Co-funded by the Erasmus+ Programme of the European Union

BRinging STEM into Active agINg (BRAIN)

STRATEGIC PARTNERSHIP FOR ADULT EDUCATION

PROJECT CODE 2020-1-PL01-KA204-081805

“SCIENCE FOR ACTIVE AGING” - TOOLKIT

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Intellectual Output 2: "Science for Active Aging" Toolkit

The Output will be a multilingual Toolkit with guidelines for direct use by elder adult learners in STEM. "Science for Active Aging" Toolkit issued by **a co-design process between Scientific Researchers that took part in the international piloting and partner** organizations' Trainers. Toolkit will be conceived for a primary audience of elder adult learners but will be adaptable to the needs of each target group across other different sectors. Also, the Toolkit will be tested through a Local Programme implemented in each partner country, involving elder adults aged 60+ in retirement.

Structure:

I. Context - WSEI
II. Introduction to the general frame of the project – Mine Vaganti NGO
III. Theoretical frame of Science and its value – Mine Vaganti NGO
IV. Science (e.g. chemistry, physics, astronomy)
V. Technology (e.g. materials, processes, production organisation)
VI. Engineering (e.g. building, mechanics, electrics)
VII. Mathematics (e.g. computing, mathematics, statistics)
VIII. Natural sciences (e.g. biology, medicine, geology)

Type of workshop:

The workshops of the toolkit should be elaborated as **group sessions** (2 workshops for each topic).
For the development of each session the following aspects should be considered: Workload, Methods and Delivery.

Workload	**Methods**	**Delivery**
Typology of the sessions: - theoretical - practical Timeframe of each session: - duration structure (ex. 10 min intro, 40 min implementation, 15 min debriefing).	Verbal Methods: oral presentation method, method of lecturing and teaching, writing method, method of conversation, case display method, method of discussion, problem solving method. Practical Methods: practical working method, method of independent learning, learning in an online environment.	Video Content: video materials intended for the session topic. Theoretical Content: reading materials created to broaden the video content. Practical Content: various exercises that will foster the learning process. Knowledge Content: short quizzes; uploads of completed tasks will be expected.

Context

People worldwide are living longer. Today most people can expect to live into their sixties and beyond. It is expected that by 2030, 1 in 6 people in the world will be aged 60 years or over. In Japan 30% of the population is already over 60 years old. At this time the share of the population aged 60 years and over will increase by 40%pp. The number of persons aged 80 years or older is expected to triple between 2020 and 2050 and two-thirds of the world's population over 60 years will live in low- and middle-income countries (*Ageing and Health*, 2022).

Common conditions in older age include many illnesses and losses. However, a longer life brings with it opportunities, not only problems. Additional years of life provide the chance to pursue new activities such as further education, a new career or a long-neglected passion. Older people can also contribute in many ways to their families and communities. Yet the extent of these opportunities and contributions depends heavily on health, based on physical, mental and social activity.

There is no typical older person. Some 80-year-olds have physical and mental capacities similar to many 30-year-olds. Other people experience significant declines in capacities at much younger ages. A comprehensive public health response must address this wide range of older people's experiences and needs. If elderly people take care for their health and if they live in a supportive environment, their ability to do the things they value will be little different from that of a younger person (*Ageing and Health*, 2022).

The literature review on active ageing and the processes supporting active ageing indicates directions for understanding this phenomenon and ways to improve the dignity, comfort and social participation of ageing people. A considerable body of work focuses on the aspect of education and learning in the context of social participation as we age, recognizing the important potential of this dimension (Boulton-Lewis, 2010).

One of the solutions that can support coping with the challenge of healthy ageing is the idea of lifelong learning, which helps us in many ways, including: giving us the ability to adapt to change; helping us to gain a competitive edge in our chosen career field; giving meaning to life at every stage (Laal & Salamati, 2012). Existing empirical literature also suggests importance of social inclusion and confirms it can be promoted by improving infrastructure, for example by organizing the public spaces of walkable neighborhoods, facilitating mobility and adequate housing for people with different psycho-physical needs and abilities (Berlinger & Solomon, 2018).

Older adult learning also has the potential to combat ageism and social exclusion (Schmidt-Hertha et al., 2014). Delaying or/and reversing the natural processes of brain ageing by introducing intensive, frequent and extensive adaptive exercises in perceptual differentiation, attention and memory should, according to the neuroplasticity model, improve cognitive performance in older people (Dubbels, 2017).
There are a number of programs that support cognitive activation using so-called serious games. The benefits of serious games for older persons have been confirmed in numerous studies, especially with regard to improving functions related to spatial orientation (Potenza et al., 2020). It is worth noting that games are now increasingly developed based on discussions with their target users, taking into account their ideas, knowledge and experience of ageing (Olympio & Alvim, 2018). The quality of life of ageing

people depends on physical and mental health as well as social relationships. The key aspects of ageing noted above are the base for the BRAIN Project answer to ageing society challenges.

Introduction

Project description

"BRinging STEM into Active agINg" (BRAIN) is a 24 months Strategic Partnership aimed at training Scientific Researchers to convey scientific knowledge and skills to elder Adults engaging them in an active aging process as well as taking an active educational role towards their peers and the other population bands which will foster their social inclusion.

Project Aims and Objectives

The Project objectives are: to train Scientific Researchers in fostering knowledge and skills related to Science and its fields among elder adults; to stimulate elder Adults active citizenship as well as educational participation in the field of Science; to engage elder adults in taking an educational role towards the society acting as educators, leading educational workshops in their local communities aimed at contrasting their social exclusion and stereotypes targeted at them; to create concrete and efficient methodologies and outcomes that could be exploited transnationally; to adopt a Systems Thinking and System Dynamics approach as a metalanguage while fostering activity among elder people.

Target groups

a) Scientific Researchers aged 35+ years old with at least 5 years of experience in the field (Joint Staff);
b) Elder adults aged 60+ years old in retirement (Local Program);
c) Youth (13-17 years old), young adults (18-30 years old), adults (30-50 years old) and elder adults (50+ years old) population bands (Local Workshops).

Implementation methodology/activities

Consortium of partners will produce a Research Report which will contain the educational needs of Scientific Researchers in matter of competences and methodologies to foster their knowledge to individuals not belonging to their sector of expertise, the educational need of elder Adults in matter of scientific subjects learning and existing educational offer in the frame of Citizen Science. The Report will set the base for the development of the "From the Laboratory to the City" Training Format (TF) based on NFE, Mentoring, Co-design and Systems Thinking modules as well as being used for the development of the IO2 "Science for Active Aging" Toolkit.

The TF will be tested through an international Piloting JS involving Scientific Researchers. The Toolkit will be tested through a Local Program implemented in partner country, that will be leaded by researchers and partner organizations' Trainers, involving elder adults aged 60+ in retirement. Afterwards, elder adults will be delivering the "Science for All" workshops implemented in each partner country with the participation of representative of each population band, in which they will replicate the educational

workshops previously learnt. Lastly, in order to strengthen the long-term impact of the project, Consortium partner will develop the "Science in your Life" game APP targeted to a wider audience of users.

