p>With the help of a colleague (who has advanced digital competence and who I can consult whenever I need) and having as support a tutorial video with the steps on how to do it:</p> <p>I can find out how to add new dialogues and images onto a brief support video already created on the intranet to illustrate the new organisational procedures.</p>							
<p>Examples of use</p> <p>02 Learning Scenario:</p> <p>Prepare a presentation on a certain topic that I will make to my classmates</p>	<p>At home with my mother (who I can consult whenever I need) and the help of a list (stored on my tablet provided by my teacher with the steps on how to do it):</p> <p>I can identify how to update a digital animated presentation I have created to present my work to my classmates, adding text, images and visual effects to be shown in the classroom using the interactive digital whiteboard.</p>							

Proficiency Levels	Foundation		Intermediate		Advanced		Highly Specialised	
	1	2	3	4	5	6	7	8
	<p>At basic level and with guidance, I can:</p> <ul style="list-style-type: none"> • identify simple rules of copyright and licenses that apply to data, digital information and content. 	<p>At basic level and with autonomy and appropriate guidance where needed, I can:</p> <ul style="list-style-type: none"> • identify simple rules of copyright and licenses that apply to data, digital information and content. 	<p>On my own and solving straightforward problems, I can:</p> <ul style="list-style-type: none"> • indicate well-defined and routine rules of copyright and licenses that apply to data, digital information and content. 	<p>Independently, according to my own needs, and solving well-defined and non-routine problems, I can:</p> <ul style="list-style-type: none"> • discuss rules of copyright and licenses that apply to digital information and content. 	<p>As well as guiding others, I can:</p> <ul style="list-style-type: none"> • apply different rules of copyright and licenses that apply to data, digital information and content. 	<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"> • choose the most appropriate rules that apply copyright and licenses to data, digital information and content. 	<p>At highly specialised level, I can:</p> <ul style="list-style-type: none"> • create solutions to complex problems with limited definition that are related to applying copyright and licenses to data, digital information and content. • integrate my knowledge to contribute to professional practice and knowledge and guide others in applying copyright and licenses. 	<p>At the most advanced and specialised level, I can:</p> <ul style="list-style-type: none"> • create solutions to solve complex problems with many interacting factors that are related to applying copyright and licenses to data, digital information and content. • propose new ideas and processes to the field.
<p>Examples of use</p> <p>01 Employment Scenario:</p> <p>Develop a short course (tutorial) to train the staff on a new procedure to be applied in the organisation</p>			<p>By myself:</p> <p>I can tell a colleague which image banks I usually use to find images that I can download free of charge for a brief tutorial video on a new procedure for my organisation's staff.</p> <p>I can deal with problems such as identifying the symbol that indicates whether an image is licensed with a certain type of Creative Commons licence and therefore can be reused without the author's permission.</p>					
<p>Examples of use</p> <p>02 Learning Scenario:</p> <p>Prepare a presentation on a certain topic that I will make to my classmates</p>			<p>By myself:</p> <p>I can explain to a friend which image banks I usually use to find images that I can download completely free of charge to create a digital animation to present my work to my classmates.</p> <p>I can fix problems such as identifying the symbol that indicate that an image is copyrighted and therefore cannot be used without the author's permission.</p>					



