DigIT

TRAINING BOOKLET

PROMOTING DIGITAL SKILLS AMONG ADULT EDUCATORS OF OLDER GENERATIONS

MODULE 3:

CODESIGNING ACTIVITIES TO PROMOTE DIGITAL COMPETENCE WITH SENIORS

Co-funded by the European Union

#3 CODESIGNING ACTIVITIES TO PROMOTE DIGITAL COMPETENCE WITH SENIORS

Objectives
This module aims to give clear guidelines to cocreate activities to promote digital competences with seniors. The learner will have the opportunity to explore the core of digital competences and different methodologies to support the creation of high-quality educational programs.

Structure of the Module
1. Basis of digital competence
2. Codesign methodology and assessment of the activities

Outcomes
- To give a framework of digital competence.
- To understand the most relevant components of digital competence to work with senior learners.
- To have an overview of the situation of seniors regarding digital competences around Europe
- To reflect on the importance to codesign meaningful activities for senior learners on the topics of their interest.
- To learn a methodology on how to codesign digital activities with senior learners to re-skill or up-skill seniors' digital competences.
- To learn to transform needs assessment results into training objectives.

Basis of digital competence

This submodule aims to provide a clear definition of digital competence and the relevant skills. It will also provide the trainer with an overview of the actual state on the acquisition of digital skills by seniors around Europe.

Digital Competence

Digital competence refers to the set of knowledge and skills required to use information and communication technologies (ICTs) and digital media to perform tasks, solve problems and communicate effectively at work and in daily life (UNESCO, 2018). They enable people to create and share digital content, communicate and solve problems for effective self-fulfilment in life, learning, work, and social activities at large.

At the EU level, the Digital Competence Framework for Citizens (DigComp) is the master model that has provided a common understanding, across the EU and beyond, of what digital competence is, and therefore provided a basis for framing digital skills policy.

Digital competence is one of the Key Competences for Lifelong Learning. It was first defined in 2006, and after an update of the Council Recommendation in 2018, it reads as follows: "Digital competence involves the confident, critical and responsible use of, and engagement with, digital technologies for learning, at work, and for participation in society. It includes information and data literacy, communication and collaboration, media literacy, digital content creation (including programming), safety (including digital well-being and competences related to cybersecurity), intellectual property related questions, problem solving and critical thinking."

There are 21 competences that are pertinent to these areas and can be explored in the official document here. We outlined the main areas of digital skills more relevant for seniors:

1. Skills to enable the learner to use digital devices (such as computers, laptops, smartphones, tablets, applications, software and systems).

This includes having the ability to use applications, systems, and software and to access the internet. Elderly people might find here a significant issue. This is crucial in a world where more and more services are now exclusively offered online. In actuality, it is causing a "digital divide" between those who have access to the internet and those who do not.

2. The ability to find, explore, check veracity, organize and share data and information appropriately.

Finding the data that the senior needs is the first stage in this process. The best course of action in this case is to carefully select their search terms and use the appropriate search engine. After that, the senior must evaluate the data gathered. Finally, the learner must be able to securely store data.

3. The ability to keep senior learners safe in the digital world.

The majority of seniors have probably heard of computer viruses, but too often, they are not aware the precautions they should take to avoid that.

There are numerous safe ways to explore when using a computer, particularly if connected to the internet. Each computer, for instance, has a sizable quantity of personal data, including information about their residence, bank account information, and family birthdays. Although a lot of this information might appear insignificant for seniors, it can be a goldmine for identity theft or password hacking in the wrong hands.

4. The ability to communicate and collaborate with other people online or remotely.

This is one of the skills senior learners are more into learning. Speaking with their loved ones more often and through channels like whatsapp or facebook is one of their main interests. However, it is important to work on safety and media digital literacy when creating these types of trainings.

