No One Behind

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IO1 Innovative Methodology for educating and training adults from rural zone to improve their digital and ICT skills

Erasmus+ Strategic Partnership - 2020-1-RO01-KA204-079988

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Contents

1. ABOUT PROJECT

The **No One Behind** project aims to equip adults living in rural areas with digital competences, promoting their access to lifelong learning activities and motivating them to start learning.

In the European Union, the level of digital skills among citizens remains too low in many countries, especially in some categories of the population. Adults living in rural areas, in particular, suffer the consequences of a lack of digital skills that contributes to their social isolation and their exclusion from the labour market.

The project intends to contribute to solving this problem by developing learning opportunities for adults, to improve their daily life and job opportunities.

The project also aims to provide experts who work with adults instruments to recognize the learners' needs and to tailor a course with specific contents to improve the digital skills of their learners.

O1: An **innovative methodology** for education and training of adults living in rural areas;

O2: A **training manual** with 5 modules for digital skills for adults in rural areas;

O3: A **new and innovative Board Game**.

The **tangible results** of the project will be:

1.1 Introduction

This methodology wants to represent a guideline for educating and training adults in rural areas to improve their digital skills. This document will be the basis for the training manual and the board game.

In a global context still marked by the COVID-19 pandemic, it is increasingly evident that technology is a fundamental part of our daily lives.

Knowledge of the digital environment has allowed many people to continue working, studying and maintaining relationships with family and other people.

On the other hand, the lack of digital knowledge highlighted inequalities among those who didn't have access to technological tools. These people got into a situation of social exclusion that had serious repercussions in the social sphere.

This is why it is important to continue working on this topic.

This methodology is based on the European Digital Competence Framework (discussed in more detail in chapter 2) which is the reference framework for digital competences. Today, being digitally competent means that people need to have competences in all areas of DigComp.

In the following chapters, the ECVET profile of the "digital competent" citizen will be presented. The course programme, based on the competences of the DigComp, provides all the necessary steps to become a "digital competent" citizen.

2. The ECVET profile of the "digital competent" citizen

2.1 Overview of the profile

The **ECVET profile of the "digital competent" citizen** outlined here aims to identify and select the knowledge, skills and competences specifically related to the usage of ECVET in the adult education field.

This document will be a point of reference for educators and anyone working with adults interested to establish an education path for adult learners. This section describes the contents and the competences required that need to be included in a training course for adult education, the learning outcomes and the associated ECVET credit points.

2.2 Principles of ECVET

The European Credit system for Vocational Education and Training (ECVET) aims to give people greater control over their individual learning experiences and make it more attractive to move between different countries and different learning environments.

The system aims to facilitate the validation, recognition and accumulation of work-related skills and knowledge acquired during a stay in another country or in different situations.

ECVET aims for better compatibility between the different vocational education and training (VET) systems in place across Europe and their qualifications.

It aims to create a technical framework to describe qualifications in terms of units of learning outcomes, and it includes assessment, transfer, accumulation and recognition procedures.

In ECVET, learning outcomes are assessed and validated in order to transfer credits from one qualification system to another or from one learning pathway to another.

According to this approach, learners can accumulate the required learning outcomes for a given qualification over time, in different countries or in different situations.

The system also allows the possibility to develop common references for VET qualifications and is fully compatible with the European Credit Transfer and Accumulation System (ECTS).

The main ECVET concepts[1] are:

- Learning Outcomes (L.O.):

L.O. are statements of knowledge, skills and competence that can be achieved in a variety of learning contexts.

L.O. are statements of what a learner knows, understands and is able to do on completion of a learning process defined in terms of knowledge, skills and competence.

- Units of Learning Outcomes:

L.O. are statements of knowledge, skills and competence that can be achieved in a variety of learning contexts.

L.O. are statements of what a learner knows, understands and is able to do on completion of a learning process defined in terms of knowledge, skills and competence.

- ECVET points:

Numerical representation of the overall weight of learning outcomes in a qualification and of the relative weight of units in relation to the qualification.

- Credit for L.O.:

Credit is given for assessed and documented learning outcomes of a learner. Credit can be transferred to other contexts (learning programmes or qualifications) and accumulated to achieve a qualification on the basis of the qualifications standards and regulations existing in the participating countries.

Mutual trust and partnership among participating organisations are expressed in **Memoranda of Understanding** and **Learning Agreements.**

[1] European Credit system for Vocational Education & Training: What is ECVET? (n.d). ECVET-secretariat.eu https://www.ecvet-secretariat.eu/en/what-is-ecvet

ECVET testing and implementation

ECVET is now in a phase of progressive implementation having created the necessary conditions and measures. The quality of ECVET testing is crucial. All stakeholders, such as awarding bodies, training and assessment providers, social partners and employers, are encouraged to engage in ECVET testing through projects and networks, in particular under the Lifelong Learning Program.

ECVET and validation of Non-Formal and Informal Learning

Countries around Europe are increasingly emphasizing the need to take account of the full range of an individual's knowledge, skills and competences not only those acquired at schools, universities or other formal education and training institutions. Recognizing all forms of learning is therefore a priority of EU action in education and training.

Learning that takes place in formal education and training systems is traditionally the most visible and recognized in the labour market and by society in general. In recent years, however, there has been a growing appreciation of the importance of learning in non-formal and informal settings. New approaches are needed to identify and assess and validate these "invisible" learning experiences within the context of qualifications.

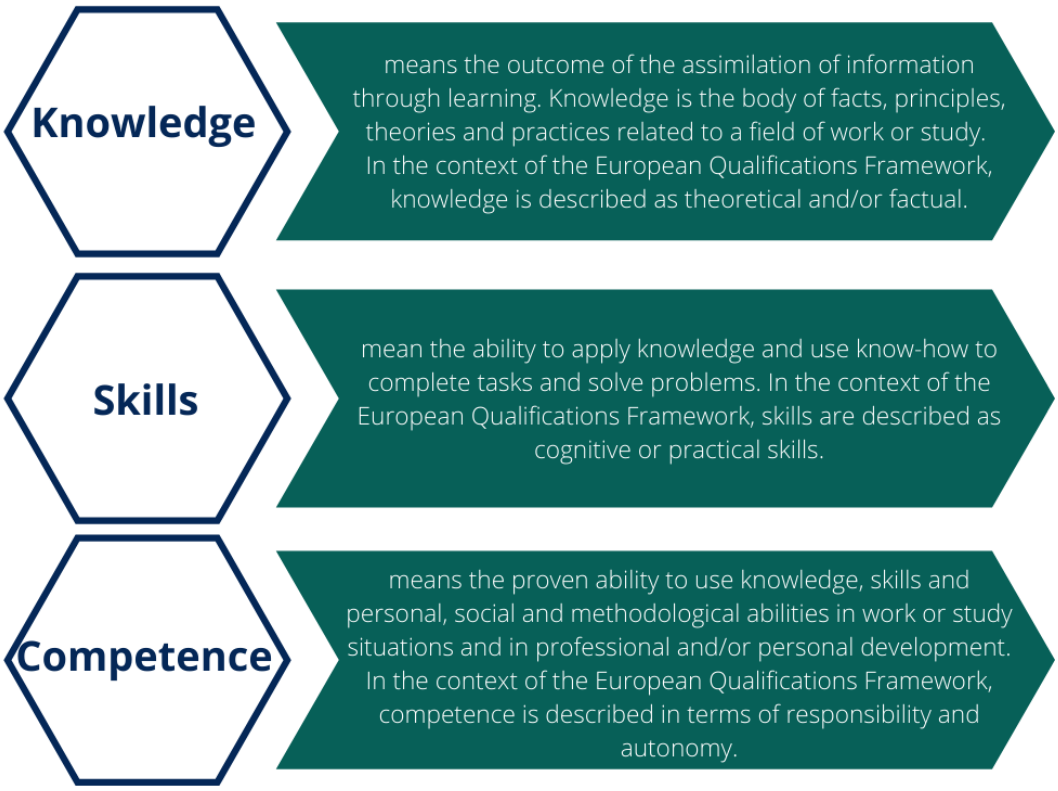
2.2.1 What are the Learning Outcomes (L.O)?

Learning Outcomes are defined in the Recommendation of the European Parliament and of the Council on the establishment of the EQF [2], and in the ECVET Recommendation[3].

Learning Outcomes are defined as statements of what a learner knows, understands and is able to do on completion of a learning process, which are defined in terms of knowledge (knows), skills (understands) and competence (is able to do).

[2] Recommendation of the European Parliament and of the Council of 23 April 2008 on the establishment of the European Qualifications Framework for lifelong learning.
https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32008H0506(01)&from=EN

[3] Recommendation of the European Parliament and of the Council of 18 June 2009 on the establishment of a European Credit System for Vocational Education and Training (ECVET)
https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2009:155:0011:0018:EN:PDF



The definition of L.O that use knowledge, skills and competence is the European definition[4], which uses these terms as a common denominator. ECVET does not provide a template or a taxonomy concerning the format of learning outcomes descriptions. Such templates or classifications may exist at the national, regional or system level.

The way to describe learning outcomes is through Units. A Unit of learning outcomes is a component of a qualification or professional profile consisting of a coherent set of knowledge, skills and competences that can be assessed and validated. This implies that Units of learning outcomes are structured comprehensively and logically and that they shall be assessed. Units of learning outcomes can be specific to a single professional profile or common to several profiles or qualifications[5].

[4] DG Education and Culture, ECVET Users' Guide. Part 1: "Get to know ECVET better - Questions and Answers" P.10-12 (2011). European Commission
https://www.cedefop.europa.eu/files/ECVET_QUESTION_ANSWERS_Feb_2011_en(download_ID_17648).pdf

[5] DG Education and Culture, ECVET Users' Guide. Part 1: "Get to know ECVET better - Questions and Answers" P.13 (2011). Commission European

Learning outcomes describe the results following the complexion of the learning process.

2.3 The competences of the "digital competent" citizen

This methodology is originated after a preliminary activity of research (Survey Research and Desk Research[6]) conducted by the project's partners. According to EU recommendations, key competences are important for each individual, both for personal development and for integration in social, cultural and professional environments.

The results of the first researches have shown that a large sector of the population, especially adults in rural areas, are still digitally unprepared to use digital technologies in their daily life and the social or work context.

