



**MILEAGE**

# HANDBOOK FOR EDUCATORS



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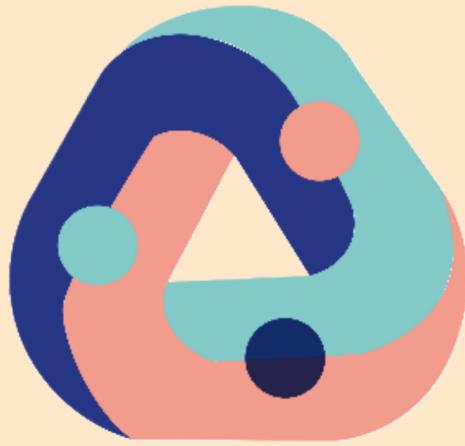
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# MILEAGE

"ENSURING SENIORS ARE DIGITALLY LITERATE IS CRUCIAL FOR THEIR WELL-BEING. TECHNOLOGY CAN EMPOWER THEM WITH KNOWLEDGE, CONNECTIONS, AND ACCESS TO ESSENTIAL SERVICES, ENHANCING THEIR OVERALL QUALITY OF LIFE."

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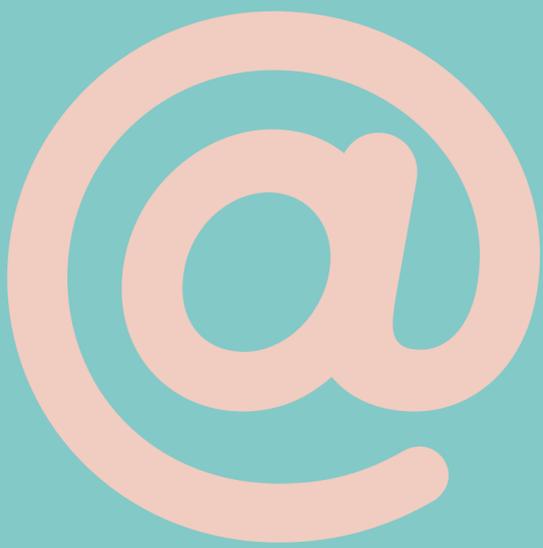


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# 1. Introduction

This document covers the information and instructions that educators need to use the MILEAGE tools and provide the MILEAGE learning program to the target group. Educators must know what is relevant to seniors and how to use the proposed tools. They also need a clear vision of the challenges seniors face today and guidance on supporting them to overcome both barriers and risks. The handbook offers suggestions to make sure younger seniors are motivated to support older seniors and that educators are aware of how to foster good peer-learning opportunities and socialization possibilities. Educators and senior peers can use the handbook to get inspiration for adapting their communication style and pedagogy.



The document is divided into eight chapters. **Chapter 2** will provide an overview of the key elements of the program and the main skills and abilities the program aims to develop in seniors. In particular, this section will focus on the skills and competencies educators need to possess to provide structured support to seniors, within the program and in other activities with this audience.

**Chapter 3** aims to inform educators and present them with updates on some principles of gerontology and some basic elements of psychology in seniors. In particular, this section will present some elements of lifelong learning and how to use them to promote active learning among seniors. **Chapter 4** will offer some methods and techniques to support active ageing and boost seniors' abilities by boosting their motivation for learning and how to insert digital elements into their learning routine or daily activities. This section is also about digital skills and the use of new media in everyday life.

**Chapter 5** aims to support educators in planning their programs adequately for seniors. The section also discusses the tools and methods associated with the MILEAGE program, emphasizing cooperative learning and peer-to-peer support. One of the key elements of the program is the necessity of having younger seniors support older seniors in their learning process. **Chapter 6** provides tips for educators to adapt their teaching style to meet their learners' expectations and offers an overview of techniques that can be used while delivering the program (or any activity targeting seniors).

**Chapter 7** illustrates the digital scenarios and how to use them to develop the digital skills introduced in Chapter 2. The section will also offer an overview of the challenges in each scenario and their purpose. **Chapter 8** is the section dedicated to micro-learning to introduce the learning materials associated with the scenarios. The tips section has been prepared by the partners and the educators that run the 1st edition of the program in the partners' countries (France, Italy, the Czech Republic, Cyprus, and Poland).