5. The ability to use digital resources for particular purposes, such as learning, shopping, banking or even working.

The digital world is filled with a wide variety of tools and apps to easier seniors' daily life. It is possible to do bank transactions, work (yes, they are seniors that still have a professional active life!), learn, and purchase online. Vacations, books, events, and even cars may all be purchased online.

Finding information about nearly anything and obtaining what seniors want are now lot easier thanks to this change. But it has also brought with it its own issues and difficulties like the safety of online payments, fake pages, virus...

6. The ability to manage senior's digital footprint and digital legacy.

The final area of digital skills is being able to manage the senior's digital footprint: their online presence. It is important to aware senior learners that what they publish for example in social media is public to everyone and might influence other's people opinions on them.

As we increasingly live much of our lives online, we leave more and more information there, or in the cloud. It is vital that seniors think about how this will be managed when they are gone and could be a topic to work with them (there are even apps to easier this process!).

Seniors and digital skills around Europe

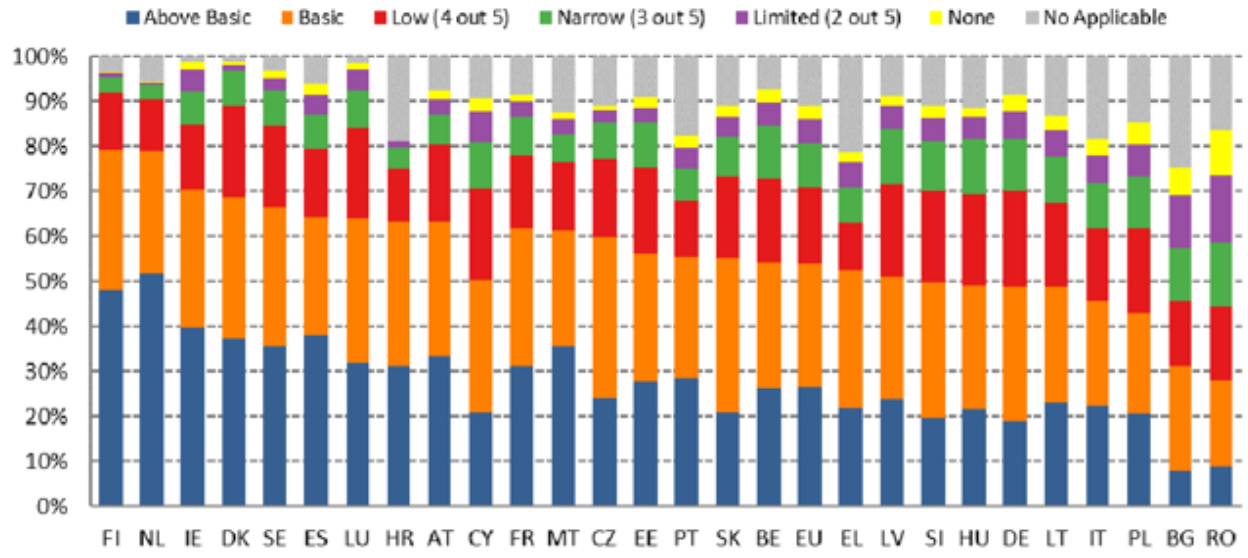
Following Commission President Ursula von der Leyen's call for greater digital leadership and a common vision for 2030 as well as the European Council's request that the EU develop a Digital Compass, the Commission adopted in March 2021 the 2030 Digital Compass: the European Way for the Digital Decade Communication. It sets out the EU's digital ambitions and lays out its vision for digital transformation by 2030. The European Council backed the Commission's approach.

As projected in the Communication and in response to a call from the European Council, on 15 September 2021 the Commission adopted a proposal for a Decision on a Path to the Digital Decade, setting out the digital targets the EU as a whole is expected to reach by the end of the decade. The 2030 target of the Digital Compass is that at least 80% of citizens have at least basic digital skills.