The curriculum is based on the **European Digital Competence Framework (DigComp) 2.0**[7] by the European Commission which identifies the key components of digital competence in 5 areas and takes into consideration the conceptual framework indicators for Information and Data Literacy, Communication and Collaboration, Digital content creation, Safety and Problem-solving (see Annex I). These 5 areas are based on the European Union (EU) key competences on knowledge, skills and attitudes needed by a person to enhance their learning and solve any obstacle in the digital world. These competences provide information on how the digital and ICT skills can be applied and are able to identify a limited set of indicators for the purposes of cross-country measurement of digital competence.

Learn more about DigComp: https://ec.europa.eu/jrc/en/digcomp
Tips: Take a look at the new infographic explaining the 8 proficiency levels using a metaphor of "Learning to swim in the digital ocean".

https://www.cedefop.europa.eu/files/ECVET_QUESTION_ANSWERS_Feb_2011_en(download_ID_17648).pdf

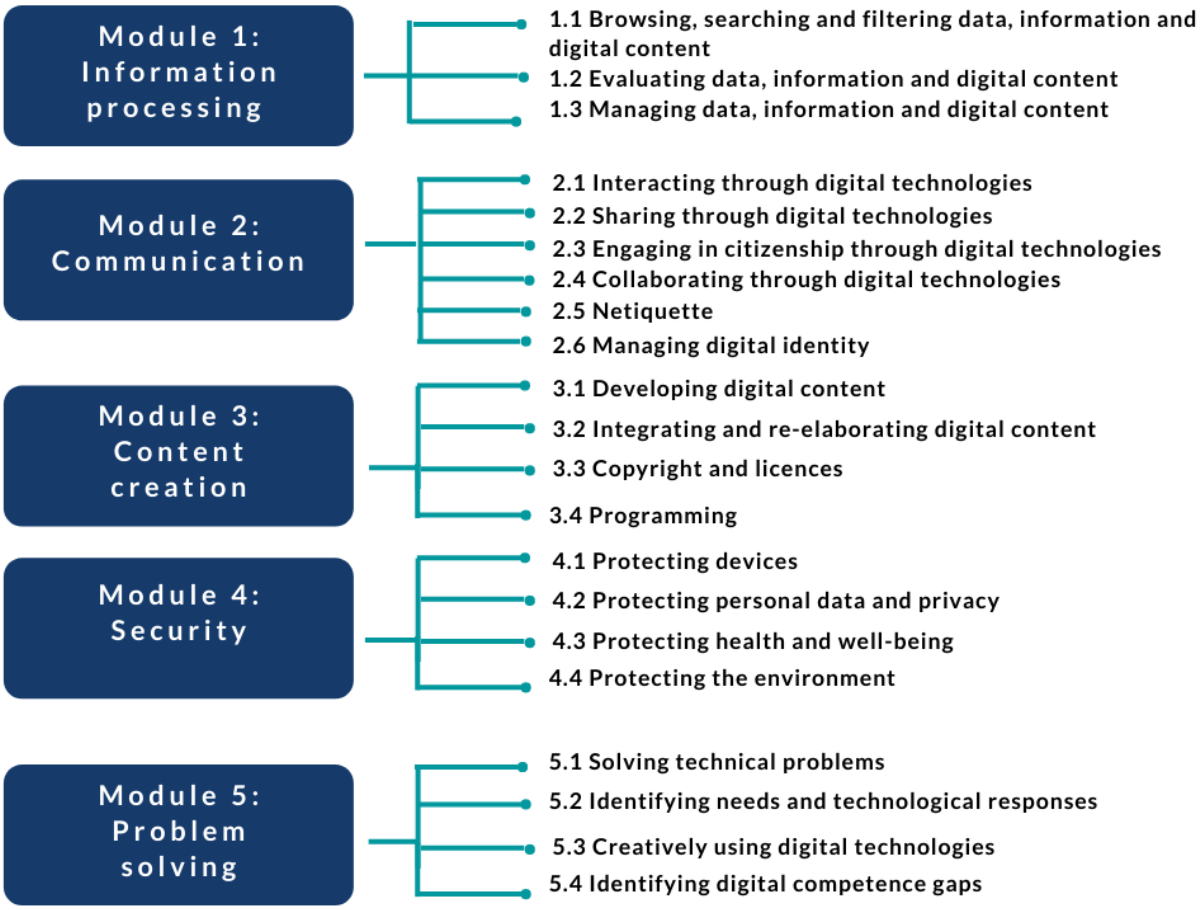
[6] The reports are available at the following link:
http://www.eurocreamerchant.it/en/progetti/no-one-behind-providing-digital-skills-for-adults-living-in-rural-areas/

[7] The Digital Competence Framework 2.0 (n.d). European Commission.
https://ec.europa.eu/jrc/en/digcomp/digital-competence-framework

The curriculum is structured in the following way:

According to European Qualification Framework, the "digital competent" citizen profile have to reach the learning outcomes required by level 3 of the EQF.

Learn more about the eight EQF levels: https://europa.eu/europass/en/description-



eight-eqf-levels

At the end of the course, the participants of the training course will gain:

- A basic digital skills thus becoming a "digital competent" citizen;
- Improving their access to quality training and education;
- Free access to learning materials in order to acquire basic digital skills.

Based on the information provided by all the organizations in the consortium on the definition of the digital competence profile, the resulted indicators in the context of society, workforce and education are information and data literacy, communication and collaboration, content creation, safety and problem solving.

ECVET profile of the "digital competent" citizen		
EQF LEVEL	*Level 3*	
Total Duration	*125h*	
Total ECVET credit points	*5 ECVET points*	
Description of the profile	Upon successful completion of this course, the "digital competent" citizen will be able to: • understand the usefulness of digital competences; • use in everyday life the main digital systems; • understand the risks and possible threats connected to the Internet environment; • understand how to interact with others and use technologies to access services.	
Unit 1	**Information and data literacy**	
Duration of Unit 1	*25h*	
ECVET Points of Unit 1	*1*	
Description of LO1	Within this unit, the participant will be trained to: - search for data and information online in safe and security; - analyze and derive meaningful information from digital data, using credible and reliable sources; - organize, store and retrieve data, information and content in digital environments respecting the copyrights and minimizing the risks associated to these environments.	
1.1 BROWSING, SEARCHING AND FILTERING DATA, INFORMATION AND DIGITAL CONTENT		
Knowledge	**Skills**	**Competences**
- The "digital competent" citizen knows there are different types of browsers to search for data, information and digital content; - The "digital competent" citizen knows there are different search engines to get digital data, information and content; - The "digital competent" citizen know how to proceed to search for data, information and digital content; - The "digital competent" citizen know the relevance to filter data, information and digital content.	- The “digital competent” citizen is able to do an online search of specific data and information; - The “digital competent” citizen is able to use the adequate sources to access and get digital content (e.g. pictures, videos, tutorials, among others) - The “digital competent” citizen is able to select accurate sources to get data and information related to specific topics and themes; - The “digital competent” citizen is able to access and navigate between digital environments.	- The “digital competent” citizen can access and use browsers and search engines with security features; - The “digital competent” citizen is able to download digital content always scanning the files with an antivirus; - The “digital competent” citizen use the acquired knowledge avoid suspicious pages and digital environments; - The “digital competent “ citizen fully understands and appreciate the role of the internet in obtaining information in the context of today's world; - The “digital competent” citizen fully understands the risks of confidentiality and

		privacy of searching in the internet.
1.2 EVALUATION DATA, INFORMATION AND DIGITAL CONTENT		
Knowledge	**Skills**	**Competences**
- The "digital competent" citizen knows there are multiple sources to get digital data, information and content with different levels of reliability and credibility; - The "digital competent" citizen knows the existence of false and inaccurate data and information in the internet (e.g. manipulation, fake news, misinformation, blur of perceptions); - The "digital competent" citizen know how to proceed to search for reliable and credible data and information; - The "digital competent" citizen knows the relevance to identify and use credible and reliable sources of data, information and digital content.	- The “digital competent” citizen is able to choose and use credibility and reliability sources to search data, information and digital content (e.g. check the web domain, check "about us" section", find other articles of the source) - The “digital competent” citizen is able to spot fake news and misinformation (e.g. read behind headlines, check the author and sources, verify the date, ask support from experts); - The “digital competent” citizen is able to identify the veracity of data and information from articles, documents and news available online (e.g. analyse the text, punctuation, spelling, grammar, the coherence between text and images, etc.) - The “digital competent” citizen is able to analyse and evaluate the veracity and accuracy of digital content (e.g. pictures, video).	- The “digital competent” citizen is able to critically think and evaluate the credibility and reliability of sources; - The “digital competent” citizen is fully conscious and use common sense in the selection and dissemination of data, information and digital content; - The “digital competent” citizen is able to check his/her own biases and reduce the impact of their own beliefs in their judgement of the credibility and reliability of data, information and digital content; - The “digital competent” citizen fully understands and recognise the dangers of fake news and misinformation in the digital age.
1.3 MANAGING DATA, INFORMATION AND DIGITAL CONTENT		
Knowledge	**Skills**	**Competences**
- The "digital competent" citizen knows there are different types of programmes to store and manage data, information and digital content; - The "digital competent" citizen knows there are different digital environments and tools to organise and store data, information and digital content; - The "digital competent" citizen knows programmes and tools to store and manage data and information in a structured and digital format; - The "digital competent" citizen knows strategies and methods to classify, store, organize and disseminate digital data and content.	- The “digital competent” citizen is able to classify, organise and store relevant digital information for the deepening of knowledge and/or decision-making; - The “digital competent” citizen is able to organise and process data and information in a digital format; - The “digital competent” citizen is able to identify and access digital environments to store and easily access data and information; - The “digital competent” citizen is able to retrieve data, information and content in digital environments.	- The “digital competent” citizen manages store data, information and digital content respecting the copyrights and property rights; - The “digital competent” citizen access digital environments defining the adequate privacy settings; - The “digital competent “ citizen access and use digital tools and environments in safety, ethically and respecting the rules and rights of others; - The “digital competent” citizen fully recognizes and understands the risks and dangers of access to digital environments.
Unit 2	**Communication and collaboration**	
Duration of Unit 2	25h	
ECVET Points of Unit 2	1	
Description of LO2	Within this unit, the participant will be trained to interact and communicate through online media and be able to use technological tools to participate as a citizen in society and to access public and private services. This competence is extremely important for adults living in rural areas that are often in a condition of social exclusion. They can to communicate with other citizens in an online environment and be a part of society actively.	
2.1 INTERACTING THROUGH DIGITAL TECHNOLOGIES		