"BRAIN" project it envisaged to transmit a substantial and sustainable impact: elder Adults involved in the Local Program after having acquired new knowledge and skills will act as learning outcomes replicators which will raise their self-esteem as well as fostering their social inclusion in the society while partner organizations will acquire new educational methodologies that can be translated in other sectors. Furthermore, all the outputs produced in the project have a transnational potential to be exploited even outside Consortium countries, setting the roots for a long-term prospective impact even after the end of the project.

Template

This is the template which has been filled out by the all consortium partners with the scenarios regarding specific national based modules. As objective, the template aims at providing a standard framework for the implementation of the activities developed within the IO2 of the BRAIN project.

TITLE	
Learning Outcomes	
Timeframe	
Methods	
Materials	
Preparation	
Context	
Procedure	

Consortium Scenarios

Natural Science (Polish Partner production: WSEI University)

1.1 Physiology of Memory - The Cognitive Reserve Base (In-Presence)

Physiology of Memory - The Cognitive Reserve Base (In-Presence)	
Learning Outcomes	• Understanding of memory processes • Skills supporting cognitive reserve
Timeframe	4 x 45 minutes
Methods	Quiz Exercise Teamwork
Materials	• Computer with internet connection and projector • Flip-chart and markers, pens / pencils • Handouts 1, 2 – the “Mento Claro Bus Lines” and slides
Preparation	Check and update details in Handouts 1 and 2
Context	A room or an open-air environment
Procedure	<u>Step 1.</u> Prepare the room: - prepare places (seats, tables, markers, internet connection, computer, projector, screen) for teamwork in groups of 2-6 persons each, letting all participants to see the board / projector screen - write the following agenda on the board or show the slide on projector: a) Presentation (your name, profession and hobby) b) The Mento Claro Bus Lines Game c) The backstage - physiology of memory d) Exercise to remember <u>Step 2.</u> . If necessary, present BRAIN Project, yourself and the session aim and agenda (5 minutes).

a. If necessary, ask all the people to introduce themselves to other persons in the group giving them about 1 minute for each person to get to know each other (10-15 minutes).
b. Give the participants a number 1 or 2: half of the participants becomes 1 and the second half becomes 2.
c. Give participants numbered 1 Handouts A Part 1 (red) and participants numbered 2 Handouts A Part 2 (blue).
d. Ask participants numbered 1 to work in pairs with participants numbered 2, nor showing them Handouts (5 minutes).

Step 3.

. Do the Mento Claro (MC) game online (individually) or from handouts (in pairs):
. Ask all the **people numbered 1** to **learn** from persons numbered 2 how to reach destinations in MC (Mento Claro City) mentioned in **Handout A part 2 (blue)**.
a. Calculate MC Tourist Blue score (15 minutes).
b. Ask all the **people numbered 2** to **learn** from persons numbered 1 how to reach destinations in MC (Mento Claro City) mentioned in **Handout A part 1 (red)**.
c. Calculate MC Tourist Red score (15 minutes).
d. Discuss results: successes, challenges, techniques used to remember.

Step 4.

. Present the online BRAIN Project information "Physiology of Memory" or presentation "BRAIN_IO2-3_Games_WSEI_MentoClaroBusLines-Handouts.pptx" (30 minutes).
a. Present 2 selected techniques of memorizing.
b. Discuss in forum (15 minutes):
. if memories are always necessary?
a. in what situations we need to remember unknown information?
a. Split group into teams of 2 – 3 pairs (4-6 persons)
b. Ask teams to discuss (10 minutes) and prepare flipcharts (20 minutes) with key points of members plan:
. What methods of improving memory participants plan to start using from next week and why?
a. What steps of improving memory participants plan to implement and what day next month?
b. Who / what participants need to support them in their plans and how?
a. Present and discuss results from 2 – 3 groups (5 minutes of presentation, 5 minutes of discussion).

Record (take a photo) of flipcharts, post them in BRAIN Project Forum.

1.2 Physiology of Memory - The Cognitive Reserve Base (Online)

Physiology of Memory - The Cognitive Reserve Base (Online)	
Learning Outcomes	• Understanding of memory processes • Skills supporting cognitive reserve
Timeframe	4 x 45 minutes
Methods	Quiz Exercise Teamwork
Materials	• Computers with internet connection for participants and trainer • Online collaboration environment like Google Workspace / Microsoft 365 / Zoho • Online meeting tool with rooms, like MS Teams / Google Meet / Zoho Meeting • Online collaboration tool like Miro / Google Jamboard / Microsot Whiteboard / others • Links to online Handouts 1, 2 and online slides (pdf) of the “Mento Claro Bus Lines”
Preparation	Check and update details in online Handouts 1 and 2
Context	An Internet online environment
Procedure	<u>Step 1.</u> Prepare the online space: - prepare online collaboration workspace (computer, internet connection, list of links to BRAIN online resources, online passwords, break rooms for teamwork in groups of 2-6 persons each), letting all participants to see the online board and shared screen - write the following agenda on the board or on the online slide: a) Online Presentation (your name, profession and hobby) b) The Mento Claro Bus Lines Game (online – pdf) c) The backstage - physiology of memory (notes) d) Exercise to remember - Book a meeting in advance, send instructions how to log in and operate the selected environment and Agenda to Participants by email, online calendar and communicator. <u>Step 2.</u> . Start the meeting from checking connections with cameras, verify possibility of bi-directional voice and video communication. a. Present BRAIN Project if necessary, yourself and the session aim and agenda (5 minutes).

	b. If necessary, ask all the people to introduce themselves to other persons in the group giving them about 1 minute for each person to get to know each other (10-15 minutes). c. Give the participants a number 1 or 2: half of the participants becomes 1 and the second half becomes 2. d. Send participants numbered 1 Handouts A Part 1 (red) and participants numbered 2 Handouts A Part 2 (blue). e. Ask participants numbered 1 to work in pairs with participants numbered 2, nor showing them Handouts (5 minutes in breakrooms). <u>Step 3.</u> . Do the Mento Claro (MC) game online (individually or in pairs): . Ask all the **people numbered 1** to **learn** from persons numbered 2 how to reach destinations in MC (Mento Claro City) mentioned in **Handout A part 2 (blue)**. a. Calculate MC Tourist Blue score (15 minutes). b. Ask all the **people numbered 2** to **learn** from persons numbered 1 how to reach destinations in MC (Mento Claro City) mentioned in **Handout A part 1 (red)**. c. Calculate MC Tourist Red score (15 minutes). d. Discuss results: successes, challenges, techniques used to remember. <u>Step 4.</u> . Present the online BRAIN Project information “Physiology of Memory” “BRAIN_IO2-3_Games_WSEI_MentoClaroBusLines-Handouts.pptx” (30 minutes). a. Present online 2 selected techniques of memorizing. b. Discuss in forum (15 minutes): . if memories are always necessary? a. in what situations we need to remember unknown information? a. Split group into teams of 2 – 3 pairs (4-6 persons in one break room) b. Ask teams to discuss (10 minutes) and prepare notes on online whiteboards (20 minutes) with key points of members plan: . What methods of improving memory participants plan to start using from next week and why? a. What steps of improving memory participants plan to implement and what day next month? b. Who / what participants need to support them in their plans and how? a. Present and discuss results from 2 – 3 groups (5 minutes of presentation, 5 minutes of discussion). Record (take screenshots) of flipcharts, post them in BRAIN Project Forum.