Proficiency Levels	Foundation		Intermediate		Advanced		Highly Specialised	
	1	2	3	4	5	6	7	8
	<p>At basic level and with guidance, I can:</p> <ul style="list-style-type: none"> • list simple instructions for a computing system to solve a simple problem or perform a simple task. 	<p>At basic level and with autonomy and appropriate guidance where needed, I can:</p> <ul style="list-style-type: none"> • list simple instructions for a computing system to solve a simple problem or perform a simple task. 	<p>On my own and solving straightforward problems, I can:</p> <ul style="list-style-type: none"> • list well-defined and routine instructions for a computing system to solve routine problems or perform routine tasks. 	<p>Independently, according to my own needs, and solving well-defined and non-routine problems, I can:</p> <ul style="list-style-type: none"> • list instructions for a computing system to solve a given problem or perform a specific task. 	<p>As well as guiding others, I can:</p> <ul style="list-style-type: none"> • operate with instructions for a computing system to solve a different problem or perform different tasks. 	<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"> • determine the most appropriate instructions for a computing system to solve a given problem and perform specific tasks. 	<p>At highly specialised level, I can:</p> <ul style="list-style-type: none"> • create solutions to complex problems with limited definition that are related to planning and developing instructions for a computing system and performing a task using a computing system. • integrate my knowledge to contribute to professional practice and knowledge and guide others in programming. 	<p>At the most advanced and specialised level, I can:</p> <ul style="list-style-type: none"> • create solutions to solve complex problems with many interacting factors that are related to planning and developing instructions for a computing system and performing a task using a computing system. • propose new ideas and processes to the field.
<p>Examples of use</p> <p>01 Employment Scenario:</p> <p>Develop a short course (tutorial) to train the staff on a new procedure to be applied in the organisation</p>				<p>Using a programming language (e.g. Ruby, Python), I can provide instructions to develop an educational game to introduce the new procedure to be applied in the organisation.</p> <p>I can resolve issues such as debugging the programme to fix problems with my code.</p>				
<p>Examples of use</p> <p>02 Learning Scenario:</p> <p>Prepare a presentation on a certain topic that I will make to my classmates</p>				<p>Using a simple graphical programming interface (e.g. Scratch Jr), I can develop a smartphone app that presents my work to my classmates.</p> <p>If a problem appears, I know how to debug the programme and I can fix easy problems in my code.</p>				

Proficiency Levels	Foundation		Intermediate		Advanced		Highly Specialised	
	1	2	3	4	5	6	7	8
	<p>At basic level and with guidance, I can:</p> <ul style="list-style-type: none"> • identify simple ways to protect my devices and digital content, and • differentiate simple risks and threats in digital environments, • choose simple safety and security measures, and • identify simple ways to have due regard to reliability and privacy 	<p>At basic level and with autonomy and appropriate guidance where needed, I can:</p> <ul style="list-style-type: none"> • identify simple ways to protect my devices and digital content, and • differentiate simple risks and threats in digital environments, • follow simple safety and security measures. • identify simple ways to have due regard to reliability and privacy 	<p>On my own and solving straightforward problems, I can:</p> <ul style="list-style-type: none"> • indicate well-defined and routine ways to protect my devices and digital content, and • differentiate well-defined and routine risks and threats in digital environments, • select well-defined and routine safety and security measures. • indicate well-defined and routine ways to have due regard to reliability and privacy 	<p>Independently, according to my own needs, and solving well-defined and non-routine problems, I can:</p> <ul style="list-style-type: none"> • organise ways to protect my devices and digital content, and • differentiate risks and threats in digital environments, • select safety and security measures. • explain ways to have due regard to reliability and privacy 	<p>As well as guiding others, I can:</p> <ul style="list-style-type: none"> • apply different ways to protect devices and digital content, and • differentiate a variety of risks and threats in digital environments, • apply safety and security measures. • employ different ways to have due regard to reliability and privacy 	<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"> • choose the most appropriate protection for devices and digital content, and • discriminate risks and threats in digital environments, • choose the most appropriate safety and security measures. • assess the most appropriate ways to have due regard to reliability and privacy 	<p>At highly specialised level, I can:</p> <ul style="list-style-type: none"> • create solutions to complex problems with limited definition that are related to protecting devices and digital content, managing risks and threats, applying safety and security measures, and reliability and privacy in digital environments. • integrate my knowledge to contribute to professional practice and knowledge and guide others in protecting devices. 	<p>At the most advanced and specialised level, I can:</p> <ul style="list-style-type: none"> • create solutions to solve complex problems with many interacting factors that are related to protecting devices and digital content, managing risks and threats, applying safety and security measures, and reliability and privacy in digital environments. • propose new ideas and processes to the field.
<p>Examples of use</p> <p>01 Employment Scenario:</p> <p>Use of a Twitter account to share information on my organization</p>					<p>I can protect the corporate Twitter account using different methods (e.g. a strong password, control the recent logins) and show new colleagues how to do it.</p> <p>I can detect risks like receiving tweets and messages from followers with false profiles or phishing attempts.</p> <p>I can apply measures to avoid them (e.g. control the privacy settings).</p> <p>I can also help my colleagues to detect risks and threats while using Twitter.</p>			
<p>Examples of use</p> <p>02 Learning Scenario:</p> <p>Use of the school's digital learning platform to share information on interested topics</p>					<p>I can protect information, data and content on my school's digital learning platform (e.g. a strong password, control the recent logins).</p> <p>I can detect different risks and threats when accessing school's digital platform and apply measures to avoid them (e.g. how to virus-check attachments before downloading).</p> <p>I can also help my classmates to detect risks and threat while using the digital learning platform on their tablets (e.g. controlling who can access the files).</p>			



Competence area 4: Safety 4.2 Protecting personal data and privacy

To protect personal data and privacy in digital environments. To understand how to use and share personally identifiable information while being able to protect oneself and others from damages. To understand that digital services use a "Privacy policy" to inform how personal data is used.