Knowledge	Skills	Competences
- The “digital competent” citizen knows how to use digital tools (laptop, desktop, etc.); - The “digital competent” knows how to write, read, speak and listen with ‘’digital-competent” citizens and low-skilled citizens; - The “digital competent” knows the environments to interact with other citizens (email, social media, forums); - The “digital competent” knows the rules of searching online.	- The “digital competent” citizen is able to use social media platforms; - The “digital competent” citizen is able to deliver presentations, webinars; - The “digital competent” citizen is able to send and receive emails and personal messages; - The “digital competent” citizen is able to record and play a video; - The “digital competent” citizen is able to make sure that information shared is respectful and empathetic.	- The “digital competent” citizen can present information to a specific audience; - The “digital competent” citizen is able to write an email, a newsletter, a leaflet depending on the receiver; - The “digital competent” citizen recognizes which digital platform should use depending on the audience wants to interact with; - The “digital competent“ citizen applies the knowledge gained to post information on facebook, instagram and other social media depending on its content.
2.2 SHARING THROUGH DIGITAL TECHNOLOGIES		
Knowledge	**Skills**	**Competences**
- The “digital competent” citizen knows how to share information digitally; - The “digital competent” citizen knows which platforms to use to share data; - The “digital competent” citizen knows how to secure data when sharing information.	- The “digital competent” citizen is able to store data in specific locations; - The “digital competent” citizen is able to access information in different platforms; - The “digital competent” citizen is able to add a security layer when sharing information; - The “digital competent” citizen is able to use appropriate electronic tool to share all types of information; -The "digital competent" citizen is able to use multiple ways to communicate online and share information depending on its audience.	- The “digital competent” citizen is transparent when sharing information; - The “digital competent” citizen fully understands the significance of secreting information; - The “digital competent” citizens can recognize threats when sharing data; - The “digital competent” citizen is able to understand the risks when sharing information.
2.3 ENGAGING IN CITIZENSHIP THROUGH DIGITAL TECHNOLOGIES		
Knowledge	**Skills**	**Competences**
- The “digital competent” citizen knows how to communicate effectively; - The “ digital competent” citizen knows how to keep information private; - The “digital competent” citizen knows how to apply critical thinking.	-The “digital competent” citizen is able to download content according to legislation; - The “digital competent” citizen is able to refer back to resources; - The “digital competent” citizen is able to send a clear consistent message with the appropriate level of information; - The “digital competent” citizen is able to ask critical questions; - The “digital competent” citizen is able to give feedback.	- The “digital competent” citizen is able to avoid hateful speech while conversing with others online; - The “digital competent” citizen encourages himself and others not to illegally download content; - The “digital competent” citizen advocates for equal digital rights; - The “digital competent “citizen makes decisions and is open-minded.
2.4 COLLABORATING THROUGH DIGITAL TECHNOLOGIES		
Knowledge	**Skills**	**Competences**
- The "digital competent" citizen know the best tools to use to communicate in an online environment; - The "digital competent" citizen know how to use these instrument for establish collaborative processes; - The "digital competent" citizen understands what the appropriate communication tools are and what the inappropriate ones are.	The "digital competent" citizen is able to adopt the appropriate communication tools depending on the context; - The "digital competent" citizen is able to share online information and data with others through the use of appropriate technologies; - The "digital competent" citizen is able to use online sharing instruments as Google Drive (Google Sheets, Google Docs), Dropbox, Calendar etc.	The "digital competent" citizen provides support to others for collaborating through online technologies; - The "digital competent" citizen applies the knowledge gained to improve online collaboration processes.
2.5 NETIQUETTE		
Knowledge	**Skills**	**Competences**

- The "digital competent" citizen knows the rules of "good manners" that a user should adopt online; - The "digital competent" citizen knows the online environments where this behaviour should be used (when users interact with other users such as email, social media, forum or chat); - The "digital competent" citizen knows what it means to respect other users.	- The "digital competent" citizen is able to communicate with users in a different way depending on the digital environment in which he is; - The "digital competent" citizen should interact with others politely by applying in a proper way the use of caps lock, the use of punctuation and the vocabulary; -The "digital competent" citizen is able to recognize whether other users are respecting the rules of online behaviour and he can act to mediate the situation.	- The "digital competent" citizen knows how to live their online experience appropriately to interact with other users and exchange opinions and information with them; - The "digital competent" citizen has understood the importance of online rules and can transfer them to other people.
2.6 MANAGING DIGITAL IDENTITY		
Knowledge	**Skills**	**Competences**
- The "digital competent" citizen knows what is the concept of digital identity and the system of information that compose it; - The "digital competent" citizen knows how to protect his digital identity online; - The "digital competent" citizen knows what advantages exist in using this instrument online.	- The "digital competent" citizen is able to processing the data produced through instruments, environments or digital services; - The "digital competent" citizen is able to communicate itself and manage properly its image online; - The "digital competent" citizen is able to manage its digital identity to have access to public and private services.	- The "digital competent" citizen applies the knowledge gained to solve problems related to managing digital identities; - The "digital competent" citizen can lead others in the management of their digital identity.
Unit 3	**Digital content creation**	
Duration of Unit 3	*25h*	
ECVET Points of Unit 3	*1*	
Description of LO3	Within this unit, the participant will be trained to create contents online. This competence allows people to share their ideas in different forms such as videos, images or texts. The participant will understand also how to use the information that is already present online to create new contents, respecting the intellectual property of the author.	
3.1 DEVELOPING DIGITAL CONTENT		
Knowledge	**Skills**	**Competences**
- The "digitally competent" citizen knows how to create and edit digital content in different formats; - The "digitally competent" citizen knows how to express oneself through digital means; - The "digitally competent" citizen knows the value of digital content as a visual aid.	- The "digitally competent" citizen is able to create word documents, powerpoint presentations, excel spreadsheets etc.; - The "digitally competent" citizen is able to make accurate representations through their materials of what it is they would like to convey; - The "digitally competent" citizen is able to format and edit content in accessible and usable templates.	- The "digitally competent" citizen leads others to create content in an online environment; -- The "digitally competent" citizen autonomously chooses the better tools to create the content that he/she wants.
3.2 INTEGRATING AND RE-ELABORATING DIGITAL CONTENT		
Knowledge	**Skills**	**Competences**
- The "digitally competent" citizen knows fundamental features related to the modification of digital content; - The "digitally competent" citizen understands how to improve and integrate information into an existing body of knowledge to create something different from the original.	- The "digitally competent" citizen knows how to modify, refine, improve and integrate information and content into an existing body of knowledge; - The "digitally competent" citizen can create new, original content and knowledge.	- The "digitally competent" citizen makes decisions on how to change existing information to forms a new one; - The "digitally competent" citizen uses the gained knowledge to create new information and content.
3.3 COPYRIGHT AND LICENSES		
Knowledge	**Skills**	**Competences**
- The "digitally competent" citizen knows how to apply copyright and licences in an accurate	- The "digitally competent" citizen is able to cite the right source if it uses content found online;	- The "digitally competent" citizen applies the gained knowledge to respect the intellectual

way; - The "digitally competent" citizen which licences are required and apply in certain circumstances; - The "digitally competent" citizen knows how to protect themselves and their organisation against copyright infringement.	- The "digitally competent" citizen distinguish the online platforms where find material (e.g., pictures, video, images) that can be used free; - The "digitally competent" citizen is able to recognise the online material (e.g., pictures, video, images) that can be used for free.	property of others; - The "digitally competent" citizen instructs others on the importance to respect copyright and licences.
3.4 PROGRAMMING		
Knowledge	**Skills**	**Competences**
- The "digitally competent" citizen knows how to plan and develop instructions for computing system; - The "digitally competent" citizen knows how to solve technical issues; - The "digitally competent" citizen knows how to apply instructions to perform tasks; - The "digitally competent" citizen knows how to apply instructions to solve problems.	- The "digitally competent" citizen is able to plan and develop a sequence of instructions created for a computing system; - The "digitally competent" citizen is able to explain how different problem could happen.	- The "digitally competent" citizen instructs the others about programming a computer or different programmes ; - The "digitally competent" citizen makes decisions on how to produce the instructions to create a new programme. - The "digitally competent" citizen uses the gained knowledge to have a clear understanding of a problem in the computer system.
Unit 4	**Safety**	
Duration of Unit 4	*25h*	
ECVET Points of Unit 4	*1*	
Description of LO4	Within this unit, the participant will be trained to: - how to protect devices, content, personal data and privacy in digital environments; - how to protect physical and psychological health, and to be aware of digital technologies for social well-being and social inclusion; - how to be aware of the environmental impact of digital technologies and their use.	
4.1 PROTECTING DEVICES		
Knowledge	**Skills**	**Competences**
- The "digital competent" citizen knows the importance of protecting devices and digital content and knows how to protect their devices and digital content; - The "digital competent" citizen knows there are different types of malware, e.g. spyware, viruses, worms, trojans, etc.; - The "digital competent" citizen know what knows what a Firewall is and what an antivirus software is; - The "digital competent" citizen knows the main risks associated with the use of technologies; - The "digital competent" citizen knows strategies to avoid risks.	- The "digital competent" citizen is able to install antivirus software - The "digital competent" citizen is able to apply updates; - The "digital competent" citizen is able to safely download apps; -The "digital competent" citizen is able to take measures to reduce the risk of fraud (e.g. setting secure passwords, applying protection settings, etc.); -The "digital competent" citizen is able to protect various devices from digital threats (malware, viruses, etc.).	- The "digital competent" citizen uses the gained knowledge to protect devices and digital content; - The "digital competent" citizen understands the different steps to take to protect a device; - The "digital competent" citizen understands the risks and threats of the digital environments; - The "digital competent" citizen knows the security and safety measures related to reliability and confidentiality; - The "digital competent" citizen is aware of the benefits and risks associated with the use of online technologies.
4.2 PROTECTING PERSONAL DATA AND PRIVACY		
Knowledge	**Skills**	**Competences**
- The "digital competent" citizen knows the basic rules of security; - The "digital competent" citizen knows what information he can share on the internet. - The	- The "digital competent" citizen is able to use and share personally identifiable information in a safely manner; - The "digital competent" citizen is able to create strong passwords;	- The "digital competent" citizen knows that digital services use a “Privacy policy” to inform how personal data is used; - The "digital competent" citizen understands