Scenario 1a

Scan the QR Code to take a look to the whole Handout 1:

All scenarios are also available ubder this link: https://brain.wsei.eu/en/modules/

Scenario 1b

Scan the QR Code to take a look to the whole Handout 2:

All scenarios are also available ubder this link: https://brain.wsei.eu/en/modules/

2.1 Physiology of Osteoporosis and Physical Activity (In-Presence)

Physiology of Osteoporosis and Physical Activity (In-Presence)	
Learning Outcomes	• Understanding physiology of osteoporosis • Skills supporting healthy bones and osteoporosis prophylaxis
Timeframe	2 x 45 minutes
Methods	Quiz Exercise Teamwork
Materials	• Computer with internet connection and projector • Flip-chart and markers, pens / pencils • Handouts 1, 2 with the IPAQ-E and slides about osteoporosis • Excel file with the IPAQ-E calculator (formula)
Preparation	Check and update details in Handouts 1 and 2, check how to use the Excel calculator
Context	A room or an open-air environment
Procedure	Step 1. Prepare the room: - prepare places (seats, tables, markers, internet connection, computer, projector, sccreen) for teamwork in groups of 2-6 persons each, letting all participants to see the board / projector screen - write the following agenda on the board or show the slide on projector: a) Presentation (your name, profession and hobby) b) IPAQ-E – The International Physical Activity Questionnaire for Elderly c) The backstage - physiology of bones and osteoporosis d) Let's move - exercises for health Step 2. . If necessary, present BRAIN Project, yourself and the session aim and agenda (5 minutes). a. If necessary, ask all the people to introduce themselves to other persons in the group giving them about 1 minute for each person to get to know each other (10-15 minutes). b. Distribute Handout 1 to all participants or ask them do the IPAQ-E questionnaire online on BRAIN Project Web Page. c. Ask participants to check their IPAQ-E scores.

	Step 3. e. Give the participants a number 1 or 2: half of the participants becomes 1 and the second half becomes 2. . Ask participants numbered 1 to work in pairs with participants numbered 2 and to: . Compare in pairs results of IPAQ-E questionnaire. a. Discuss their physical activity levels and activity habits with the other person in pair. b. Collect results (categories) of each person in group and calculate group modal category in Excel. If necessary, modal categories can be calculated separately for women and men. c. Present a chart showing group results (only a chart, not individual results!). d. Discuss results: successes, challenges, daily habits and exercises or domestic / work physical activities keeping participants healthy. Step 4. g. Present the online BRAIN Project information "Physiology of Osteoporosis and Physical Activity" or presentation in Handout 2 (30 minutes). . Present 2 selected exercises used as prevention of osteoporosis. Select safe and easy exercises. If necessary, it is possible to select one exercise for women and one for men. . Invite all participants to do one or two times exemplary exercises. . Discuss in forum (15 minutes): . if physical activity is always necessary? a. in what situations we need to exercise stronger and when to avoid physical activity? . Split group into teams of 2 – 3 pairs (4-6 persons). . Ask teams to discuss (10 minutes) and prepare flipcharts (20 minutes) with key points of members plan: . What exercises participants plan to start using from next week and why? a. What steps of improving their physical condition and preventing osteoporosis participants plan to implement and what will be their agenda? b. Who / what participants need to support them in their plans and how? . Present and discuss results from 2 – 3 groups (5 minutes of presentation, 5 minutes of discussion). Record (take a photo) of flipcharts, post them in BRAIN Project Forum.

2.2 Physiology of Osteoporosis and Physical Activity (Online)

Physiology of Osteoporosis and Physical Activity (Online)	
Learning Outcomes	• Understanding physiology of osteoporosis • Skills supporting healthy bones and osteoporosis prophylaxis
Timeframe	2 x 45 minutes
Methods	Quiz Exercise Teamwork
Materials	• Computers with internet connection for participants and trainer • Online collaboration environment like Google Workspace / Microsoft 365 / Zoho • Online meeting tool with rooms, like MS Teams / Google Meet / Zoho Meeting • Online collaboration tool like Miro / Google Jamboard / Microsot Whiteboard / others • Links to online Handouts 1, 2 and online versions of the IPAQ-E and slides
Preparation	Check and update details in Handouts 1 and 2, check how to use the Excel calculator
Context	An Internet online environment
Procedure	<u>Step 1.</u> Prepare the online space: - prepare online collaboration workspace (computer, internet connection, list of links to BRAIN online resources, online passwords, break rooms for teamwork in groups of 2-6 persons each), letting all participants to see the online board and shared screen - write the following agenda on the board or on the online slide: a) Online Presentation (your name, profession and hobby) b) Online IPAQ-E – The International Physical Activity Questionnaire for Elderly c) The backstage - physiology of bones and osteoporosis d) Let's move - exercises for health in front of the computer - Book a meeting in advance, send instructions how to log in and operate the selected environment and Agenda to Participants by email, online calendar and communicator. <u>Step 2.</u> . Start the meeting from checking connections with cameras, verify possibility of bi-directional voice and video communication. a. If necessary, present BRAIN Project, yourself and the session aim and agenda (5 minutes).

b. If necessary, ask all the people to introduce themselves to other persons in the group giving them about 1 minute for each person to get to know each other (10-15 minutes).
c. Send a link to Handout 1 to all participants or ask them to do the online IPAQ-E questionnaire online on BRAIN Project Web Page.
d. Ask participants to check their IPAQ-E scores. Do not allow to discus iscuss results

Step 3.

f. Give the participants a number 1 or 2: half of the participants becomes 1 and the second half becomes 2.
. Ask participants numbered 1 to work in pairs with participants numbered 2 and to:
. Compare in pairs results of IPAQ-E questionnaire.
a. Discuss their physical activity levels and activity habits with the other person in pair.
b. Collect results (categories) of each person in group and calculate group modal category in Excel. If necessary, modal categories can be calculated separately for women and men.
c. Present a chart showing group results (only a chart, not individual results!).
d. Discuss results in forum: successes, challenges, daily habits and exercises or domestic / work physical activities keeping participants healthy.

Step 4.

h. Present the online BRAIN Project information "Physiology of Osteoporosis and Physical Activity" or presentation in Handout 2 (30 minutes).
. Present 2 selected exercises used as prevention of osteoporosis. Select safe and easy exercises. If necessary, it is possible to select one exercise for women and one for men.
. Invite all participants to do one or two times exemplary exercises.
. Discuss in forum (15 minutes):
. if physical activity is always necessary?
a. in what situations we need to exercise stronger and when to avoid physical activity?
. Split group into teams of 2 – 3 pairs (4-6 persons).
. Ask teams to discuss (10 minutes) and prepare flipcharts (20 minutes) with key points of members plan:
. What exercises participants plan to start using from next week and why?
a. What steps of improving their physical condition and preventing osteoporosis participants plan to implement and what will be their agenda?
b. Who / what participants need to support them in their plans and how?
. Present and discuss results from 2 – 3 groups (5 minutes of presentation, 5 minutes of discussion).

Record (take screenshots) of flipcharts, post them in BRAIN Project Forum.