## 1.1. PROJECT AIMS AND OBJECTIVES

Many methods work best to motivate and empower seniors to use ICT tools and media content, but education materials targeting seniors often need to be updated and in line with their needs. Not to mention that online threats and risks evolve rapidly, and seniors can feel lost and think their knowledge needs to be updated. For this reason, the MILEAGE program offers a practical approach (ref: scenarios) and a more traditional approach with micro-lessons.

The MILEAGE learning program aims to enhance senior citizens' digital skills and media and information literacy while equipping them to protect themselves from virtual threats such as fake news, online scams, and phishing. The program encourages seniors to confidently use ICT tools in all aspects of their lives, from e-government to social media and streaming music and videos. This project addresses the digital divide, and seniors are encouraged to participate in civic and cultural life in the EU.

In today's digital landscape, where media players' responsibilities continuously evolve, it is essential to ensure that seniors know what is proper online behaviour and which protection tools should be used. Improving their digital literacy and skills can play a crucial role in achieving this goal. The MILEAGE program partners used the MEDIA and INFORMATION LITERACY concept to develop an engaging tool that supports seniors in learning how to use media and technology to their advantage. Seniors need to defend themselves from 'different virtual dangers' (e.g. fake news, online scams, 'phishing') while being empowered to use ICT tools with confidence in every aspect of their lives (e-government, social media, music and video streaming, etc.) While people of all ages fall victim to fake news, studies have shown that seniors are more vulnerable to fake news and digital misinformation.

The MILEAGE program recognizes the growing phenomenon of digital exclusion and seeks to prevent it, as it severely affects citizens' employability and social participation. Seniors are particularly vulnerable to this exclusion, making it a pressing concern. The program intends to increase seniors' ability to identify and avoid dangers associated with various online elements and risks. While fake news and digital misinformation affect people of all ages, studies have shown that seniors are more susceptible.

### Learning outcomes

By participating in the proposed learning program, seniors are expected to

- increase their content skills (which include ICT literacy and active learning), cognitive abilities (creativity and mathematical reasoning), and process skills (problem-solving and critical thinking) that are the base for active ageing;
- decrease the possibility of being scammed or tricked and decrease overall exposure to virtual dangers;
- enhance their ability to take full advantage of online media and ICT tools largely available;
- increase ability to recognize disinformation, misleading, or outright false information.



## 1.2. TARGET GROUPS

This document has been created to benefit educators and practitioners, such as seniors' educators, social workers, senior citizens' counsellors, adult educators, and trainers from NGOs and civil society organizations, third-age universities, and second-chance schools.

When promoting the use of the internet or other media, educators must be aware of what is relevant to seniors, what they use those tools for specifically, what their daily routine is, and how it can be improved (facilitated) by using technologies or media. This could be a good peer-learning opportunity and socialization possibility, too; seniors have to support each other or show each other what they can do; they might also adapt their communication style to fit one of their peers, as they have already 'decoded' the information and know how to use it.

This handbook has been prepared to familiarize them with the latest digital skills framework and its benefits for active ageing. By using this handbook, we expect educators to become familiar with the contents of the program, understand better the use of the scenarios and the micro-lessons, and overall gain the knowledge needed to support seniors in avoiding the risks they might encounter while using social media, online platforms, and other tools offered via digital devices.

It has been validated and updated using the partners' experience and the educators' comments, and it will run the program's first edition at the end of 2023.



## 1.3. PARTNERSHIP

Five partners worked together to create a new solution to promote 'active ageing and support seniors in developing the skills to live better in the 21st century, including features and demands that help them become more independent and autonomous.

- **E-SENIORS (FR)** has wide expertise in working with seniors and offering tools to increase their digital skills. They are experienced in the development and implementation of training and the usage of online training platforms.
- **FRAMEWORK (IT)** has contributed to offering new learning solutions aimed at fostering decision-making processes using elements of gamification and application of psychological theories to design digital services.
- **CARDET (CY)** is the technical partner and expert in developing e-learning, mobile learning, and gamified solutions across disciplines.
- **EDUCATOR (CZ)** has provided solid expertise in user needs assessment and skill enhancement through new technologies.
- **WSBINOZ (PL)** and its educational science and psychology departments, have the competence and expertise to support the MILEAGE partners in all aspects related to seniors' education and active ageing.