The most current data on digital literacy in Europe are provided by a report published annually by the *Digital Economy and Society Index of the European Commission (DESI)*, which monitors Europe's overall digital performance and tracks the progress of EU countries in their digital competitiveness. Each year, DESI includes country profiles which support Member States in identifying areas requiring priority action as well as thematic chapters offering an European-level analysis across key digital areas, essential for underpinning policy decisions.

Following the data of the DESI 2022, while 87% of people (aged 16-74) used the internet regularly in 2021, only 54% possessed at least basic digital skills. The Netherlands and Finland are the frontrunners in the EU, while Romania and Bulgaria are lagging behind. A large part of the EU population still lacks basic digital skills. The proposed 2030 target of the Path to the Digital Decade is that at least 80% of citizens have at least basic digital skills.

In 2021, socio-demographic factors continuing to influence the levels of digital skills. For example, 71% of young adults (aged 16-24), 79% of individuals with high formal education, and 77% of higher education students have at least basic digital skills. By contrast, only 42% of those aged 55-64 and 25% after 65 years old have at least basic digital skills. The gap between rural and urban areas is still substantial regarding the digital skills of the population: only 46% of individuals living in rural areas have at least basic digital skills compared to people living in the predominantly urban areas (61%).



Source: Eurostat, Community survey on ICT usage in Households and by Individuals

Low information and communications technology (ICT) skills seem to remain a barrier to meaningful participation in a digital society, particularly for the older population. In addition, COVID-19 has made the range of digitalization effects on older adults—from new opportunities

for participation to new risks of social exclusion—more than clear. This in particular applies to the education systems and possibilities for older people to participate in it, highlighting the importance of exploring how older people acquire digital literacy to ensure their digital inclusion.

Older adults' digital inclusion is a complex process that consists of the interplay between structural/external and individual/internal factors and in which ageing plays a context-and life-experience–driven role. Consequently, it is necessary to consider dynamics among sociocultural and psychological/individual-level parameters in relation to older adults' digital inclusion.

In terms of content of the trainings, initiatives including or targeting specifically older adults tend to cover more systematically skills related to the basic uses of digital devices (often provided by associations or Third Age Universities), digital content creation, online safety and problem solving than initiatives intended to other social or age groups. The starting point for the training should be the individual's lifeworld and their experience. This means that the older people who are to be trained should be involved in the conception and planning of the training courses as we will explore in the next module.

Concerns of the Elderly

• Technological Usability – Simplicity On/Off, Clear Non-Technical Instructions With Large Print And Visual!
• Data Protection – Information
• More Digital Literacy, Including Familiarity With Terminology
• More Aging Literacy To Technologists!
• Fewer Physical Challenges: Large Font, No Too Much Demand For Fine Motor Skills And No More Battery Charging Connection Out Of Sight
• Voice-Activated Tools

Conclusions and tips

The digital exclusion is a reality affecting seniors and people from disadvantaged communities: in this sense vulnerable groups are more exposed to not have access to IT equipment or the internet to be able to participate in learning. Actions aimed at bridging the digital gap must therefore be oriented towards a complex initiative that takes into account a series of different factors at a social and individual level.
Digital literacy programs can empower older persons, foster social participation, and increase older adults' autonomy. In addition, independence and that tailored peer- or intergenerational training initiatives targeted at older persons have proven to be effective in enhancing their digital literacy. Having in mind a practical framework of digital competence is crucial to choose the content and methodology of the training program.

To be fully inclusive, the digital education action plan should also seek to:

- improve the accessibility of online learning content;
- improve the 'physical' accessibility of digital devices;
- encourage digital training attendance in places where older persons are and live, such as in long-term care services or public libraries;
- fully embrace opportunities of non-formal and informal learning.

Codesign methodology and assessment of the activities

This submodule aims to provide detailed guidelines on how to codesigning meaningful activities for senior learners on the topics of their interest.

Definition of Codesign

Co-creation or co-design is a form of collaborative creativity that was initiated by firms first to enable innovation with, rather than simply for their customers. Co-creation or co-design refers to the voluntary involvement of users/beneficiaries in any of the design, management, delivery and/or evaluation of services/programs/products.