Scenario 2a

Scan the QR Code to take a look to the whole Handout 1:

All scenarios are also available ubder this link: https://brain.wsei.eu/en/modules/

Scenario 2b

Scan the QR Code to take a look to the whole Handout 2:

All scenarios are also available ubder this link: https://brain.wsei.eu/en/modules/

Biology, Chemistry and Medicine (Italian Partner production: MVNGO)

1.1 Empowering elderly through healthy literacy (In-Presence)

Empowering elderly through healthy literacy (In-Presence)	
Learning Outcomes	In this role play, educators will demonstrate that the knowledge of biology, chemistry and medicine can be useful to understand the reality. In particular, they can show how a virus spreads between people and induct a reflection upon the importance of vaccination. The participants can arise their awareness about: ● how a virus spread; ● how vaccines can stop it; ● how immunity works. Additionally, they can increase their knowledge in biology, virology and medicine.
Timeframe	80 minutes
Methods	Verbal Methods (group discussion, brainstorming/debriefing) Practical Methods (practical working method, role play)
Materials	Board Paper and pens
Preparation	Prepare papers with three roles: 1. Patient 0 2. Non-vaccinated person 3. Vaccinated person Start with a low percentage of vaccinated people, then you can raise the number.
Context	A room or in an open-air environment
Procedure	INTRODUCTION – 15 minutes: 1. Do an introduction to the topic of this workshop and stimulate a brief debate: say that you are going to see how a virus works and ask: “do you know what is a virus?” and wait for the answers. Write some keywords on a board. After that, explain shortly what is it: for example, you can say that it is a very tiny organism that can only live and reproduce inside another living cell. The cell the virus invades is called the host cell. The virus basically turns the cell into a factory to make more viruses which then invade more cells. The majority of the time the human body can fight the virus and any medical treatment is to relieve the symptoms of the virus rather than destroy it, but for more severe infections medicines called antivirals can be used. 2. Shortly explain to participants what they are going to do (check the following “implementation” section)

3. Ask if there are questions or doubts and answer.

IMPLEMENTATION – 45 minutes:

1. Let the participants randomly pick from a box their roles without reading it. Ask participants to shake hands with 3 people and write down their names.
2. Once they are done, tell the participants to read their role. Ask who was patient 0 and start to track down how the virus spread. Repeat from step one a couple of times and write down the numbers of people who got infected, at each round make a comparison with how the same situation would have evolved if the vaccinated people weren't vaccinated.
3. Re-assign the roles, but this time raise the number of vaccinated people. Repeat STEP 1 AND 2 STEP.
4. Repeat STEP 3 with more vaccinated people.

DEBRIFIENG – 20 minutes

ather the participants in plenary to discuss the exercise and to reflect upon what they did and what they learned from it. You can ask the participants the following questions:

- What did you learn about viruses in this exercise?
- Do you think that vaccines are important? Why?
- How many vaccinated people do you need to stop the virus from spreading?
- What could you do if there is no vaccine? (Do not “shake hands”: social distancing)
- Can you think of everyday viruses that have been stopped by vaccinations or social distancing? Examples:
  - Smallpox
  - Rinderpest
  - Polio
  - Tetanus
  - Mumps
- For sure, the conversation will be also focused on covid pandemic. Ask participants which is their experience about it. For example, you can ask:
  - How did you lived/are you living the pandemic?
  - Are you scared about it? If not, why?
  - What do you think about the vaccine’s issues? Are you vaccinated? If not, why?
  - How the situation will evolve, in your opinion?

1.2 Empowering elderly through healthy literacy (Online)

Empowering elderly through healthy literacy (Online)	
Learning Outcomes	The participants will deepen their knowledge about medicines and how to use them in a correct way. In addition, they will be more aware about the effects that they can have on their lives, especially in some cases.
Timeframe	90 minutes
Methods	Verbal Methods: method of lecturing and teaching, method of discussion Practical Methods: method of independent learning, learning in an online environment.
Materials	Internet connection, laptops/tablets/mobile phone, meeting platform
Preparation	In this activity, a medical role-play is foreseen. In particular, you have to divide the participants in 2 groups. Assigning them the following roles: doctors team, nurses and patient. To the 2 patients, in addition, assign a illness: 1. Patient 1: diabetes, type 2 What is diabetes? Diabetes describes a condition in which the body cannot make proper use of carbohydrate in food because the pancreas does not make enough insulin, or the insulin produced is ineffective, or a combination of both. Insulin is the hormone that helps glucose (sugar) from the digestion of carbohydrate in food, move into the body's cells where it is used for energy. When insulin is not present or is ineffective, glucose builds up in the blood. This is because insulin is the key, which unlocks the door to the body's cells. Once the door is unlocked glucose can enter where it is used as fuel for energy so we can work, play and generally live our lives. If there is no insulin present in the body, as in Type 1 diabetes, then there is no key to unlock the door and the glucose stays in the blood. When there is not enough insulin, the cell doors are only partially unlocked, or when there is lots of insulin but the lock doesn't work properly (sometimes referred to as insulin resistance), this is Type 2 diabetes. Because the excess glucose stays in the blood and isn't being used as fuel for energy, people with untreated diabetes often feel very tired, pass large amounts of urine and are extremely thirsty. As people with diabetes have problems with their insulin, it is necessary for them to take steps to either create insulin or to help the insulin they are making, work better. This can be done through a healthy lifestyle and treatment. By following a treatment plan, which includes healthy diet and regular physical activity, people with diabetes can control the amount of glucose in the blood and lead a healthy life. Diabetes Medicines: Most people with type 2 diabetes use medicines other than insulin shots. People with type 2 diabetes use medicine to help their blood glucose levels stay in their target range. If your body makes insulin and the insulin doesn't lower your blood glucose levels enough, you may need to take one or more medicines. Diabetes medicines come in pill and shot form. Some people take diabetes medicines once a day and other medicines more often. 0. Patient 2: hypertension

	What is hypertension? Hypertension is another name for high blood pressure. It can lead to severe health complications and increase the risk of heart disease, stroke, and sometimes death. Blood pressure is the force that a person's blood exerts against the walls of their blood vessels. This pressure depends on the resistance of the blood vessels and how hard the heart has to work. Almost half of all adults have high blood pressure, but many may not know they have it. Hypertension is a primary risk factor for cardiovascular disease, including stroke, heart attack, heart failure, and aneurysm. Managing blood pressure is vital for preserving health and reducing the risk of these dangerous conditions. Hypertension medicines: People can use specific medications to treat hypertension. Doctors will often recommend a low dose at first. Antihypertensive medications will usually only have minor side effects. Eventually, people with hypertension may need to combine two or more drugs to manage their blood pressure. Medications for hypertension include: • diuretics, including thiazides, chlorthalidone, and indapamide • beta-blockers and alpha-blockers • calcium-channel blockers • central agonists • peripheral adrenergic inhibitor • vasodilators • angiotensin-converting enzyme (ACE) inhibitors • angiotensin receptor blockers • The choice of medication depends on the individual and any underlying medical conditions they may experience. Anyone taking antihypertensive medications should carefully read the labels of any over-the-counter (OTC) drugs they may also take, such as decongestants. These OTC drugs may interact with the medications they are taking to lower their blood pressure. Prepare a word/pdf with this information and share them with the groups' patients before the team work. It will be useful for the participants to understand their illness and to communicate it adequately during the game.
Context	Online