"digital competent" citizen knows the steps to keep one's privacy; - The "digital competent" citizen knows and understands the terms of use and conditions of the online services (eg to facilitate the provision of personal data) and is able to act prudently; - The "digital competent" citizen knows that interactive services use personal information to filter commercial messages; - The "digital competent" citizen knows the appropriate behavior in digital environments; - The "digital competent" citizen knows to what extent his or her digital identity data may or may not be used by a third party; - The "digital competent" citizen knows how to protect information about people around him (eg family, friends, co-workers ...).	- The "digital competent" citizen is able to manage their identity and fingerprint; - The "digital competent" citizen is able to act prudently in relation to confidentiality issues.	the importance of keeping personal data protected; - The "digital competent" citizen understands the different behaviours one has to follow to be safe; - The "digital competent" citizen understands how others can see and follow his fingerprint; - The "digital competent" citizen understands the risk of identity theft; - The "digital competent" citizen can locate online information about them; - The "digital competent" citizen modifies or deletes information that they have displayed about others.
4.3 PROTECTING HEALTH AND WELL-BEING		
Knowledge	**Skills**	**Competences**
- The "digital competent" citizen knows know that bad behaviours can lead to dependency and can recognize some behaviours that can lead dependency; - The "digital competent" citizen knows what cyberbullying and cybercrime are; - The "digital competent" citizen knows the risks of the misuse of the internet.	- The "digital competent" citizen is able to avoid health-risks and threats to physical and psychological well-being while using digital technologies; - The "digital competent" citizen is able to protect oneself and others from possible dangers in digital environments; - The "digital competent" citizen is able to control the aspects that distract from work and digital life; - The "digital competent" citizen is able to take preventive measures to protect the health of the person for whom he is responsible.	- The "digital competent" citizen knows the importance of being responsible while navigating the internet; - The "digital competent" citizen understands that all behaviours online entail consequences; - The "digital competent" citizen is aware of digital technologies for social well-being and social inclusion; - The "digital competent" citizen understands the problems related to digital media; - The "digital competent" citizen is aware of the long-term consequences of using digital technologies.
4.4 PROTECTING THE ENVIRONMENT		
Knowledge	**Skills**	**Competences**
- The "digital competent" citizen knows different ways to protect the environment from the impact of digital technologies and their use; - The "digital competent" citizen knows how to use digital equipment cost-effectively.	- The "digital competent" citizen is able to recognise simple environmental impacts of digital technologies and their use; - The "digital competent" citizen can select safe and appropriate digital media that are efficient and cost-effective compared to others; - The "digital competent" citizen has a sketch or a global mind map about how the online world works; - The "digital competent" citizen is able to use digital services without being dependent on them.	- The "digital competent" citizen is aware of the environmental impact of digital technologies and their use; - The "digital competent" citizen understands the technologies he uses to an appropriate extent to make good purchasing or contracting decisions (i.e. devices, internet service providers); - The "digital competent" citizen understands the environmental impact of computers and electronic devices and knows how to extend their life by recycling their components (e.g. changing hard disks); - The "digital competent" citizen is aware of the benefits and risks associated with the use of information technologies;

		- The "digital competent" citizen understands that digital media can influence things in a positive or negative way, depending on how they are used, or the rules followed.
Unit 5	**Problem solving**	
Duration of Unit 5	*25h*	
ECVET Points of Unit 5	*1*	
Description of LO5	Within this unit, the participant will be trained to: - identify needs and problems; - to resolve conceptual problems and problem situations in digital environments - problem-solving competences are important in every career at every level. The "digital competent" citizens can use digital tools to innovate processes, products and keep up-to-date with the digital evolution.	
5.1 SOLVING TECHNICAL PROBLEMS		
Knowledge	**Skills**	**Competences**
- The "digital competent" citizen knows how to recognise when a technical problem has been encountered; - The "digital competent" citizen knows how to identify simple technical problems when operating devices and using digital environments; - The "digital competent" knows how to identify a simple technical problem from a list of those that can arise while using a digital device or a digital platform (from trouble-shooting to solving more complex problems) .	- The "digital competent" citizen is able to solve simple technical problems; - The "digital competent" citizen is able to access information in different platforms; - The "digital competent" citizen is able to use appropriate electronic tool to solve simple technical problems.	- The "digital competent" citizen can transferring files between computers or other devices; -The "digital competent" citizen is able to seek assistance when unable to solve a technical problem; -The "digital competent" citizens uses the gained knowledge connect and installing new devices; -The "digital competent" citizen uses the gained knowledge to change a software or app setting.
5.2 IDENTIFYING NEEDS AND TECHNOLOGICAL RESPONSES		
Knowledge	**Skills**	**Competences**
- The "digital competent" citizen know how to use help facilities, online forums and tutorials; - The "digital competent" citizen recognize solving issues methods (for system or application freeze, or internet connection issues); -The "digital competent" citizen recognize typical technical problems (e.g. on-screen error messages arising from application or peripheral hardware malfunctions, or online connectivity and communication issues).	- The "digital competent" citizen is able to identify and apply solutions to common technical problems, using online tutorials, FAQs and help facilities; - The "digital competent" citizen is able to distinguish incorrect credentials; - The "digital competent" citizen is able interpret incorrectly connecting hardware; - The "digital competent" citizen recognize attempt to open a file with an unsuitable application; - The "digital competent" citizen recognize the attempt to save a file using a filename with inappropriate characters.	- The "digital competent" citizen is able to use help facilities, online forums and tutorials; - The "digital competent" citizen solve the problem of access resetting login credentials; - The "digital competent" citizen applies the gained knowledge to changing Wi-Fi settings; - The "digital competent" citizen understands the instructions in an online tutorial; - The "digital competent" citizen can lead other to disable an app, or uninstalling and reinstalling software.
5.3 CREATIVELY USING DIGITAL TECHNOLOGIES		
Knowledge	**Skills**	**Competences**
- The "digital competent" citizen identify and describe diffrent kinds of questions stems to gather informations;	- The "digital competent" citizen is able to make simple modifications to generate some different ideas and posibilities; - The "digital competent" citizen is able explore the capabilities	- The "digital competent" citizen choose which digital technology to use for which purpose; - The "digital competent" citizen is able to use

- The "digital competent citizen" know why people use and develop technologies to meet their needs; - The "digital competent" citizen identify needs and wants, consider user values and beliefs, generate and develop ideas; - The "digital competent" citizen knows the consequence of use and the impact of technologies on individuals, families, communities and the environment.	of digital technologies for supporting creative, innovative and enterprising pursuits; - The "digital competent" citizen is able to place personal reactions to situation or problems and know how these reactions may influence the original concept.	the components of digital systems and digital information in real-world situations.
5.4 IDENTIFYING DIGITAL COMPETENCE GAPS		
Knowledge	**Skills**	**Competences**
- The "digital competent" citizen recognise where his own digital competence needs to be improved or updated; - The "digital competent" citizen identifies where to seek opportunities for self-developments and to keep up-to-date with the digital evolution.	- The "digital competent" citizen is able to support others to develop their digital competence; - The "digital competent" citizen is able use online learning resources include FAQs, guides, videos, tutorials and advice forums.	- The "digital competent" citizen permanently seeks opportunities in digital environment for improving their individual and collectively activities; - The "digital competent" citizen applies the gained knowledge to evaluate himself or others, if new digital environments found while surfing, are appropriate means of improving digital competence level.

3. The principles of formal and non formal adult education

The purpose of this chapter is to present the principles that will underlie the learning materials developed within the No One Behind project.

In the No One Behind project, the learning process is carried out using modern and innovative teaching methods, by incorporating educational materials in an online board game through which adults with reduced digital skills can practice all the theoretical aspects studied.

This innovative teaching method is based on formal adult education principles as well as some specific principles of non-formal and informal learning. The purpose is to combine different strengths of each educational system so as to best meet the needs of our target group, namely adults in rural areas.

3.1 Types of education

In order to select the most valuable principles that will be integrated into the course structure, we aim to define and differentiate the main types of education: formal, non-formal and informal:

Formal education represents the totality of systematic and organized actions, designed and carried out in specialized institutions and pursues explicit purposes, aiming at the formation and development of personality. This type of formal education is achieved through the educational process, which means compliance with official documents. Official education has the following attributes: consciously organized, systematic, institutionalized, regulated, coordinated, directed, planned, evaluated, so it is an expression of an educational policy.

Non-formal education takes place outside school institutions, i.e. in spaces in partnership with the school. In fact, this type of education refers to those meetings organized systematically outside the formal system to meet a wide variety of learning requirements. The teacher who adopts a non-formal variant is required more flexibility and enthusiasm, adaptability in adopting the leadership styles of the activity, depending on the needs and requirements of the student.

Informal education represents those educational systems that are not systematic, unorganized, not subordinated to explicit objectives and purposes, which have an influence on the individual. This can be the product of the subject's life experience.

Learn more about types of education:
http://www.young-adulllt.eu/glossary/detail.php?we_objectID=193

3.1.1 Difference between formal and non-formal education

In a formal setting, attendance is compulsory for both teachers and participants, which mean it will have the same set of teachers and a curriculum. In the case of a non-formal setting, there is no definitive curriculum every year as it varies based on the learner's requirement. Also, the attendance on the non-formal setup is not consistent, and the teachers can change every time.

In a formal setting, teachers have to stick to the predefined curriculum, and there is no scope for including non-traditional content, and they have to meet the standards of today's education. The content and curriculum of the non-formal education is however not sacrosanct and can be changed to match with the learning curve of the students.

The knowledge and experience of classroom teachers and that of teachers in non-formal education settings vary vastly. The former has training in teaching strategies, management of the classroom, content-based teaching methods, etc., while the latter is more focused on group management and content expertise as they deal with different age groups and in various disciplines.

The activities in a classroom-based educational program can last for more than one day, which is not the case with the non-formal educational program. In the latter, the events have to be completed on the same day for a more effective outcome.