Why to codesign

From a robot to an active aging program, involving seniors in codesign empowers and provides a sense of ownership in decision-making and more motivation to commit. These new types of processes encourage new behaviours, roles, and relationships. Learners are no longer passive, but they participate as active members of the program providing inputs for the training content and they become a very valuable information source because of their final user perspective.

Likewise, the ambition of codesigning processes in learning is to foster a truly bottom-up approach by involving seniors and all relevant stakeholders to create meaningful programs relevant to senior learners.

Phases of a Codesign Process

We can consider three important phases before the definition or implementation of any training curriculum:

Phase 1- Preparing for codesign
- Identification of offline or online activities, tools, and resources to conduct a meaningful needs assessment
- Preparation of a calendar of activities
- Community engagement and identification and recruitment of participants
- Preparation of co-creation methodology

Phase 2 – Implementing co-creation activities
- Organisation of at least two co-creation events, in the preferred format (online, offline, hybrid)
- Collection of input to feed the training goals.
- Awareness raising of potential and importance of digital competence

Phase 3 Monitoring co-creation and reporting results
- Follow-up of activities, assessment, and evaluation
- Final version of the training structure

Codesigning step-by-step

Step 1: Define the participant profile, some of the inclusion criteria and the number of participants.

The right number of participants depends on the dynamics and objectives of each event. However, quantity does not mean quality, as the larger the group is the less time available for each person to participate and contribute. A general suggestion is that each co-creation workshop shall include an average of maximum 20 participants.

Motivation and attitude towards the subject matter Ideally, the people who will attend the events should be interested in doing so. Involving participants with strong interest in the subject matter, could be a strong incentive and ensure engagement in the overall co-creation process.

Demographic aspects such as the gender and age balance can be considered when inviting subjects to the co-creation activities. Finally, involve participants with different cultural and social backgrounds (e.g., cities and rural areas), as well as socially excluded groups and minorities in order to give the opportunity to every interested group to be represented.

Step 2: Prepare an initial information.

The starting point of communication with stakeholders shall be the preparation of specific information materials / social media posts and/or a list of potential questions on the research activities.. E.g., leaflets and other approved visual materials can be handed out either in physical meetings or disseminated online.

Step 3: Identify and engage multipliers.

'Multipliers', i.e., strategic stakeholders or local actors that have the capacity to reach out to a wide number of local individuals can be identified. The local multipliers should be approached directly, and efforts could be invested in engaging them into the project activities as participating stakeholders or at least as supporters e.g., by distributing information through their channels and inviting their contacts to join the activities.

Reach out through existing actors and channels. For target groups' identification and engagement, partners should rely on channels and actors that already exist in their areas. They are encouraged to rely on own local experience. Furthermore, informal communication with the members of stakeholder groups would be very helpful, (i.e., simply asking them what the best way to reach out to their organisations/institutions is). In this sense, a strategy would be to identify 'leaders' – well-known and respected representatives of communities – and to invite them to the co-creation, since they can potentially reach other individuals and organisations and institutions.

Organise (onsite or online) Info Days. Especially in the case of partners that have high stakeholder engagement targets to fulfil, the organisation of an Info Day could be interesting to attract a wider public prior to the start of co-creation activities. In the Info Day, they could provide detailed information about the project and the co-creation activities open to volunteering individuals of the target groups.

Step 4: Attract and recruit volunteers from target groups.

The first part of the dissemination strategy of facilitators and their teams shall cover the online community. Announcements about upcoming co-creation events shall be made in partners' newsletters, institutional websites, and social media accounts to reach a maximum audience. For specific population cohorts, such as elderly and adolescents, call for expression of interest to take part in the co-creation process can also be posted at schools/universities, or at doctors' offices. In parallel, partners can use direct contacts through emails and phone calls to targeted stakeholders and potential multipliers. This will help to extend the dissemination reach, exploiting other pre-existing dedicated networks.