Procedure	INTRODUCTION – 5 minutes Explain to participants what they are going to do. Initially, a general overview about medicines will be provided; then, some tips to manage them as best as possible. On a third moment, the workshop will continue with a quiz. Lastly, they will be divided in 2 groups because of a medical role-play during which they will pretend to be doctors, nurses and patients. Ask if there are questions or doubts and reply if necessary. IMPLEMENTATION – 20 minutes Start the presentation, following the slides: 1. What are medicines? - How medicines are composed? - Medicines shapes - Types of medicines Ask to participants if someone of them takes medicines, what kind of medicines and if they want to share with the group their personal experiences. 2. TIPS: How to use your medicines more safely - Know your medications - Take your medicine - Keep your medications safe - When you are in the hospital - Other tips QUIZ – 15 minutes Guide the group in doing the quiz all together. Comment answers if necessary or stimulate a debate. Following the right answers: 1 – B; 2 – D; 3 – C; 4 – B; 5 – B; 6 – D; 7 – A; 8 – A ù TEAM WORK – 40 minutes This activity will be based on what emerged previously, namely all contents can be applied during the following role-play activity. Explain to participants that you are going to divide them in 2 teams for an activity during which they have to pretend to be at the hospital. Assigning to each member, the following roles: ● Medical team, namely doctors and nurses (the number of doctors and nurses depends on how many people are in the team) ● a patient. To the 2 patients, in addition, assign a illness: diabetes type 2, hypertension (see “preparation” session). Divide the groups in virtual room and let them work. Enter in each room and share with the patients the docs you prepared before and say them to read it in order to understand in which consist exactly the illness and say them to think which could be the right way to communicate it to the medical team. In fact, the patient has to read the document and to pretend to be sick; he/she must to go the hospital to receive some cures. He/she has to communicate his/her medical conditions to the medical team in order to allow it to provide the best cure. In particular, the patients of each group have to: ● say what illness he/she has ● how he/she treats it

- what kind of symptoms has (he/she can invent; for example, he/she can have a strong headache or feels something strange on chest)
- if he/she already had similar episode

The medical team (doctors and nurses), instead, has to ask and take notes of:

- symptoms
- previous illness
- medicines taken and frequency
- allergies possessed
- unusual medicines' effects
- similar episodes recorded

After that, they provide prescriptions and advices to the patient on how to cure the problem.

During the exercise, the patients take note of how the medical staff communicate with him/her, if he/she felt reassured, if doctors and nurses appeared convincing in prescribing the cure, if they felt listened and if they think that the prescribed cure is the right one for him/her and if he/she thinks to have expressed well his/her necessities. The medical staff, on the other side, write if it thinks that the problem has been explained well and if it thinks that the patient will follow its instructions. These two parts then will confront each other inside the virtual room and discuss on reciprocal approaches, on what they would have done or said differently, if they think that the reciprocal communication was effective or if they agree with the cure plan elaborated.

After that, the groups will be moved again in the common room, where they will explain, in turn, what has been done in the separate room. At the end of their explanation, anyone who wants can give their own feedback, an opinion. The trainer can also encourage people to talk about their personal experiences in the hospital, what happened, how they were treated, if the prescribed treatment was effective and so on.

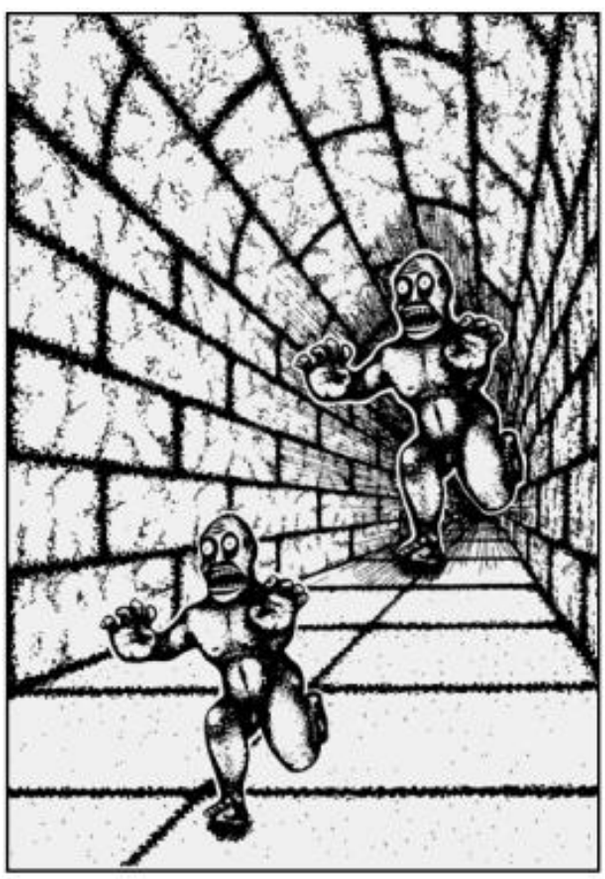
DEBRIEFING – 10 minutes

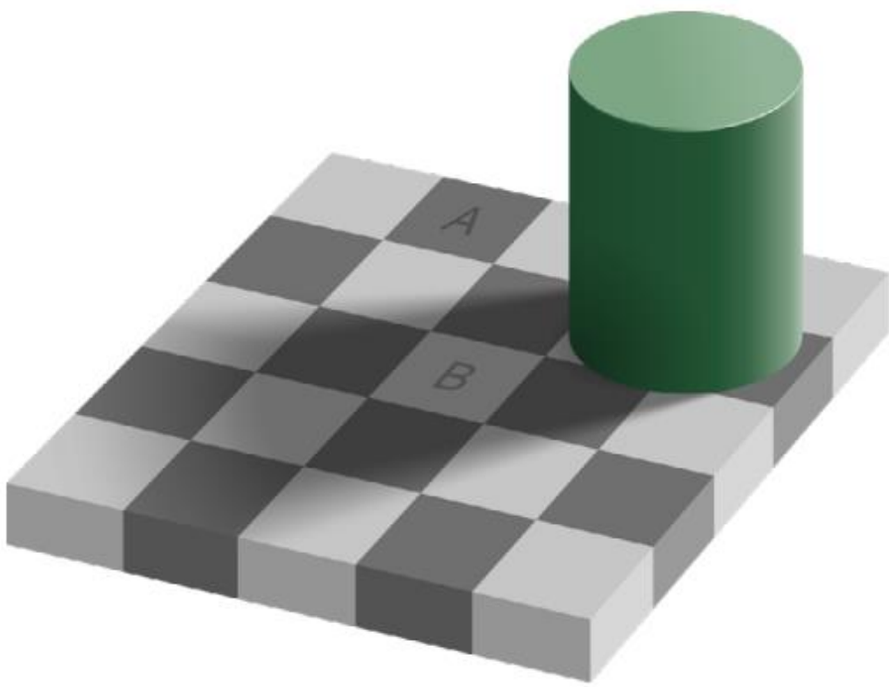
The trainer can stimulate a reflection in participants, asking something like:

- what did you understand from this section?
- do you think you used well medicines during your life or sometimes you abused of them?
- would you like to share your general opinion on this workshop?