Proficiency Levels	Foundation		Intermediate		Advanced		Highly Specialised	
	1	2	3	4	5	6	7	8
	<p>At basic level and with guidance, I can:</p> <ul style="list-style-type: none"> • select simple ways to protect my personal data and privacy in digital environments, and • identify simple ways to use and share personally identifiable information while protecting myself and others from damages. • identify simple privacy policy statements of how personal data is used in digital services. 	<p>At basic level and with autonomy and appropriate guidance where needed, I can:</p> <ul style="list-style-type: none"> • select simple ways to protect my personal data and privacy in digital environments, and • identify simple ways to use and share personally identifiable information while protecting myself and others from damages. • identify simple privacy policy statements of how personal data is used in digital services. 	<p>On my own and solving straightforward problems, I can:</p> <ul style="list-style-type: none"> • explain well-defined and routine ways to protect my personal data and privacy in digital environments, and • explain well-defined and routine ways to use and share personally identifiable information while protecting myself and others from damages. • indicate well-defined and routine privacy policy statements of how personal data is used in digital services. 	<p>Independently, according to my own needs, and solving well-defined and non-routine problems, I can:</p> <ul style="list-style-type: none"> • discuss ways to protect my personal data and privacy in digital environments, and • discuss ways to use and share personally identifiable information while protecting myself and others from damages. • indicate privacy policy statements of how personal data is used in digital services. 	<p>As well as guiding others, I can:</p> <ul style="list-style-type: none"> • apply different ways to protect my personal data and privacy in digital environments, and • apply different specific ways to share my data while protecting myself and others from dangers. • explain privacy policy statements of how personal data is used in digital services. 	<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"> • choose the more appropriate ways to protect personal data and privacy in digital environments, and • evaluate the most appropriate ways of using and sharing personally identifiable information while protecting myself and others from damages. • evaluate the appropriateness of privacy policy statements on how personal data are used. 	<p>At highly specialised level, I can:</p> <ul style="list-style-type: none"> • create solutions to complex problems with limited definition that are related to protecting personal data and privacy in digital environments, using and sharing personally identifiable information protecting self and others from dangers, and privacy policies to use my personal data. • integrate my knowledge to contribute to professional practice and knowledge and guide others in protecting personal data and privacy. 	<p>At the most advanced and specialised level, I can:</p> <ul style="list-style-type: none"> • create solutions to solve complex problems with many interacting factors that are related to protecting personal data and privacy in digital environments, using and sharing personally identifiable information protecting self and others from dangers, and privacy policies to use my personal data. • propose new ideas and processes to the field.
<p>Examples of use</p> <p>01 Employment Scenario:</p> <p>Use of a Twitter account to share information on my organization</p>					<p>I can select the most appropriate way to protect the personal data of my colleagues (e.g. address, phone number) when sharing digital content (e.g. a picture) on the corporate Twitter account.</p> <p>I can distinguish between appropriate and inappropriate digital content to share it on the corporate Twitter account, so that my privacy and that of my colleagues are not damaged.</p> <p>I can assess whether personal data are used on the Corporate Twitter appropriately according to the European Data Protection Law and Right to be Forgotten.</p> <p>I can deal with complex situations that can arise with personal data in my organisation while on Twitter, such as removing pictures or names to protect personal information in accordance with the European Data Protection Law and Right to be Forgotten.</p>			
<p>Examples of use</p> <p>02 Learning Scenario:</p> <p>Use of the school's digital learning platform to share information on interested topics</p>					<p>I can select the most appropriate way to protect my personal data (e.g. address, phone number), before sharing it on the school's digital platform.</p> <p>I can distinguish between appropriate and inappropriate digital content to share it on my school's digital platform, so that my privacy and that of my classmates are not damaged.</p> <p>I can assess whether the way my personal data are used on the digital platform is appropriate and acceptable as regards my rights and privacy.</p> <p>I can overcome complex situations that can arise with my personal data and those of my classmates while on the digital education platform, such as personal data is not used in accordance to the "Privacy policy" of the platform.</p>			