The recruitment will be accompanied by essential information regarding the project, the co-creation objectives, and structure. In certain cases, additional background material will also be provided (e.g., summary of the projects' findings, information regarding the co-creation methodology and tools) as thought-provoking material that will generate a common basis for the subject of the events.

Announcements of activities and/or invitations for participation will be sent with enough time so that people have spare days in their calendars. To enrol participants, voluntarily calls for expression of interest can be launched e.g., Google Form, digital Event Invitation, or open registration emails. In addition, people whose participation is essential can be contacted by phone.

For the recruitment of the elderly group, national coordinators might exploit the following channels among others: elderly centres; healthcare centres; elderly's associations; universities of Third Age; gyms or other facilities organising courses/activities for seniors, etc. An effective way to contact and motivate the elderly themselves to participate is to talk to them in meetings and present them the project activities in person. Pre-existing contacts with seniors, for instance the ones that participated in the survey and/or in the Focus Groups, should also be exploited as a way to recruit CoP members.

Enrolment of target groups' volunteers shall happen, on average, 1-2 months before the start of each co-creation event, so as to offer enough time for additional invitations to be sent in cases of limited participation. Facilitators can foresee a reserve list to reduce the risk of limited participation in case people fail to confirm their attendance in time. Organisers might also investigate the chance to offer 'rewards' to participants. In case such rewards exist, they will be mentioned in the invitation as they could act as additional motivation for participation.

Step 5: Choose several methods for the exploration.

To organise traditional co-creation activities, partners will need to think of:

1) Physical structure: The space where to implement the participatory activities is also a factor to be taken into account when selecting an appropriate location. Partners will need to ensure they have a safe and accessible space for co-creation, which could include their same premises but also other types of locations such as renting a dedicated room with the right conditions or benefitting from schools' and municipality's spaces, as well as facilities of a long-term partner organisation active with the target group at local/regional level, etc.

When selecting the venue of the co-creation workshops, partners shall take into account several aspects that may require the workshop's physical space to have certain characteristics. Therefore, the workshops' settings will be decided by the respective organiser based on the specificities and needs of each case. In general, workshops will be organised in the most suitable, for each case, setting which will have a proper balance among the features presented below:

- Availability of appropriate technical infrastructure;
- Sufficient space to hold the number of participants as well as for the selected methods to be performed optimally;
- Appropriate lighting and adequate air circulation and temperature;
- Comfortable and flexible seating and light tables so that the set-up can be adjusted according to the workshop's needs;
- Enough wall space or freestanding surfaces for hanging posters so they can be seen by all participants;
- Quiet and safe place;
- Easy access and proximity to public transport.

In addition to the main space where the workshop will be conducted, workshop venues will typically have a room that can be used in case the group is divided in subgroups and a room that will serve as a dining space. Lunch / coffee breaks could be served to avoid participants' fatigue.

2) Community calendar: A calendar should be put in place in order to organise the different activities. The most suitable times for co-creation workshops shall be ensured to attract more people must be considered, which will depend greatly on the local context.

3) Communication material: mandatory communication and dissemination materials should be put in place in a permanent manner to both promote the project and attract more potential interested actors. This material will include, for instance, posters and leaflets that will be designed and included in the communication pack developed in WP5. Material for the co-creation activities may be also needed e.g., pens, post-its, blank sheets, dashboard, etc according to the chosen co-creation methods. In general, partners will make sure that the required material is available at the time and place of the events.

Type of activities:

- Focus Group
- Artistic activities (role-play, photography, painting...)
- Programming activities and intergenerational requirements
- Creativity stimulation activities with practical examples of what the future could look like
- Games, Social Media Competitions, FabLabs.
- Surveys and Interviews – Focus on asking about experiences and emotions associated with technology. Open-ended questions.
- Test in their environment

Step 6: Analysing the data and create the training curriculum

With all the collected data, the trainer is at the moment of being able to create learning objectives and curriculum, but everything in collaboration with them! For example, you should take the seniors vision regarding the logistics and duration of the training.