Non-Formal Education has a more informal environment and is aimed at a different audience group while a formal education is more precise in its approach.

3.2 Areas of education

As we all know, education is a continuous process and can take place at any age, throughout life, which is why education is divided into the following areas: school, VET, higher education and adult.

A **school** is an educational institution designed to provide learning spaces and learning environments for the teaching of students (or "pupils") under the direction of teachers. Most countries have systems of formal education, which is sometimes compulsory

Modern **vocational education and training** (VET) is training for a specific industry through a combination of teaching and practical experience. In many cases, vocational education combines learning in the college environment as well as practical work experience. Vocational education offers an alternative to traditional academic subjects, like the ones, many young people take at A-level or degree level.

Higher, post-secondary, tertiary, or third level education is the stage of learning that occurs at universities, academies, colleges, seminaries, and institutes of technology. **Higher education** also includes certain college-level institutions, such as vocational schools, trade schools, and career colleges, that award academic degrees or professional certifications.

Adult education is a practice in which adults engage in systematic and sustained self-educating activities in order to gain new forms of knowledge, skills, attitudes, or values. It can mean any form of learning adults engage in beyond traditional schooling, encompassing basic literacy to personal fulfilment as a lifelong learner.

3.3 Education principles adopted in No One Behind training materials

Analyzing the concepts defined above, the target group-specific components and main principles for the planning and implementation of the online learning course within the methodology were established:

- Self-Direction and Motivation
- Heterogeneity
- Social inclusion
- Openness for technical issues
- Practical use
- Communication

1. Self-Direction and Motivation – adults are motivated to learn new things – end to learn because they want to or they see the direct benefit of learning, rather than because they are told to or are expected to.

- The course is aimed at people who want to learn more about the digital world and ICT.
- The course has to identify and present to the learners' benefits and values to participate in the course.
- The learning programs should clearly demonstrate what the learner gains from their interaction.
- The course should be at a level adapted to the target group, in order to avoid the risk of demotivation.
- Despite an assumed high level of motivation to participate in the course, there should be the awareness that learners' motivation can be very fragile.

2. Heterogeneity – our target group is a very heterogeneous group, for this reason, the course will be structured in the following manner:

- Different levels of difficulty of the chapters/modules
- An easy to access educational platform
- Increasing difficulty during the course
- A very clear language
- Small learning bits
- Guidance and feedback

3. Social inclusion – The social inclusion of adults from rural areas is one of the main points of the project. This is ensured in the project by the active participation of adults and trainers in the creation and implementation of online courses and products.

The basic principles regarding social inclusion will be:

- Social inclusion through active participation of adults and educators in the creation and implementation of the online courses and products developed in the project.
- Make the adults aware of the great benefits of digital devices and ICT
- The online course enables all adults to participate, and the only requirement to participate in their interest in the topic of digitalisation.

4. Openness for technical issues - Learners in the No One Behind project should be open for technical issues:

- It is supposed that learners are open to a certain degree to new and innovative technology, but have fears at the same time, too.
- The online courses should start at a very low level and increase in difficulty during the courses so that concerns about the new technology can be addressed and adults see digital technology as more of day-to-day support than a vice.

5. Practical use – Adults learn quickly and remember what they learn when they can turn around and apply that knowledge in their role. This is why:

- Learning materials should be constructed with practical examples, using real-world scenarios and problem-solving that requires learners to access their experience and knowledge.
- The learners will set their pace and their own path. Online learning is well suited for this type of learning, as learners can access learning content on their own schedule.
- Learners are responsible for learning themselves.
- The course framework should help and encourage the learners to find their own learning paths.

6. Communication in an Online Learning environment is a very important tool for exchange between trainer and learner:

- Communication between the course participants does not happen by itself. It has to be activated in the beginning and it should be promoted during the whole course.
- Communication enables and guarantees appropriate learning support, especially in online courses, which is of enormous importance for citizens in the online learning process.
- Communication is a factor for success in a learning environment and this is why various communication tools will be used during the online courses.

4. The No One Behind training manual

At the end of Intellectual Output 2, the consortium will create a training manual containing 5 modules that will cover at least 20 digital competences in accordance with the "DigComp 2.0: The Digital Competence Framework for Citizens".

The training manual will have about 100 pages in total and is addressed to adult educators, adult's learners, and other stakeholders.

The manual aims to:

contribute to the development of a **high-quality training program** for adults in rural areas, allowing them to become "digitally competent" citizen;

training plan and materials to support adult educators (and other stakeholders) in the development of digital skills of low qualified adults from rural areas.

The structure of the manual will be:

Module 1: Information processing

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

Module 2: Communication

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

Module 3: Content creation

3.1 Developing digital content

3.2 Integrating and re-elaborating digital content

3.3 Copyright and licences

3.4 Programming

Module 4: Security

4.1 Protecting devices

4.2 Protecting personal data and privacy

4.3 Protecting health and well-being

4.4 Protecting the environment

Module 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

5. The evaluation system

In this section is proposed an evaluation system to support adult educators and trainers in the evaluation of the learning and development/consolidation of competences of adult learners, attending the No One Behind training and it can be characterized as follows:

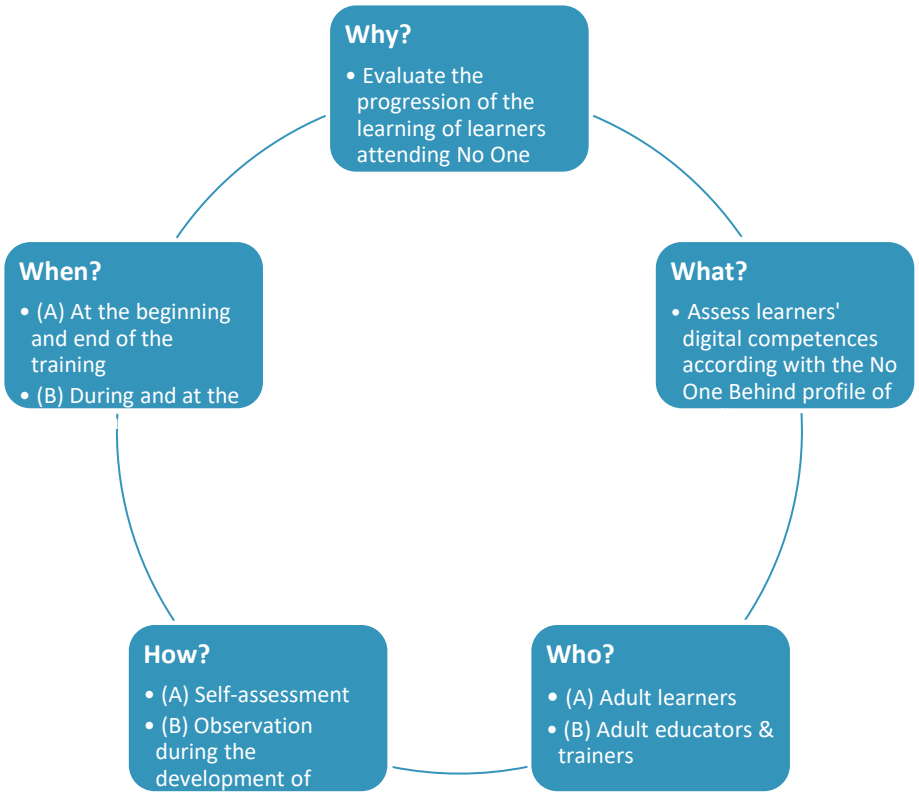


Figure 1 - Brief characterization of the No One Behind evaluation system

5.1 Framework for the assessment of digital competences

The evaluation will be made based on the No One Behind profile of the "digital competent" citizen, according to a framework for the assessment of digital competences. The framework integrates the 5 modules and units of competence of the profile defined and for each unit of competence are defined:

- **Evidence criteria** - qualitative indicators of the domain of competence unit by adults
- **Examples of activities** – Suggestion of activities for the development and evidence of the unit competences identified

The framework defined is essential to support adult educators and trainers at two levels:

- in the definition of sessions and activities fostering the acquisition, development or consolidation of the units of competences by adults
- in the assessment of adult learners' digital competences in different moments of the training

As mentioned, the framework is defined per module and unit of competences, as can be seen in the tables presented in the next pages of the document.

[IO1 - Innovative Methodology]

Unit 1 – Information and Data Literacy

1.1 Browsing, searching and filtering data, information and digital content

Evidence Criteria	Examples of activities
Be able to identify different web browsers. - Be able to recognize different search engines. - Be able to search information and content online. - Be able to navigate between digital environments. - Be able to understand the risks of confidentiality and privacy of searching on the internet. - Be able to know the role of the internet in obtaining information in the context of today's world.	- Make a list of the available search engines and present to the classmates the market share of each one. - Each one of the trainees should test a browser and describe the advantages and disadvantages, what they liked and disliked about it. After, make a short presentation to the classmates and share impressions. - Identify the most used job portals or platforms, which can help job seekers to find an available position and submit an application. - Give general or specific topics/thematic to the trainees and ask them to search for images that represent the topic/thematic. This can be done in small groups or individually. Organize a small contest for the other trainees to guess which topic corresponds to the pictures. - Divide the class into groups and each group should search for privacy add-ons that can be installed on the web browser. Each group should present the most popular add-ons. - Retrieve a previously visited web page from the browser's history. - Do different exercises using online maps, such as looking for the best alternative path, checking the public transportation schedules or defining a path with various map locations (three or more).

Table 2. Browsing, searching and filtering data, information and digital content evidence criteria and activities examples

1.2 Evaluating data, information and digital content

Evidence Criteria	Examples of activities
- Be able to recognize the dangers of fake news and misinformation in the digital age. - Be able to identify the veracity of data and the accuracy of digital information. - Be able to detect the credibility and reliability of common sources of data, information and their digital content. - Be able to search for reliable and credible data and information.	- Provide a list of articles, news and websites and ask trainees to analyze the text, punctuation, spelling, grammar, read behind headlines, check the author and sources. Present to other classmates why do they consider it to be a reliable website or a trusted source of news. - Divide the class into groups and ask trainees to identify popular and recent cases of misinformation on social media platforms. - Identify reliable platforms, websites and authors in their country that have the objective of determining the veracity of news circulating in public space. - Provide information about different institutions or regulators in the country. Develop a small quiz, present cases of unreliable information and deceiving schemes, and have trainees try to guess which entity should they report the bad

	actors. - Perform a search in a search engine or a social media platform and differentiate promoted or advertised digital content from non-advertised content.