TIPS: you can create more groups, smallest teams, giving them the same illness in order to see how each one approaches to the same problem or new diseases.

2.1 Workshop about scientific method (In-Presence)

Workshop about scientific method (In-Presence)	
Learning Outcomes	Participants will experience that their eyes are not always correct through the examination of two optical illusions and they will reflect upon the importance of the use of some sciences (mathematics, physics…) to understand the reality and how fake news or human perception can influence negatively their knowledge.
Timeframe	60 minutes
Methods	Verbal Methods (group discussion, problem solving method) Practical Methods (practical working method, method of independent learning)
Materials	1. Print outs of following optical illusion images: FIG. A 

	 FIG. B 0. A ruler 0. Paper 0. Pens or pencils 0. Rubbers
Preparation	Print one of the optical illusions for each group
Context	A room or in an open-air environment
Procedure	IMPLEMENTATION – 45 minutes 1. Divide the participants in groups of 4-5 and give each group the first optical illusion (FIG. A) upside down, so the participants can't see well the image. 2. Ask the participants to flip the page and look at FIG. A. Tell the participants that they are only allowed to look at the picture, they cannot touch the paper (so they don't have any comparison tool). Ask them to raise their hands if they think the monster in the back is smaller than the monster in the front. Then ask the participants to raise their hands if they think the monster in the back is bigger than the monster in the front. Finally ask to raise their hands if they think the two monsters are the same size. Initiate a discussion with them about finding a solution to verify their opinion/get to a common agreement (such as using a common tool to compare – a ruler, for example).

3. Let the participants measure the monsters with a tool and repeat the questions of step 2. If there is still a disagreement, let them discuss it based on their measurements until they reach an agreement.
4. Give the participants the second optical illusion (FIG. B) and ask them to figure out which square between "A" and "B" is darker. Tell them that they must present their measurement supporting their theory. Give them a few minutes to find a way to compare the two squares. Afterwards ask to raise their hands if they think that the "A" square is darker, then if they think "A" is lighter, then who thinks they are the same. If there is a disagreement, let them discuss it based on their measurements until they reach an agreement.
5. Let the participants try to create their own optical illusions. For this you can give the participants a template tunnel or ask them to draw the tunnel themselves and ask them to draw their own "monster". Then invite them to show their creation and to ask each other which monster is the bigger.

DEBRIEFING – 15 minutes

Gather the participants in plenary to discuss the exercise and to reflect upon what they did and what they learned from it. You can ask the participants the following questions:

- Is human perception reliable?
- What was the key to reach an agreement?
- Why is the scientific method so important?
- What kind of sciences are involved in the exercise we just finished and how did you applied them?
  Examples:
  - Physics
  - Biology
  - Mathematic
  - Geometry
- Can you think of every-day life examples when our perception is not reliable?
  Examples:
  - Witnesses
  - Maybe? When you see someone on the street and you think the person in walking away from you, but in fact the person is walking toward you?
  - Can you think of a real-life example when you have reached an agreement using a scientific method?

  Example: Someone say to you that he is taller than you, but you believe you are taller. So you both measure your height and you convince your peer that indeed you are taller.

Scenario 1

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Engineering (Bulgarian Partner production: Horizont Proconsult)

1.1 Egg Drop Challenge (In-Presence)

Egg Drop Challenge (In-Presence)	
Learning Outcomes	1. Understanding basic physics principles, such as gravity, force, and impact. 2. Developing creativity and critical thinking skills to design and modify landing craft. 3. Enhancing problem-solving and teamwork skills by working collaboratively and iteratively.
Timeframe	The exact timeframe will depend on the complexity of the designs and the number of iterations and tests performed. However, with a clear understanding of the challenge requirements and a focused approach, participants can design, build, and test their landing craft within a relatively short timeframe.
Methods	The egg drop challenge follows the engineering design cycle, which involves defining the problem, brainstorming and designing solutions, building prototypes, testing, and refining the design. The challenge requires creativity, critical thinking, problem-solving, and teamwork skills.
Materials	• Raw egg, or other payload that needs protecting • Container, like a cardboard tube, cup, box, etc. • External protection materials, like balloons, rubber bands, craft sticks, straws, etc. • Internal padding, like fabric, packing materials, paper, etc. • Pen or pencil • Paper • Tape • Scissors
Preparation	To prepare for the egg drop challenge, participants will need to gather the necessary materials, including a raw egg or other payload, containers, internal padding, external protection, pens or pencils, paper, tape, and scissors. Participants should also familiarize themselves with the engineering design cycle and basic principles of gravity and force.
Context	The egg drop challenge is a hands-on activity that can be used to teach physics and engineering concepts, as well as to develop teamwork and problem-solving skills.

Procedure	Define the problem and constraints, such as the height of the drop and the materials allowed. Brainstorm and sketch potential designs for the landing craft, considering factors such as weight, stability, and impact absorption. Select the best design and gather the necessary materials. Build the landing craft, incorporating the internal padding and external protection. Test the landing craft by dropping it from the designated height. Evaluate the success of the design by examining the egg for cracks and making modifications as necessary. Repeat the testing and refining process until the desired outcome is achieved.

2.1 Straw boats challenge (In-Presence)

Straw boats challenge (In-Presence)	
Learning Outcomes	By completing this challenge, participants will gain hands-on experience with engineering design, problem-solving, and basic principles of buoyancy. They will also develop their fine motor skills and spatial reasoning abilities.
Timeframe	This activity can typically be completed in about an hour, depending on the age and skill level of the participants.
Methods	Participants will use plastic straws and packing tape to build a boat that can hold candy, coins, or marbles without sinking. They will test their designs by placing the boat in a bowl of water and observing whether it floats or sinks.
Materials	• Plastic straws • Packing tape • Scissors • Bowl of water • Candy, coins, marbles etc.
Preparation	The materials needed for this activity include plastic straws, packing tape, scissors, a bowl of water, and small objects to use as cargo. The facilitator should ensure that there is enough space and materials for all participants to complete the challenge.
Context	This activity is a fun and engaging way to introduce basic principles of buoyancy and engineering. It can be used in classroom, after-school, or camp settings to teach STEM concepts and promote problem-solving skills.
Procedure	Participants will follow a step-by-step process to build their boats, test their designs, and iterate on their creations to improve performance. The facilitator can encourage discussion and reflection on the design process and the principles of buoyancy.