A learning objective is a description of what the learner must be able to do upon completion of an educational activity. A well-written learning objective outlines the knowledge, skills and/or attitude the learners will gain from the educational activity and does so in a measurable way.

An effective learning objective should include the following 5 elements: who, will do, how much or how well, of what, by when.

The mnemonic SMART—Specific, Measurable, Attainable, Relevant, and Time-bound—can be used to describe the elements of a well-written learning objective.

Recommendations:

- Each learning objective must answer the following questions: who will do it, how much or how well, of what, by when?
- Identify content areas that participants are expected to learn.
- Choose an action verb that is measurable and observable to specify desired student performance, followed by a description of the content.
- Use more complex or higher-order action verbs when appropriate.
- Avoid using action verbs like “understand, know, learn, appreciate, believe, be familiar with, comprehend,” etc.
- Each learning objective should be separate: two distinct actions (such as diagnosis and treatment) or topics (such as bronchospasm and hypotension) should not be combined.
- Specify the condition under which the action will occur. An example of a good way to start the statement is: “Upon completion of this learning activity, participants should be able to…”

The SMART learning objectives are:

- Specific: What action will be taken and by whom?
- Measurable: How will success be measured? Objectives should quantify the amount of change expected.
- Achievable: Can this objective be achieved within a given time frame and with available resources?
- Relevant: Are the objectives aligned with the teaching and assessment method?
- Deadline: When will this goal be achieved? Objectives should provide a deadline that indicates when the objective will be achieved.

Bloom's Taxonomy of Learning Objectives Review

COGNITIVE AREA
1. Remember
2. Understand
3. Sign up
4. Analyze
5. Evaluate
6. Create

COGNITIVE PROCESS
1. Retrieve relevant knowledge from long-term memory.
2. Construct meaning from instructional messages, including oral, written, and graphic communication.
3. Perform or use a procedure in a given situation.
4. Divide the material into its constituent parts and determine how the parts relate to each other and to an overall structure or purpose.
5. Make judgments based on criteria and standards.
6. Joining elements to form a coherent or functional whole: rearranging elements into a new pattern or structure.

ACTION VERBS
1. Describe, describe, reproduce, select, declare, etc.
2. Clarify, explain, review, represent, summarize, etc.
3. Apply, use, prepare, relate, discover, practice, etc.
4. Select, inspect, debate, contrast, analyze, etc.
5. Recommend, evaluate, review, evaluate, justify, etc.
6. Develop, design, plan, establish, prepare, etc.

Step 7: Implement the training curriculum and evaluate the results with the participants

After implementing the training sessions, it is important to assess the participants knowledge, attitudes and skills. If they have met their own expectations!
You can do this through creative activities like focus group, games or even individual surveys.

One example is the 5W:

- Give 15 minutes for participants to go around the first three charts, filling in their insights.
- The first chart will have the 1st W: What have you learned in this pathway?.
- The second chart (Having in mind what the participants have learned throughout the modules), has the following 4Ws: (1) Why are those learnings important for you?; (2) When were you most surprised with the learnings you made? (3) Where can you apply it? (4) Who can you involve if you want to explore or to take action regarding what you have learned?.
- The last chart should have “How do you intend to continue this movement or journey moving forward?”.

Conclusions and tips

1. First, knowledge that is provided to older adults must be useful to learn and it has to respond to the older adults' personal social needs.
2. Second, training aiming at the improvement of older adults' digital literacy should be cooperative and collaborative. This means that the instruction should include teamwork and interaction to achieve more proactive learning.
3. Third, the training should also foster social inclusion by providing knowledge on possibilities to expand communication through the web with their friends and relatives.
4. Fourth, the training should promote older adults' autonomy so that they could be the protagonists of their own learning. Therefore, the content of the training should be designed considering the older adults' learning styles, interests and expectations of the senescent individual.