# 2. How to use the MILEAGE handbook

## 2.1. Purpose of the handbook.

The Guide is intended for educators to explain the risks and dangers of online activities to seniors. It provides an overview of the key elements of the MILEAGE program and an update on techniques and methods that can be employed while teaching seniors. It also offers an overview of the knowledge and skills needed to help practitioners become more effective in creating engaging learning environments for seniors using the MILEAGE resources.

Actual learning programs addressed to seniors must be tailored to their needs and should fit their lifestyles or learning approaches. Indeed, seniors might have physical constraints related to mobility, vision, and hearing impairments that might discourage them from using certain small devices, such as mobile phones. This should be considered to increase the perceived utility and confidence in using ICT tools. It should also be accounted for by educators when they select learning devices and activities and plan material and pedagogical support.

The manual describes the interplay and combination among the scenarios and the micro-lessons in combination with the peer-support activities, how to plan and perform the tailored sessions, and other techniques to be used with senior learners. It includes gerontology, psychology, mentoring, coaching, and pedagogy principles to boost educators from different fields and expertise to replicate the MILEAGE program and to support less experienced educators to use the resources more effectively.



## 2.2. Overview of the key concepts and tools in the program

### Report on the risks and challenges of the online environment

The document presents the main social media and other ITC tools that are used nowadays and illustrates the more recurring dangers and risks associated with each environment. The analysis offers an overview of the real difficulties in using certain tools and media, the risks faced by seniors, and some basic elements and countermeasures to be employed in association with the risks identified.

### Digital scenarios

Games and interactive materials that will simulate the most recurrent “dangerous scenarios” seniors (and any citizens, to be more precise) are exposed to, while using media and navigating the internet. The scenarios will be interactive and mimic a real digital environment to allow seniors to get used to the environment. The aim is to foster seniors’ ability to recognize the dangers associated with the most common scams, fake news, deep-fake videos, and so on, but also recognize the more generic misleading information and entertainment articles contributing to discrimination and hate speech. The game-like, challenge-based situations will increase their ability for problem-solving and analysis, which is the basis of active ageing.