Table 3. Evaluating data, information and digital content evidence criteria and activities examples

1.3 Managing data, information and digital content

Evidence Criteria	Examples of activities
- Be able to identify different types of programmes, tools and environments to store and manage data, information and digital content. - Be able to use digital tools and platforms to store and manage data. - Be able to organize content and data in a digital platform in a structured way. - Be able to access digital environments defining adequate privacy settings.	- Make a list of the most used platforms to store data synchronously and to perform collaborative tasks. - Do exercises to organize folders (create, copy, move, rename and delete) and manage files (create, locate, copy, move, rename, sort, delete,) on different digital devices, such as a laptop, a smartphone or a tablet. - Try to transfer files and folders between different platforms or devices. For example, between the laptop and the USB flash drive or a smartphone to the cloud (Dropbox, Google Drive, iCloud, OneDrive, etc.). - Organize a set of digital photos on a monthly basis by folders. - Create a collaborative working file (such as a Google Docs on the Google Drive platform) and share it with classmates.

Table 4. Managing data, information and digital content evidence criteria and activities examples

Unit 2 – Communication and Collaboration

2.1 Interacting through digital technologies

Evidence Criteria	Examples of activities
- Be able to identify different digital tools, characterize them and use them in accordance with the context. - Be able to interact and communicate with different audiences using adequate digital tools and devices. - Be able to recognize and characterize different digital platforms and devices for communication. - Be able to search for information online in safe and ethically.	- Access, read and sum up some information about different digital tools and devices. - Participate in a chat, training seminar, informal meeting with friends made online. - Identify and nominate different digital platforms of communication and interactions with others. - Search for specific information and select an adequate source.

Table 5. Interacting through digital technologies evidence criteria and activities examples

2.2 Sharing through digital technologies

Evidence Criteria	Examples of activities
- Be able to share information with others using adequate tools and/or platforms. - Be able to recognize and characterize different digital platforms and devices for sharing information. - Be able to share information with others in safe and ethically. - Be able to search for information online in safe and ethically.	- Search for information or data (such as articles, pictures, infographics, videos) and send it to a member of the team, using the most suitable tool or platform. - Collect and introduce information about digital platforms and devices for sharing information. - Comply with safety and ethical rules related to the share of information and use of the platforms for it.

Table 6. Sharing through digital technologies evidence criteria and activities examples

2.3 Engaging in citizenship through digital technologies

Evidence Criteria	Examples of activities
- Be able to communicate online ethically and open-minded. - Be able to participate online in society as a citizen. - Be able to use legal online services. - Be able to provide feedback and opinions with respect for others. - Be able to recognize information and interactive online services. - Be able to configure settings to keep information private.	- Find official websites and apps of government bodies and other public service organizations in the country at national and local level in areas of interest. - Identify copyrighted content. - Simulate a conversation or a post discussion. - Change the default settings of online platforms (such as social media) and applications. - Sharing session with the classmates about digital platforms and guide each other on how to use a particular one to empower citizenship participation.

Table 7. Engaging in citizenship through digital technologies evidence criteria and activities examples

2.4 Collaborating through digital technologies

Evidence Criteria	Examples of activities
- Be able to use different tools and platforms to communicate online with others. - Be able to share information online using appropriate tools and platforms. - Be able to identify the most used online platforms in their country or region. - Be able to distinguish between instant messaging or chat platforms, voice-over-IP, social media platforms, forums and e-mail.	- Create and share documents with others in online platforms such as Google Drive (Google Sheets, Google Docs), OneDrive or Dropbox. - Create an e-mail account, send and receive e-mails with multiple recipients and individual recipients. - Join a videocall and change different settings on an online tool (such as admitting participants in a call, mute participants or giving the rights to share the screen). - Create a group on an instant messaging platform (for example, Whatsapp), add members, exchange messages with others and modify group settings (such as attributing a new administrator).

Table 8 Collaborating through digital technologies evidence criteria and activities examples

2.5 Netiquette

Evidence Criteria	Examples of activities
- Be able to demonstrate polite interaction online with others. - Be able to identify what kind of behavior should be used in different online environments (such as email, social media or chat). - Be able to apply "good manners" in an online environment communicating with others. - Be able to understand the importance of online rules when using digital resources.	- Apply basic online writing rules, such as avoiding writing full words in capital letters and taking care of spelling. - Test the basics of e-mailing etiquette, such as using BCC and CC, forwarding emails, opening and closing of the message, writing a short title and using proper fonts. - Simulate a chat conversation with other classmates and use appropriately emoticons when communicating, depending on your message - Create examples and ask students to identify socially/ethically inappropriate online behavior and communication such as hate speech, flaming, cyber-bullying and online stalking. - Make a list of appropriate behaviors to have on social media platforms such as asking permission before publishing pictures of other people and avoiding spam.

Table 9. Netiquette evidence criteria and activities examples

2.6 Managing digital identity

Evidence Criteria	Examples of activities
- Be able to describe the concept of digital identity. - Be able to understand how to protect the digital identity. - Be able to describe simple ways to protect the reputation online. - Be able to manage the digital footprint. - Be able to know how to be respectful of the digital identities of others and careful about what to post about other people.	- Create a practical exercise to create an online account and related personal profile, to log in and log out safely (including changing and protecting passwords) and to delete the account if wants to quit. - Adjust the profile on different social media platforms depending on the potential audience (formal-informal, professional, official, thematic etc.). - Make a list of possible communications usage that can be left online and accessible to everyone, such as posts on social media, forums and blogs, "likes" or other reactions to publications and published and shared photos and videos. - Identify examples of images that could be best suitable for a profile picture on a specific social media platform. - Identify publications of digital content (texts, pictures, videos), that can harm the reputation of others.

Table 10. Managing digital identity evidence criteria and activities examples

Unit 3 - Digital content creation

3.1 Developing digital content

Evidence Criteria	Examples of activities
- Be able to create and edit digital content in different formats. - Be able to create new, original content and knowledge. - Be able to represent well what it is intended to communicate. - Be able to identify the value of digital content as a visual aid. - Be able to adapt the expression through the creation of the most appropriate digital means.	- Identify commonly used software applications for content creation through their names and icons. - Create an exercise to test the basic features of spreadsheet software to organize data and use simple formulas. For example, creating a very simple company or personal budget. - Create an exercise to test the basic features of presentation software to prepare a simple presentation. For example, make a presentation to the classmates. - Create an exercise to test the basic features of word processing software to write simple text and apply formats. - Organize an online activity with the classmates to make use of a digital and collaborative online whiteboard (for example, Jamboard or Miro).

Table 11. Developing digital content evidence criteria and activities examples

3.2 Integrating and re-elaborating digital content

Evidence Criteria	Examples of activities
- Be able to modify information and content into an existing document or platform. - Be able to integrate new information and content into an existing document or platform. - Be able to assess the most appropriate ways to integrate specific new items of content and information.	- Produce simple changes to a document produced by another person, such as adding text, making spelling corrections and changing formatting. - Develop a short video, adding new dialogues and images onto a brief support video already created. - Visualize tutorial videos on how to modify information on specific software programmes or platforms. - Edit a publication or a description of a picture that was previously posted online. - Improve a presentation adding text, images and visual effects to the slides. - Make changes such as changing or adding numbers and changing rows sequence by a new ordering criterium to a spreadsheet created by another person.

Table 12. Integrating and re-elaborating digital content evidence criteria and activities examples

3.3 Copyright and licenses

Evidence Criteria	Examples of activities
- Be able to apply copyright and licenses in an accurate way. - Be able to identify which licenses are required in certain circumstances. - Be able to know how to protect themselves against copyright infringement.	- Read about the Creative Commons license and the different layers of licenses that are available. - From a folder of different types of documents examples, identify which Creative Commons license should be used for a specific document. - Find and quote a source and author of an online digital content. - Link a variety of images of licensing symbols to the correct denotation. - Make a list of steps on how to react in case of copyright infringement.

Table 13. Copyright and licenses evidence criteria and activities examples

3.4 Programming

Evidence Criteria	Examples of activities
- Be able to list simple instructions for a computing system to solve a simple problem or perform a simple task. - Be able to solve simple technical issues. - Be able to apply instructions to perform tasks or solve problems..	- Create a simple flowchart to represent an algorithm, a simple programme or process. - Present an incomplete flowchart and ask students to complete it by putting in the appropriate empty boxes the respective sentences for the process to “run” smoothly. - Create a basic programme based on a simple flowchart or algorithm. - Think about a creative mobile application and create a very simple smartphone app with a drag-and-drop blocks platform. Present it to the classmates.

Table 14. Programming evidence criteria and activities examples

Unit 4 – Safety

4.1 Protecting devices

Evidence Criteria	Examples of activities
- Be able to understand the importance of protecting devices and avoid risks. - Be able to identify the difference between different types of malware. - Be able to understand the importance of measures related to reliability and confidentiality.	- Downloading safe apps and regularly updating device’s features. - Distinguishes types of malware such as spyware, viruses and installs a Firewall or an antivirus software. - Being provisional by setting secure passwords, applying protection settings

Table 15. Protecting devices evidence criteria and activities examples

4.2 Protecting personal data and privacy

Evidence Criteria	Examples of activities
- Be able to keep personal data protected. - Be able to understand the risk of identity theft. - Be able to apply "Privacy Policy" when using digital services. - Be able to understand the basic rules of security..	- Use and share personally identifiable information though secure platforms and locate online information about him/her. - Create strong passwords and manage successfully his/her identity and fingerprint. - Selects only necessary "cookies", accepts terms and conditions when suitable. - Protects information about him and people around him and deletes or modifies information that is unreal.

Table 16. Protecting personal data and privacy evidence criteria and activities examples

4.3 Protecting health and well-being

Evidence Criteria	Examples of activities
- Be able to avoid health risks and threats to physical and psychological well-being while using digital technologies. - Be able to control possible dangers and threats in digital environments. - Be able to identify the risks of misusing online and digital services.	- Understanding the importance of being responsible while navigating the internet. - Being aware that all digital behaviors entail consequences. - Understanding the consequences of cyberbullying and cybercrime.