Proficiency Levels	Foundation		Intermediate		Advanced		Highly Specialised	
	1	2	3	4	5	6	7	8
	<p>At basic level and with guidance, I can:</p> <ul style="list-style-type: none"> • differentiate simple ways to avoid health -risks and threats to physical and psychological well-being while using digital technologies. • select simple ways to protect myself from possible dangers in digital environments. • identify simple digital technologies for social well-being and social inclusion. 	<p>At basic level and with autonomy and appropriate guidance where needed, I can:</p> <ul style="list-style-type: none"> • differentiate simple ways to avoid health -risks and threats to physical and psychological well-being while using digital technologies. • select simple ways to protect myself from possible dangers in digital environments. • identify simple digital technologies for social well-being and social inclusion. 	<p>On my own and solving straightforward problems, I can:</p> <ul style="list-style-type: none"> • explain well-defined and routine ways to how to avoid health -risks and threats to physical and psychological well-being while using digital technologies. • select well-defined and routine ways to protect myself from dangers in digital environments. • indicate well-defined and routine digital technologies for social well-being and social inclusion. 	<p>Independently, according to my own needs, and solving well-defined and non-routine problems, I can:</p> <ul style="list-style-type: none"> • explain ways to how to avoid threats to my physical and psychological health related with the use of technology. • select ways to protect self and others from dangers in digital environments. • discuss on digital technologies for social well-being and inclusion. 	<p>As well as guiding others, I can:</p> <ul style="list-style-type: none"> • show different ways to avoid health -risks and threats to physical and psychological well-being while using digital technologies. • apply different ways to protect myself and others from dangers in digital environments. • show different digital technologies for social well-being and social inclusion. 	<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"> • discriminate the most appropriate ways to avoid health -risks and threats to physical and psychological well-being while using digital technologies. • adapt the most appropriate ways to protect myself and others from dangers in digital environments. • vary the use of digital technologies for social well-being and social inclusion. 	<p>At highly specialised level, I can:</p> <ul style="list-style-type: none"> • create solutions to complex problems with limited definition that are related to avoiding health -risks and threats to well-being while using digital technologies, to protect self and others from dangers in digital environments, and to the use of digital technologies for social well-being and social inclusion. • integrate my knowledge to contribute to professional practice and knowledge and guide others in protecting health. 	<p>At the most advanced and specialised level, I can:</p> <ul style="list-style-type: none"> • create solutions to solve complex problems with many interacting factors that are related to avoiding health -risks and threats to well-being while using digital technologies, to protect self and others from dangers in digital environments, and to the use of digital technologies for social well-being and social inclusion. • propose new ideas and processes to the field.
<p>Examples of use</p> <p>01 Employment Scenario:</p> <p>Use of a Twitter account to share information on my organization</p>							<p>I can create a digital campaign of possible health dangers of using Twitter for professional reasons (e.g. bullying, addictions, physical well-being) which can be shared and used by other colleagues and professionals on their smartphones or tablets.</p>	
<p>Examples of use</p> <p>02 Learning Scenario:</p> <p>Use of the school's digital learning platform to share information on interested topics</p>							<p>I can create a blog on cyberbullying and social exclusion for my school's digital learning platform, which helps my classmates to recognise and face up to violence in digital environments.</p>	