3.1 Toxic Waste (In-Presence)

Toxic Waste (In-Presence)	
Learning Outcomes	Teamwork skills, problem-solving skills, leadership skills, communication skills, strategic thinking, and planning. Participants will also learn the importance of following rules and guidelines, as well as the consequences of not doing so. This activity can be used to foster a culture of collaboration, trust, and mutual support within the team.
Timeframe	Timeframe: 35-55 minutes • 5 minutes for briefing and setup • 5 minutes for group discussion and planning • 15-30 minutes for task completion • 10 minutes for reviewing and challenge debrief
Methods	The main method used in this team building activity is experiential learning. The participants are presented with a simulated scenario where they must work together to solve a problem and achieve a common goal. Through this experience, the participants are able to identify and develop their teamwork, problem-solving, and leadership skills. They are also able to learn from their mistakes and successes, and apply these lessons to future situations. The use of a rope circle and toxic waste bucket provides a tangible and engaging way to challenge the participants' problem-solving abilities. The limited resources and potential consequences of failure add an element of excitement and urgency to the activity. Additionally, the activity can be modified by using blindfolds or penalties for entering the radiation zone, which adds an extra layer of challenge and helps to reinforce the importance of communication and following instructions. Overall, this activity utilizes a variety of methods to create a fun and engaging learning experience for the participants.
Materials	• 1 x toxic waste bucket (1 large bucket) • 1 x rope for the radiation zone • 2 x ropes of the same length to use to transport the waste bucket • 1 x raised platform (can use a stool seat to place the waste bucket) • 6 x tennis balls or you can use water (to represent toxic waste) • Blindfolds (optional)
Preparation	Obtain the necessary materials: toxic waste bucket, ropes, platform, and tennis balls or water. Set up the radiation zone using one of the ropes to create a circle with a diameter of 8-10ft. Place the platform in the middle of the radiation zone. Fill the bucket with tennis balls or water and place it on the platform. Place the two remaining ropes outside of the radiation zone. Optional: provide blindfolds for participants.

Context	This is a team-building challenge designed to highlight the importance of teamwork, problem-solving, and leadership. The goal is to transport a toxic waste bucket from the radiation zone to the safe zone without spilling the contents.
Procedure	The group is tasked with transporting a bucket of "Toxic Waste" from a radiation zone to a safe zone using only 2 ropes and a raised platform. The toxic waste can be represented by either water or tennis balls. The radiation zone is created using a rope circle, and the team must avoid entering it as it will result in a fatal injury or death. The group has 20 minutes to complete the task and must first spend 5 minutes discussing and planning before attempting to retrieve the bucket.

4.1 Bingo Game (Online)

Bingo Game (Online)	
Learning Outcomes	• Improved memory recall • Enhanced cognitive function • Decreased risk of mental illness • Accelerated recuperation • Improved coordination and reflexes • Increased comfort with technology and virtual experiences • Socialization and making new friends.
Timeframe	Each game can last between 30 and 60 minutes.
Methods	Bingo is a popular game among senior citizens, and it offers various benefits such as memory recall, cognitive function improvement, and enhanced coordination and reflexes. Playing bingo can also decrease the risk of mental illness and accelerate recuperation. As such, it is an ideal activity for older adults.
Materials	You'll need a few things to set up your online bingo game. First, you'll need a device with a camera and microphone, like a laptop or tablet. Second, you'll need a way to call the numbers. You can use a physical bingo set, or use an online number generator like Bingo Maker. Third, you'll need a way to communicate with your players. This can be through a live stream platform like Zoom or Google Meet, or through a specialized bingo hosting platform like Let's Play Bingo."
Preparation	To host an online bingo game for older adults, you'll need to decide on a live stream platform that is easy to use for seniors. You'll also need bingo cards or a virtual bingo card generator, and a way to display the called numbers.
Context	Online bingo is a great way to engage seniors who may not be able to attend in-person bingo events. It offers a way to socialize, have fun, and maintain cognitive function
Procedure	To begin your online bingo game, start by choosing a platform that is user-friendly for seniors. Next, create or obtain bingo cards and a way to display the called numbers. You can use a physical bingo set or a free online bingo player. Ensure that the audio and video

	quality is sufficient and be aware of any audio or visual impairments that your players may have. Lastly, establish rules and procedures for the game, such as how to call numbers and how to determine the winner.

5.1 IMAGINATION CHRONICLES (Online)

IMAGINATION CHRONICLES (Online)	
Learning Outcomes	• Fosters creativity and imagination. • Enhances storytelling and communication skills. • Encourages teamwork and collaboration. • Promotes thinking outside the box. • Boosts morale and team spirit.
Timeframe	The "Exciting Sponge" game can be conducted in approximately 30 minutes, depending on the team size and the time allocated for each participant to share their story
Methods	The game relies on active participation of each team member, who selects an object and uses their imagination to tell an exciting story about it.
Materials	• Internet-connected devices for each participant. • Objects within each person's reach to use during the game.
Preparation	• Ensure all participants have access to Internet-connected devices. • Instruct each team member to have an object within their reach before starting the game.
Context	The "Exciting Sponge" game can be utilized in various contexts, such as team meetings, training sessions, virtual events, or any occasion where promoting creativity and teamwork in a fun way is desired
Procedure	• Explain the rules of the game to all participants. • Instruct each person to select an object within their reach. • Each participant should invent and share an exciting story about their object, exaggerating its features and adding ridiculous details. • Encourage other team members to listen attentively and show enthusiasm during each story. • After everyone has shared their stories, an informal vote can be conducted to determine the most entertaining or creative story.

Scenario 1

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Scenario 2

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Technology and IT (Spanish Partner Production: FFE)

1.1 Leakage of personal data, creating strong passwords, password organizers

Ice-breaker 1 (In-Presence)

Leakage of personal data, creating strong passwords, password organizers Ice-breaker 1 (In-Presence)	
Learning Outcomes	Icebreakers are fun activities to help people get to know one another. Instructors can use them to help acquaint participants with course content and expectations.
Timeframe	
Methods	Different variations of this can be played but it is great for getting the group to know one another and the names.
Materials	Telephones/tablets/laptops with Internet access, projector, sheets of paper, pens, cardboards
Preparation	Get the group into a circle.
Context	Icebreakers can also be designed to help warm up online learning spaces and orient participants to the online environment.
Procedure	Get the group into a circle. Then start out by saying your name and an IT related word that begins with the same letter. E.g. Adam Application, Bartek Banner, Celine Cookies, Darek Domain, etc.… Then the next person does theirs, plus yours. Then the third person does theirs, the second's and the first's name and an IT related word. It then moves on down the line, so that the last person has to do everyone with in the group.

2.1 Leakage of personal data, creating strong passwords, password organizers

Introduction to the basics of internet security (In-Presence)

Leakage of personal data, creating strong passwords, password organizers Introduction to the basics of internet security (In-Presence)	
Learning Outcomes	Introduction to the basics of internet security. The instructor will begin by asking the participants some questions about if they know what some items are and letting them express themselves. The purpose is to generate a small discussion among the participants and their previous knowledge of the topics.
Timeframe	
Methods	The instructor will begin by asking the participants some questions about if they know what some items are and letting them express themselves.
Materials	Telephones/tablets/laptops with Internet access, projector, sheets of paper, pens, cardboards
Preparation	To seat in circle or in groups.
Context	The purpose is to generate a small discussion among the participants and their previous knowledge of the topics.