Table 17. Protecting health and well-being evidence criteria and activities examples

4.4 Protecting the environment

Evidence Criteria	Examples of activities
- Be able to recognize simple environmental impacts of digital technologies and their use. - Be able to use digital services without being dependent on them. - Be able to protect the environment from the impact of disposing digital devices.	- Selecting safe, efficient and cost-effective media. - Understanding that digital media can influence situations either positively or negatively, depending on their use. - Knows how to extend the cycle life of digital devices by recycling their internal parts.

Table 18. Protecting the environment evidence criteria and activities examples

Unit 5 - Problem Solving

5.1 Solving technical problems

Evidence Criteria	Examples of activities
- Be able to navigate online in everyday contexts. - Be able to identify when a digital device is appropriate enough to work on. - Be able to identify when a problem has occurred on a digital device or service.	- Logging in with no issues, using correct passwords, connecting to the correct network and sharing files between digital devices. - Turning on a digital device, connecting to power, troubleshoot the issue when identifying a problem. - Knowing how to access the internet when connection has cut off, restarting a device when multiple apps do not respond, updating software and hardware when needed.

Table 19. Solving technical problems evidence criteria and activities examples

5.2 Identifying needs and technological responses

Evidence Criteria	Examples of activities
- Be able to recognize technical problems originating from a digital device or from the environment. - Be able to recognize solving methods. - Be able to understand how to use help facilities, manuals guides.	- Resetting login credentials, changing network settings, troubleshooting connection between a digital device and network. - Using digital tools or other tools to identify and solve the problem. - Read carefully instructions from online sources, using help facilities within apps, use communication and request assistance.

Table 20. Identifying needs and technological responses evidence criteria and activities examples

5.3 Creatively using digital technologies

Evidence Criteria	Examples of activities
- Be able to use the appropriate digital technology for a specific purpose (gather information, create content). - Be able to use components of digital systems and digital information in real-world conditions.	- Making simple modifications to generate some different ideas and possibilities, exploring the capabilities of digital technologies for supporting creative, innovative and enterprising pursuits. - Placing personal reactions to situation or problems and know how these reactions may influence the original concept.

Table 21. Creatively using digital technologies evidence criteria and activities examples

5.4 Identifying digital competence gaps

Evidence Criteria	Examples of activities
- Be able to evaluate himself or others if new digital environments are appropriate means of improving digital competence level.	- Supporting himself and others on digital issues and recognizing where his own digital competence needs improvement.

- Be able to seek opportunities for self-development and keep up to date with the digital evolution.	- Seeking opportunities in digital environment for improving their individual and collectively activities.

Table 22. Identifying digital competence gaps evidence criteria and activities examples

5.2 Assessment of learners' digital competences

The assessment of learners' digital competences resulting from their attendance in the No One Behind training course will be done by:

Adult educators and trainers	Adult learners
• During the development of the activities. • At the end of the training.	• At the begining of the each unit. • At the end of each unit.

Figure 2 – Who and when is previewed the assessment of learners' progression in the learning.

In any case, to assess learners' digital competences, adult educators/trainers and learners can use the tables introduced below. In the tables are identified the units of competences to be assessed in each unit, using a 3-levels scale:

1. None - the learner doesn't have any domain in the unit of competence;
2. Basic – the learner has a basic domain in the unit of competence;
3. Above Basic – the learners have a good domain in the unit of competence.

1. Information and Data Literacy			
1.1. Browsing, searching and filtering information			
Unit of competence	**None**	**Basic**	**Above Basic**
Be able to identify different web browsers.			
Be able to recognize different search engines.			
Be able to search for information and content online.			

Be able to navigate between digital environments.			
Be able to understand the risks of confidentiality and privacy of searching on the internet.			
Be able to know the role of the internet in obtaining information in the context of today's world.			
1.2. Evaluating data, information and digital content			
Be able to recognize the dangers of fake news and misinformation in the digital age.			
Be able to identify the veracity of data and accuracy of digital information.			
Be able to detect the credibility and reliability of common sources of data, information and their digital content.			
Be able to search for reliable and credible data and information.			
1.3. Managing data, information and digital content			
Be able to identify different types of programmes, tools and environments to store and manage data, information and digital content.			
Be able to use digital tools and platforms to store and manage data.			
Be able to organize content and data in a digital platform in a structured way.			
Be able to access digital environments defining the adequate privacy settings.			

Table 23. Assessment of learners' digital competences – Unit 1. Information and Data Literacy

[IO1 - Innovative Methodology]

2. Communication and Collaboration			
2.1. Interacting through technologies			
Unit of competence	**None**	**Basic**	**Above Basic**
Be able to identify different digital tools, characterize them and use them in accordance with the context.			
Be able to interact and communicate with different audiences using adequate digital tools and devices.			
Be able to recognize and characterize different digital platforms and devices for communication.			
Be able to search for information online in safe and ethically.			
2.2. Sharing through digital technologies			
Be able to share information with others using adequate tools and/or platforms.			
Be able to recognize and characterize different digital platforms and devices for sharing information.			
Be able to share information with others in safe and ethically.			
Be able to search for information online in safe and ethically.			
2.3. Engaging in citizenship through digital technologies			
Be able to communicate online ethically and open-minded.			
Be able to participate online in society as a citizen.			
Be able to use legal online services.			

Be able to provide feedback and opinions with respect for others.			
Be able to recognize information and interactive online services.			
Be able to configure settings to keep information private.			
2.4. Collaborating through digital technologies			
Be able to use different tools and platforms to communicate online with others.			
Be able to share information online using appropriate tools and platforms.			
Be able to identify the most used online platforms in their country or region.			
Be able to distinguish between instant messaging or chat platforms, voice-over-IP, social media platforms, forums and e-mail.			
2.5. Netiquette			
Be able to demonstrate polite interaction online with others.			
Be able to identify what kind of behavior should be used in different online environments (such as email, social media or chat).			
Be able to apply “good manners” in an online environment communicating with others.			
Be able to understand the importance of online rules when using digital resources.			
2.6. Managing digital identity			
Be able to describe the concept of digital identity.			

Be able to understand how to protect the digital identity.			
Be able to describe simple ways to protect the reputation online.			
Be able to manage the digital footprint.			
Be able to know how to be respectful of the digital identities of others and careful about what to post about other people.			

Table 24. Assessment of learners' digital competences – Unit 2. Communication and Collaboration

3. Digital Content Creation			
3.1. Developing content			
Unit of competence	**None**	**Basic**	**Above Basic**
Be able to create and edit digital content in different formats.			
Be able to create new, original content and knowledge.			
Be able to represent well what it is intended to communicate.			
Be able to identify the value of digital content as a visual aid.			
Be able to adapt the expression through the creation of the most appropriate digital means.			
3.2. Integrating and re-elaborating			
Be able to modify information and content into an existing document or platform.			

Be able to integrate new information and content into an existing document or platform.			
Be able to assess the most appropriate ways to integrate specific new items of content and information.			
3.3. Copyright and Licenses			
Be able to apply copyright and licenses in an accurate way.			
Be able to identify which licenses are required in certain circumstances.			
Be able to know how to protect themselves against copyright infringement.			
3.4. Programming			
Be able to list simple instructions for a computing system to solve a simple problem or perform a simple task.			
Be able to solve simple technical issues.			
Be able to apply instructions to perform tasks or solve problems.			

Table 25. Assessment of learners' digital competences – Unit 3. Digital Content Creation

4. Safety			
4.1. Protecting devices			
Unit of competence	**None**	**Basic**	**Above Basic**
Be able to understand the importance of protecting devices and avoid risks.			
Be able to identify the difference between different types of malware.			

Be able to understand the importance of measures related to reliability and confidentiality.			
4.2. Protecting personal data			
Be able to keep personal data protected.			
Be able to understand the risk of identity theft.			
Be able to apply “Privacy Policy” when using digital services.			
Be able to understand the basic rules of security.			
4.3. Protecting health			
Be able to avoid health-risks and threats to physical and psychological well-being while using digital technologies.			
Be able to control possible dangers and threats in digital environments.			
Be able to identify the risks of misusing online and digital services.			
4.4 Protecting the environment			
Be able to recognize simple environmental impacts of digital technologies and their use.			
Be able to use digital services without being dependent on them.			
Be able to protect the environment from the impact of disposing digital devices.			

Table 26. Assessment of learners’ digital competences – Unit 4. Safety

5. Problem-solving			
5.1. Solving Technical Problems			
Unit of competence	**None**	**Basic**	**Above Basic**
Be able to navigate online in everyday contexts.			
Be able to identify when a digital device is appropriate enough to work on.			
Be able to identify when a problem has occurred on a digital device or service.			
5.2. Identifying needs and technological responses			
Be able to recognize technical problems originating from a digital device or from the environment.			
Be able to recognize solving methods.			
Be able to understand how to use help facilities, manuals guides.			
5.3. Innovating and creatively using technology			
Be able to use the appropriate digital technology for a specific purpose (gather information, create content).			
Be able to use components of digital systems and digital information in real-world conditions.			
5.4. Identifying digital competence gaps			
Be able to evaluate himself or others if new digital environments are appropriate means of improving digital competence level.			
Be able to seek opportunities for self-development and keep up to date with the digital evolution.			

Table 26. Assessment of learners' digital competences – Unit 5. Problem-solving

6. The background information on game design

No one Behind aims to create an innovative boarding game, as part of Intellectual Output 3. A Game-Based Learning technologies and tools will be used to offer a learning experience for adults from rural areas who are willing to improve their digital skills and knowledge, so as to find new work opportunities and eventually improve their life quality.

Following the development of an innovative methodology for education and training of adults in rural areas (IO1) and a training module-based manual for digital skills (IO2), will be created an online environment that will consist of a simple table game that will incorporate project materials in a playful way (IO3). When the game will be ready, participants and the general public can freely access the table game and use it.

The game will be based on quiz-like assessment mechanisms, and will test and identify one's level of digital knowledge through knowledge and skills assessment mechanisms. The selected training methods that will be used will strongly depend on the IO1 methodology, whereas the content of the questions/ real-life scenarios/ case studies, etc. will derive from the IO2 training manual.