Proficiency Levels	Foundation		Intermediate		Advanced		Highly Specialised	
	1	2	3	4	5	6	7	8
	At basic level and with guidance, I can: <ul style="list-style-type: none"> • recognise simple environmental impacts of digital technologies and their use. 	At basic level and with autonomy and appropriate guidance where needed, I can: <ul style="list-style-type: none"> • recognise simple environmental impacts of digital technologies and their use. 	On my own and solving straightforward problems, I can: <ul style="list-style-type: none"> • indicate well-defined and routine environmental impacts of digital technologies and their use. 	Independently, according to my own needs, and solving well-defined and non-routine problems, I can: <ul style="list-style-type: none"> • discuss ways to protect the environment from the impact of digital technologies and their use. 	As well as guiding others, I can: <ul style="list-style-type: none"> • show different ways to protect the environment from the impact of digital technologies and their use. 	At advanced level, according to my own needs and those of others, and in complex contexts, I can: <ul style="list-style-type: none"> • choose the most appropriate solutions to protect the environment from the impact of digital technologies and their use. 	At highly specialised level, I can: <ul style="list-style-type: none"> • create solutions to complex problems with limited definition that are related to protecting the environment from the impact of digital technologies and their use. • integrate my knowledge to contribute to professional practice and knowledge and guide others in protecting the environment. 	At the most advanced and specialised level, I can: <ul style="list-style-type: none"> • create solutions to solve complex problems with many interacting factors that are related to protecting the environment from the impact of digital technologies and their use. • propose new ideas and processes to the field.
Examples of use	01 Employment Scenario: Use of a Twitter account to share information on my organization							I can create an illustrated video which answers questions on the sustainable use of digital devices in organisations of my sector, to be shared on Twitter, and to be used by staff and by other professionals in the sector.
Examples of use	02 Learning Scenario: Use of the school's digital learning platform to share information on interested topics							I can create a new eBook to answer questions on the sustainable use of digital devices at school and home, and share it on my school's digital learning platform in order to be used by other schoolmates and their families.


Proficiency Levels	Foundation		Intermediate		Advanced		Highly Specialised	
	1	2	3	4	5	6	7	8
	<p>At basic level and with guidance, I can:</p> <ul style="list-style-type: none"> • identify simple technical problems when operating devices and using digital environments, and • identify simple solutions to solve them. 	<p>At basic level and with autonomy and appropriate guidance where needed, I can:</p> <ul style="list-style-type: none"> • identify simple technical problems when operating devices and using digital environments, and • identify simple solutions to solve them. 	<p>On my own and solving straightforward problems, I can:</p> <ul style="list-style-type: none"> • indicate well-defined and routine technical problems when operating devices and using digital environments, and • select well-defined and routine solutions to them. 	<p>Independently, according to my own needs, and solving well-defined and non-routine problems, I can:</p> <ul style="list-style-type: none"> • differentiate technical problems when operating devices and using digital environments, and • select solutions to them. 	<p>As well as guiding others, I can:</p> <ul style="list-style-type: none"> • assess technical problems when using digital environments and operating digital devices, and • apply different solutions to them. 	<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"> • appraise technical problems when operating devices and using digital environments, and • resolve them with the most appropriate solutions 	<p>At highly specialised level, I can:</p> <ul style="list-style-type: none"> • create solutions to complex problems with limited definition that are related to technical problems when operating devices and using digital environments. • integrate my knowledge to contribute to professional practice and knowledge and to guide others in solving technical problems. 	<p>At the most advanced and specialised level, I can:</p> <ul style="list-style-type: none"> • create solutions to solve complex problems with many interacting factors that are related to technical problems when operating devices and using digital environments. • propose new ideas and processes to the field.
<p>Examples of use</p> <p>01 Employment Scenario:</p> <p>Use of a digital learning platform to improve my career opportunities</p>	<p>Helped by a colleague from the IT department:</p> <p>I can identify a simple technical problem from a list of those that can arise while using a digital learning platform, and</p> <p>I can identify what type of IT support would solve it.</p>							
<p>Examples of use</p> <p>02 Learning Scenario:</p> <p>Use of a digital learning platform to improve my math skills</p>	<p>Helped by a friend:</p> <p>I can identify a simple technical problem from a list of those that can arise while using a digital learning platform, and</p> <p>I can identify what type of IT support would solve it.</p>							



Competence area 5: Problem solving # 5.2 Identifying needs and technological responses

To assess needs and to identify, evaluate, select and use digital tools and possible technological responses and to solve them. To adjust and customise digital environments to personal needs (e.g. accessibility).