Procedure	The instructor will begin by asking the participants some questions about if they know what some items are and letting them express themselves. Introduction to topic: - What can you tell me about online privacy? (Let them answer and discuss) The instructor explains that: The definition of online privacy is the level of privacy protection an individual has while connected to the Internet. It covers the amount of online security available for personal and financial data, communications, and preferences. Internet privacy is important because it gives you control over your identity and personal information. Without that control, anyone with the intention and means can manipulate your identity to serve their goals, whether it is selling you a more expensive vacation or stealing your savings. - What is Spying / snooping? (Let them answer) The instructor explains that: When you are online, you are spied on by a number of trackers for various purposes. Trackers keep a record of your search history and track all your online activities through various means. This provides them a clear picture of who you are and your interests, which is a breach of online privacy policy and makes you a public property. Most of the time, this tracking is for advertisement purposes only and it allows advertisers to show ads according to your taste and interests. But sometimes this information is used by cybercriminals to carry out unauthorized and illegal activities risking your online existence. - What do you know about Information mishandling? (Let them answer and discuss) The instructor explains that: There are various sites on the internet that need your personal information to get access to their services. These sites often store cookies and save your personal information and later use it for various purposes. Most of the time this information is not encrypted and can be accessed by anyone. This mishandling of personal information may lead to serious consequences. The modern trend of e-banking and e-business portals have multiplied the risks associated with online privacy. By sharing your bank details and crucial files on the internet, you are paving ways for burglars and making yourself vulnerable to cybercriminals. - What are cookies? What are they for? (Let them answer and discuss) The instructor explains that: Cookies are small pieces of text that the websites you visit send to your browser. They allow websites to remember information about your visit, which can make it easier to revisit sites and make them more useful to you. They are temporary files that can last for a shorter or longer period of time. We can configure them, use tools to block them, delete them whenever we want... The problem can come mainly when they collect personal data without notifying the user. - Do you know what is cloud data? (Let them answer and discuss) The instructor explains that: Cloud storage is a cloud computing model that stores data on the Internet through a cloud computing provider who manages and operates data storage as a service. It's delivered on demand with just-in-time capacity and costs, and eliminates buying and managing your own data storage infrastructure. - Could someone tell me what cybersecurity is? (Let them answer and discuss) The instructor explains that: Cybersecurity is the practice of protecting systems, networks, and programs from digital attacks. These cyberattacks are usually aimed at accessing, changing, or destroying sensitive information; extorting money from users; or interrupting normal business processes. - Does anyone know how to create a strong password? (Let them answer and discuss)

	The instructor explains that: The main keys to creating a strong password are that it should be at least 12 characters long, mixing upper and lower case letters, numbers and a symbol. It is also necessary to use different passwords for each site and change them from time to time. - What is a VPN? (Let them answer and discuss) The instructor explains that: VPN stands for "virtual private network" — a service that helps you stay private online. A VPN establishes a secure, encrypted connection between your computer and the internet, providing a private tunnel for your data and communications while you use public networks - Do you know how users are tracked in search engines? (search history, cookies, IP addresses, click-through history) (Let them answer and discuss) The instructor explains that: A search engine can track you across websites if the websites you visit contain the search engine's own tracking scripts as part of the page. What you search for leave a trail of information about you. This information reveals what you're interested in, what you're curious about, even what you think about those things. - Do you know of any tricks to prevent your information from being tracked? (Let them answer and discuss) The instructor explains that: Change settings to block trackers, use incognito mode, use vpn, use private browsers. Search Encrypt uses encryption to hide your search history from others who may use your device after you search. - Can you tell me what identity theft is and some of the ways in which it is carried out? (phishing, malware, pharming, discarded computers and phones…) (Let them answer and discuss) The instructor explains that: Identity theft and identity fraud are terms used to refer to all types of crime in which someone wrongfully obtains and uses another person's personal data in some way that involves fraud or deception, typically for economic gain.

3.1 Leakage of personal data, creating strong passwords, password organizers

Presentation: Leakage of personal data, creating strong passwords, password organizers (In-Presence) / (Online)

Leakage of personal data, creating strong passwords, password organizers Presentation: Leakage of personal data, creating strong passwords, password organizers (In-Presence) / (Online)	
Learning Outcomes	The internet has become a determining factor for the development of today's society. It has been used as the main means for the interaction of people and computers, exchanging information and promoting the rapid transmission of experiences and knowledge regardless of geographic location.
Timeframe	
Methods	Presenting the Power Point Presentation
Materials	Telephones/tablets/laptops with Internet access, projector, sheets of paper, pens, cardboards
Preparation	Please follow the presentation about this in the separate file.
Context	The Trainer will present the Power Point Presentation
Procedure	The way in which the internet has evolved since its invention is fantastic and it has let us see that it will continue to evolve so fast that it will not cease to amaze us. Please follow the presentation about this in the separate file.

4.1 Leakage of personal data, creating strong passwords, password organizers

Game: Two truths and one lie (In-Presence) / (Online)

Leakage of personal data, creating strong passwords, password organizers Game: Two truths and one lie (In-Presence) / (Online)	
Learning Outcomes	Icebreakers are fun activities to help people get to know one another. Instructors can use them to help acquaint participants with course content and expectations. Icebreakers can also be designed to help warm up online learning spaces and orient participants to the online environment.
Timeframe	
Methods	The participants are given three statements. Two will be true, one will be a lie.
Materials	Telephones/tablets/laptops with Internet access, projector, sheets of paper, pens, cardboards
Preparation	The participants need to identify the lie.
Context	Game Two truths and one lie. The participants need to identify the lie.

Procedure	The participants are given three statements. Two will be true, one will be a lie. The participants need to identify the lie. All the statements will be related to Internet topics. **Online Shopping:** 1. Credit card is one of the most dangerous ways to pay for goods online 2. You should never enter your payment details on a page unless there is an S after HTTP 3. If you don't have a credit or debit card, PayPal is a good alternative to pay for goods online **Malware:** 1. Malware is a type of computer virus 2. A computer worm frequently exploits computers running out-dated software 3. An important step to protect yourself from ransomware is regular backups **Phishing:** 1. If an email addresses you as 'customer', you should be especially wary of it 2. A phishing scam that knows personal details pertinent to the recipient is called a spear-phishing attack 3. Clicking a link in an email is okay if the email is from a bank you have an account with **Social Media privacy:** 1. The only recommended default privacy level is friends and family ONLY 2. Installing social media apps (Facebook, Instagram, Twitter…) can give total strangers access to certain information about you 3. If I block someone on Facebook or Twitter, that person has no way of seeing anything I do with or post on my account **Facebook scam:** 1. Adding a stranger on Facebook gives them access to my computer 2. Adding a stranger on Facebook could put my friends at risk 3. Adding a stranger on Facebook could lead to identity theft **Email scams:** 1. Advance fee email scams rely on tricking a victim to send money on the promise of a much bigger return 2. An email attachment that contains a Word Document can still be dangerous to open 3. The best course of action if I get a 'Nigerian Prince' email scam is to reply and tell them to stop emailing me **Ransomware** 1. If ransomware infects my computer, a reliable and reputable anti-virus program can remove it. 2. Anti-virus can reverse the effects of ransomware 3. Ransomware is one of the most prolific online threats of 2017 and 2018 After these examples, participants will have to think up at least one more each. They will then try to find out which statement is incorrect.

Scenario 1

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Co-funded by the
Erasmus+ Programme
of the European Union

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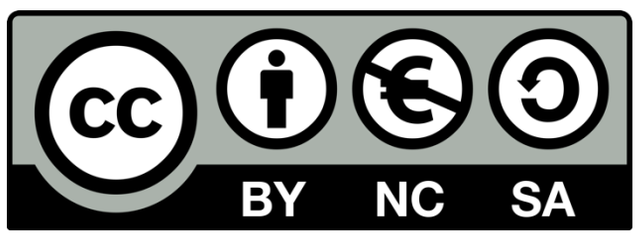

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