The online game will be based on the following steps, which will be further developed later in the project timeline:

- **Step 1** "What the game is for": Getting familiar with the training material (on digital competences) developed in IO2 training manual, as well as assess one's knowledge in them.
- **Step 2** "Land on the game": Home page of the game (game environment).
- **Step 3a** "Customize your visit": Choose the language of preference.
- **Step 3b** "How to play": Main instructions of the game.
- **Step 3c** "Start forming your profile": Push the button to get you to Step 4.
- **Step 4** "Profile yourself": Select avatar.
- **Step 5** "Welcome box": Hints to be able to play the game.
- **Step 6** "The board": presentation of the board with all features (turns/ cards/ cases or real-life scenarios/ badges or points) & instructions step-by-step to start playing.
- **Step 7** "Pop-up questions" Pop-ups will keep you on track with limitations of the game (for example, the number of turns) and will guide you towards the completion of the game.

- **Step 8** "Feedback message": A synopsis of ones' performance (for example, # of rounds, # of correct answers/ # of not correct answers, etc.)

The final EN version of the game will be tested at the Short-term Joint-Staff Training Event, whereas the language versions will be presented and tried at the course of national events titled "How can I use the simple boarding game", which will take place in each partner country.

6.1 Board Game Design: Aim, Description, Rationale &Guidelines

Aim of the Game

The aim of the No One Behind game is to work as a gamified 'virtual assistant' to support the adults from rural areas during the learning process. The gamified approach intends to improve the motivation of the trainees to accomplish the learning objectives of the No One Behind training material and to make the content absorption easier and more playful. For that reason, the game users will be asked to answer correctly questions relevant to the training material in order to finish the game and become "Digital Competent".

Game Short Description

The No One Behind game focuses on creating a digital rural area micro-environment, with a specific set of rules and requirements. The game features a user-friendly interface that contains all the information required for the player to develop digital skills and a motivational environment with graphical objects that will depict the actual actions that the players take. The game is developed in Unity engine, a powerful game engine used in game development with great success. The game will be played as a web-based game. The game will be structured as a scenario-based campaign with a linear progression and will entail different levels of difficulty, based on the number of rounds played. The gamification aspect of the project has a high priority in the development process. For motivating the adult learners of all ages to learn and compete, a system of achievements (stamps to collect) will be implemented in the game. Following discussions that took place among partners during online meetings

the project consortium decided to proceed with the following design for the No One Behind game. The game will encourage the player to develop their skills and knowledge in a fun way and give them the opportunity to engage with the training material in an effective, informal learning environment. Additionally, by answering the game questions the learner can test their knowledge and get immediate feedback. Lastly, the game has the possibility of multiple players encouraging cooperation and teamwork between the trainees. The original game design, storyboard, graphics, and functions reflect the No One Behind project topic, aims, and learning objectives to help the users get the most out of their training. The game has 4 characters, and the player can choose 1-4 characters in each game.

The rationale of the game

We have developed a quiz like game engine based on Unity which can power knowledge-based games simulating a board game. The engine is content agnostic and will be adjusted to the educational content of the project time with minor to major changes based on the requirements of the game. Different levels can facilitate progress through the game while multiplayer mode is an option under conditions. The learning experiences can be used to offer personalized advice to learners with similar profiles.

Generic Guidelines

The screen size is 1920x1080px 16: 9 with space for the player to interact 1440x1080px 4: 3 at the center of the screen. The main panel of each screen is about 1120x920px. It does not have to be just that, but it covers most of the 4: 3 behind it, leaving space on it for the Player info panel. All panels can be stretched + -50% of its size horizontally or vertically, so we follow the 9- segment logic as much as possible. Between the main panel and the rest of the images behind it, a semi-transparent dark image comes in with a little blur for the player to focus on the panel rather than on the background. There is a generic screen that we use, but it can also fit in with the other graphics. All the texts, AND the title will be dynamically filled into Unity, so we artically avoid artistic that we cannot replicate, unless it is agreed to something in the image e.g. Logo instead of text title. Also, the font to be used should be Unicode and as far as it supports the familiar European languages, with all the characters and symbols and not

any strange demo that is missing. All sprites are png 24-bit, 72dpi, transparent, uncompressed.

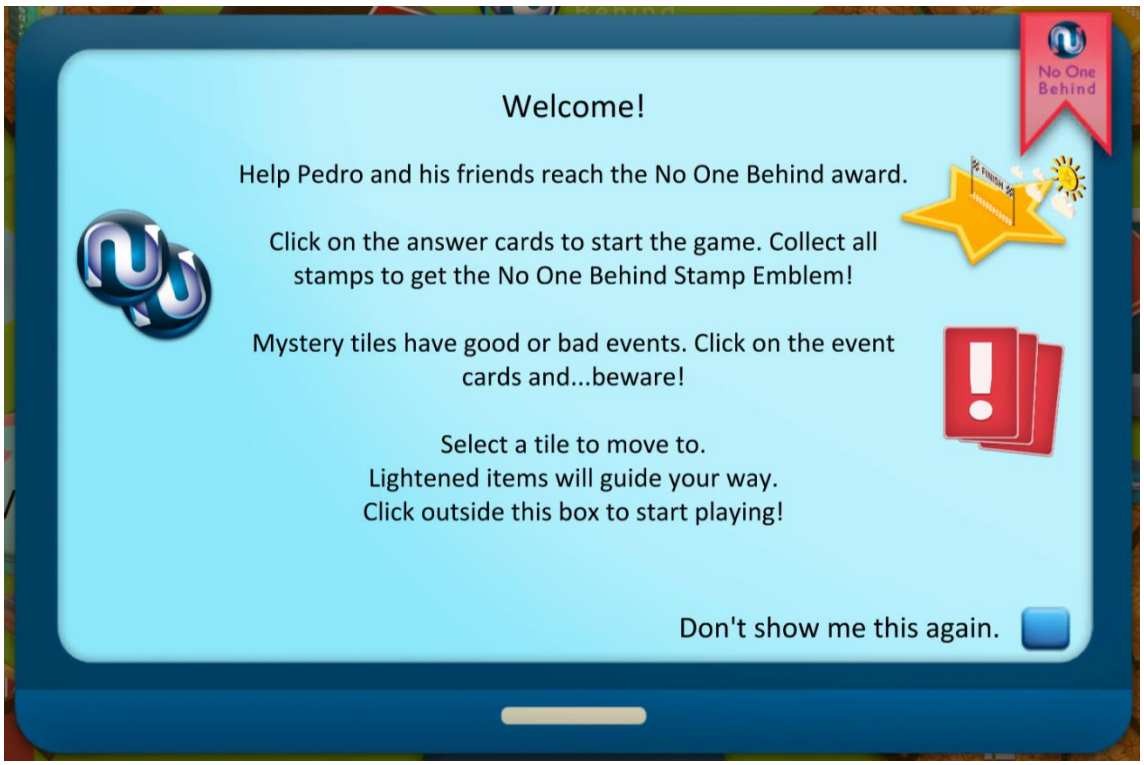
6.2 Game screens

The intro panel follows the generic guidelines. The project logo and project number together with the Erasmus+ logo and disclaimer will be visible in the Intro screen. The background image is 1920x1080 and common in all game screens, only the main panels are changed. The environment should display a theme relative with the following key words: adults in rural areas, digital skills. Indicative examples of the background are demonstrated below:

Within the Intro Screen Settings, a button for Multilingual functionality will be added. The game will be available in: **English (EN), Romanian (RO), Italian (IT), Portuguese (PT), Greek (EL), Danish (DK).**

The info pop-up window

Below, we can find the info pop-up window which is revealed to a player right before they start playing and informs them about the rules of the game.



Gameplay screen

The background showcases a map that includes graphics relevant to rural areas such as farms, wind farms and fishing pods. The background is shown here:

The user will also be able to select 1-4 characters. Character names will be from left to right: *Pedro, Martin, Maria, Elena.*

6.3 Player Deck

Player Deck is the place where the event cards and questions and player pawns are originally placed. The tiles will be 25.

Player Deck is the place where the players are initially placed together with the cards with their back side turned.

The Player Hand is the place where the character cards are placed from their front side.

The Round Counter counts the time, ie the remaining rounds until the game is over.

The Stamp Counter counts how many stamps the player has collected. The stamps are 5 in total and are made by the No One Behind project's logo:

The main screen of the game will contain:

- Board (25 tiles, including START / FINISH tiles). The number of tiles that the player can move to is highlighted.

- Character pawns (player pawn (s))

- A hand player that includes the portraits of each character, with movements (+1, +2, -1, -2, ...) highlighted. The number of character cards in the player hand will correspond to the characters playing.

- Round counter

- Stamp counter. If the player proceeds to a tile containing a stamp, the stamp counter is highlighted.

- Event deck and event counter. If the player moves to a tile containing an event card, the event cards deck is highlighted.

- Question deck and question counter

Items temporarily displayed on the main screen:

- Spinner

- Question cards

- Event cards

- Information panels

- Pause panels

Whenever the player hovers the mouse over the character card, the card will be zoomed in by giving information about the character's moves.

Clicking on a question card displays the question.

Answers will be:

- Yes / No

- True / False

- Multiple choice questions (up to 3 answers provided – 1 is correct)

- Drag & Drop questions (up to 3 answers provided – if images are going to be used (to accompany the questions/scenarios), then extra requirements will apply – rights free images, certain size and analysis, etc.

6.4 Panels

Settings Panel

The Settings Panel follows the generic guidelines.

Results Panel

The Results Panel follows the generic guidelines.

Here are displayed:

- The number of correct answers

- The number of wrong answers

- The MVP with the number of correct answers

- The number of stamps collected

Board Game Development Stages

Game specification and architecture

Based on previous IO results regarding game features, rules, gameplay, the game specifications and platform architecture have been elaborated and developed based on the results.

Game wireframe and flow

In this task using game specifications and architecture from previous task, will be developed the Graphic User Interface (GUI) and the game flow for the entire application. At the same time, we will address all the unique specifications that come with developing an application for a specific age group of users. The GUI must be focused on giving the required information to the user in the most visual way possible, avoiding adding a large content of data at once.

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8. Annexes

8.1 Annex I –DigComp[8] competence areas and competences

Competence Area	Competences
1. Information and Data Literacy	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
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
3. Digital content creation	3.1. Developing digital content 3.2. Integrating and re-elaborating digital content 3.3. Copyright and licenses 3.4. Programming
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
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

The key components of digital competence in 5 areas

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