Proficiency Levels	Foundation		Intermediate		Advanced		Highly Specialised	
	1	2	3	4	5	6	7	8
	<p>At basic level and with guidance, I can:</p> <ul style="list-style-type: none"> • identify needs, and • recognise simple digital tools and possible technological responses to solve those needs. • choose simple ways to adjust and customise digital environments to personal needs. 	<p>At basic level and with autonomy and appropriate guidance where needed, I can:</p> <ul style="list-style-type: none"> • identify needs, and • recognise simple digital tools and possible technological responses to solve those needs. • choose simple ways to adjust and customise digital environments to personal needs. 	<p>On my own and solving straightforward problems, I can:</p> <ul style="list-style-type: none"> • indicate well-defined and routine needs, and • select well-define and routine digital tools and possible technological responses to solve those needs. • select well-defined and routine ways to adjust and customise digital environments to personal needs. 	<p>Independently, according to my own needs, and solving well-defined and non-routine problems, I can:</p> <ul style="list-style-type: none"> • explain needs, and • select digital tools and possible technological responses to solve those needs. • select ways to adjust and customise digital environments to personal needs. 	<p>As well as guiding others, I can:</p> <ul style="list-style-type: none"> • assess needs, • apply different digital tools and possible technological responses to solve those needs. • use different ways to adjust and customise digital environments to personal needs. 	<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"> • assess needs, • choose the most appropriate digital tools and possible technological responses to solve those needs. • decide the most appropriate ways to adjust and customise digital environments to personal needs 	<p>At highly specialised level, I can:</p> <ul style="list-style-type: none"> • create solutions to complex problems with limited definition using digital tools and possible technological responses, and to adapt and customise digital environments to personal needs. • integrate my knowledge to contribute to professional practice and knowledge and guide others in identifying needs and technological responses. 	<p>At the most advanced and specialised level, I can:</p> <ul style="list-style-type: none"> • create solutions to solve complex problems with many interacting factors using digital tools and possible technological responses, and to adapt and customise digital environments to personal needs. • I can propose new ideas and processes to the field.
<p>Examples of use</p> <p>01 Employment Scenario:</p> <p>Use of a digital learning platform to improve my career opportunities</p>	<p>With the help of a colleague from the Human Resource department who I can consult whenever I need:</p> <p>From a list of online courses that the Human Resources department has prepared, I can identify those that fit with my career improvement needs.</p> <p>While reading the study material on the screen of my tablet, I can make the font larger to help the readability.</p>							
<p>Examples of use</p> <p>02 Learning Scenario:</p> <p>Use of a digital learning platform to improve my math skills</p>	<p>In the classroom with my teacher who I can consult whenever I need:</p> <p>From a list of digital math resources prepared by my teacher, I can choose an educational game that can help me to practice my math skills.</p> <p>I can adjust the game's interface to match with my mother tongue.</p>							

Proficiency Levels	 Foundation		 Intermediate		 Advanced		 Highly Specialised	
Examples of use 01 Employment Scenario: Use of a digital learning platform to improve my career opportunities	<p>At basic level and with guidance, I can:</p> <ul style="list-style-type: none"> • identify simple digital tools and technologies that can be used to create knowledge and to innovate processes and products. • show interest individually and collectively in simple cognitive processing to understand and resolve simple conceptual problems and problem situations in digital environments. 	<p>At basic level and with autonomy and appropriate guidance where needed, I can:</p> <ul style="list-style-type: none"> • identify simple digital tools and technologies that can be used to create knowledge and to innovate processes and products • follow individually and collectively simple cognitive processing to understand and resolve simple conceptual problems and problem situations in digital environments. 	<p>On my own and solving straightforward problems, I can:</p> <ul style="list-style-type: none"> • select digital tools and technologies that can be used to create well-defined knowledge and well-defined innovative processes and products. • engage individually and collectively in some cognitive processing to understand and resolve well-defined and routine conceptual problems and problem situations in digital environments. <p>By myself:</p> <p>I can use a MOOC's forum to ask for well-defined information on the course I am following and I can use its tools (e.g. blog, wiki) to create a new entry for exchanging more information.</p> <p>I can engage in a collaborative exercise with other students using the mind map tool of the MOOC in order to understand a concrete issue in a new way.</p> <p>I can fix problems such as identifying that I am introducing a question or comment in the wrong place.</p>	<p>Independently, according to my own needs, and solving well-defined and non-routine problems, I can:</p> <ul style="list-style-type: none"> • differentiate digital tools and technologies that can be used to create knowledge and to innovate processes and products. • engage individually and collectively in cognitive processing to understand and resolve conceptual problems and problem situations in digital environments. 	<p>As well as guiding others, I can:</p> <ul style="list-style-type: none"> • apply different digital tools and technologies to create knowledge and innovative processes and products. • apply individually and collectively cognitive processing to resolve different conceptual problems and problem situations in digital environments. 	<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"> • adapt the most appropriate digital tools and technologies to create knowledge and to innovate processes and products. • resolve individually and collectively conceptual problems and problem situations in digital environments. 	<p>At highly specialised level, I can:</p> <ul style="list-style-type: none"> • create solutions to complex problems with limited definition using digital tools and technologies. • integrate my knowledge to contribute to professional practice and knowledge and guide others in creatively using digital technologies. 	<p>At the most advanced and specialised level, I can:</p> <ul style="list-style-type: none"> • create solutions to solve complex problems with many interacting factors using digital tools and technologies. • propose new ideas and processes to the field.
Examples of use 02 Learning Scenario: Use of a digital learning platform to improve my math skills			<p>By myself:</p> <p>I can use the MOOC's forum to ask for well-defined information on the course I am following, and I can use their tools (e.g. blog, wiki) to create a new entry for exchanging more information.</p> <p>I can engage in exercises of the MOOC that use simulations to practice a math problem that I failed to solve correctly at school. Discussing the exercises in chat with other students helped me to approach the problem differently and improved my skills.</p> <p>I can fix problems such as identifying that I am introducing a question or comment in the wrong place.</p>					



Competence area 5: Problem solving # 5.4 Identifying digital competence gaps

To understand where one's own digital competence needs to be improved or updated. To be able to support others with their digital competence development. To seek opportunities for self-development and to keep up-to-date with the digital evolution.

Proficiency Levels	Foundation		Intermediate		Advanced		Highly Specialised		
	1	2	3	4	5	6	7	8	
	<p>At basic level and with guidance, I can:</p> <ul style="list-style-type: none"> • recognise where my own digital competence needs to be improved or updated. • identify where to seek opportunities for self-developments and to keep up-to-date with the digital evolution. 	<p>At basic level and with autonomy and appropriate guidance where needed, I can:</p> <ul style="list-style-type: none"> • recognise where my own digital competence needs to be improved or updated, • identify where to seek opportunities for self-developments and to keep up-to-date with the digital evolution. 	<p>On my own and solving straightforward problems, I can:</p> <ul style="list-style-type: none"> • explain where my digital competence needs to be improved or updated, • indicate where to seek well-defined opportunities for self-developments and to keep up-to-date with the digital evolution. 	<p>Independently, according to my own needs, and solving well-defined and non-routine problems, I can:</p> <ul style="list-style-type: none"> • discuss on where my digital competence needs to be improved or updated, • indicate how to support of others to develop their digital competence. • indicate where to seek opportunities for self-developments and to keep up-to-date with the digital evolution. 	<p>As well as guiding others, I can:</p> <ul style="list-style-type: none"> • demonstrate where my own digital competence needs to be improved or updated, • illustrate different ways to support others in the development of their digital competence. • propose different opportunities found for self-development and to keep up-to-date with the digital evolution. 	<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"> • decide which are the most appropriate ways to improve or update one's own digital competence needs, • assess the development of others' digital competence. • choose the most appropriate opportunities for self-development and to keep up-to date with new developments. 	<p>At highly specialised level, I can:</p> <ul style="list-style-type: none"> • create solutions to complex problems with limited definition that are related to improving digital competence, and to find opportunities for self-development and to keep up-to-date with new developments. • integrate my knowledge to contribute to professional practice and knowledge and to guide others in identifying digital competence gaps. 	<p>At the most advanced and specialised level, I can:</p> <ul style="list-style-type: none"> • create solutions to solve complex problems with many interacting factors that are related to improving digital competence, and to find opportunities for self-development and to keep up-to-date with the digital evolution. • propose new ideas and processes to the field. 	
Examples of use					<p>I can discuss the digital competence I need to be able to use MOOCs for my professional career with an employment adviser.</p> <p>I can tell her where I find and use MOOCs to develop and update my proficiency level of digital competences to improve my professional career.</p> <p>I can deal with any issue while I am doing these activities, e.g. I can evaluate whether new digital environments that I find while surfing are appropriate means of improving my digital competence' proficiency level.</p>				
Examples of use					<p>I can discuss with a friend the digital competence I need to use the tools of a MOOC for my studies in math.</p> <p>I can show my teacher where I find and use MOOCs according to my learning needs.</p> <p>I can tell her which digital activities and pages I surf in order to keep my digital competence updated so that I can profit the most from digital learning platforms for my learning needs.</p> <p>I can deal with any issue while I am doing these activities, such as evaluate whether new digital environments that appear while surfing are appropriate for improving my digital competence and getting the most profit from the MOOC.</p>				



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