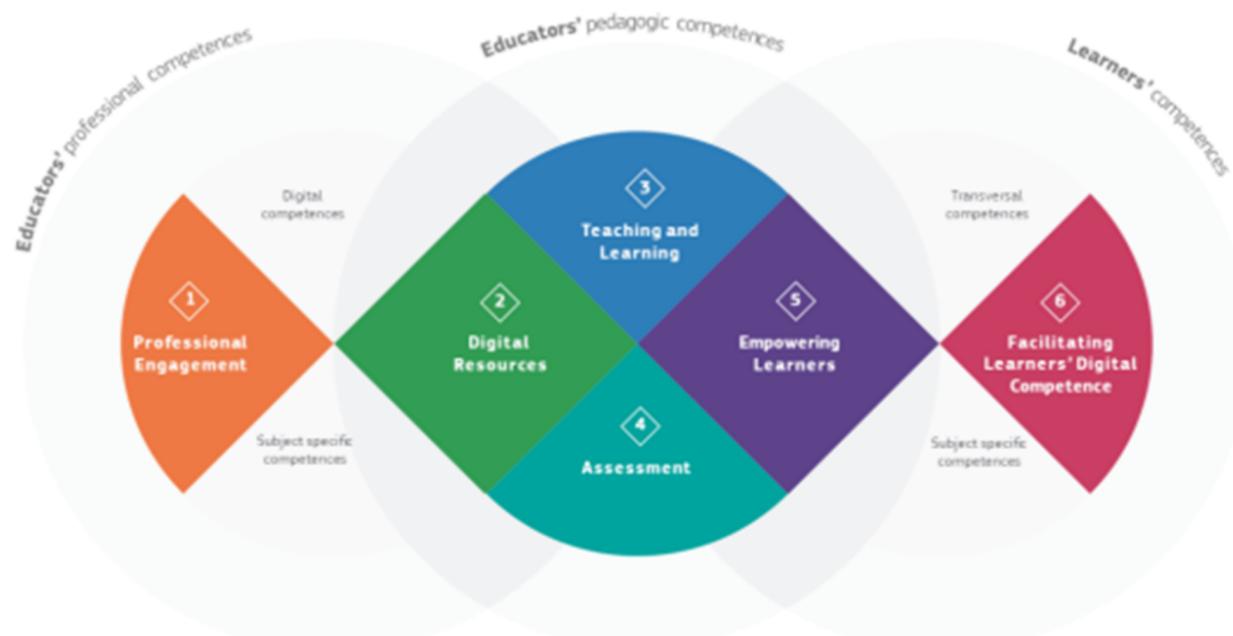
### Microlearning

Each scenario is also associated with a micro-lesson aimed at showing how those ‘dangers’ have been created, by whom, why, and for what purpose, to foster the participant’s ability to get a better grasp of the complexity of our society and be able to recognize them in the future. In this respect, the MIL framework guides partners in creating the learning objectives for the whole program and assessing participants’ learning outcomes.

## 2.3. PRINCIPLES OF DIGICOMP

The European Digital Competence Framework for Citizens, or DigComp, offers a tool to improve citizens' digital competence. The current document also gives examples of how DigComp is used at the European, national, and regional levels.

The current version focuses on expanding the ICT's eight proficiency levels and examples of use. It aims to support stakeholders with the further implementation of DigComp. A wider and more detailed range of proficiency levels supports the development of learning and training materials. It also helps design instruments for assessing the development of citizens' competence, career guidance, and promotion at work. On the other hand, the teaching professions also face rapidly changing demands that require a new, broader, and more sophisticated set of competencies than before. The ubiquity of digital devices and applications, in particular, requires educators to develop their digital competence. The European Framework for the Digital Competence of Educators (DigCompEdu) is a scientifically sound framework describing what it means for educators to be digitally competent. It provides a general reference frame to support the development of educator-specific digital competencies in Europe. DigCompEdu is directed towards educators at all levels of education, from early childhood to higher and adult education, including general and vocational education and training, special needs education, and non-formal learning contexts.



Picture 1. The learn more about the DIGComps, please visit <https://publications.jrc.ec.europa.eu/repository/handle/JRC106281>

The main competences illustrated by the framework are:

### Information and data literacy

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

### Communication and Collaboration

- Interacting through digital technologies
- Sharing through digital technologies
- Engaging in Citizenship through digital technologies
- Collaborating through digital technologies
- Netiquette
- Managing digital identity



### Digital content creation

- Developing digital content
- Integrating and re-elaborating digital content
- Copyright and Licenses
- Programming

### Safety

- Protecting devices
- Protecting personal data and Privacy
- Protecting health and well-being
- Protecting the Environment

### Problem-solving

- Solving technical problems
- Identifying Needs and technological responses
- Creatively using digital technologies
- Identifying digital competence gaps



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# 3. A modern scientific approach to seniors problems

## 3.1. Principles of gerontology

Gerontology, the scientific study of ageing, encompasses various disciplines and principles that shape our understanding of the ageing process. In this chapter, we explore the fundamental principles that guide gerontology, providing insights into the multidimensional nature of ageing and the factors influencing older adults' experiences..

Gerontology, the scientific study of ageing, encompasses various disciplines and principles that shape our understanding of the ageing process. In this chapter, we explore the fundamental principles that guide gerontology, providing insights into the multidimensional nature of ageing and the factors influencing older adults' experiences.



Gerontology takes an interdisciplinary approach, integrating knowledge from biology, psychology, sociology, healthcare, and other fields to comprehend ageing comprehensively. By adopting a lifespan perspective, gerontology examines ageing as a continuous journey from birth to death, uncovering both developmental and decline processes.

Recognizing individual differences is crucial in gerontology. Each person's ageing experience is influenced by genetics, environment, culture, and socioeconomic status. Gerontologists emphasize tailoring interventions and care to meet the unique needs and strengths of older adults.

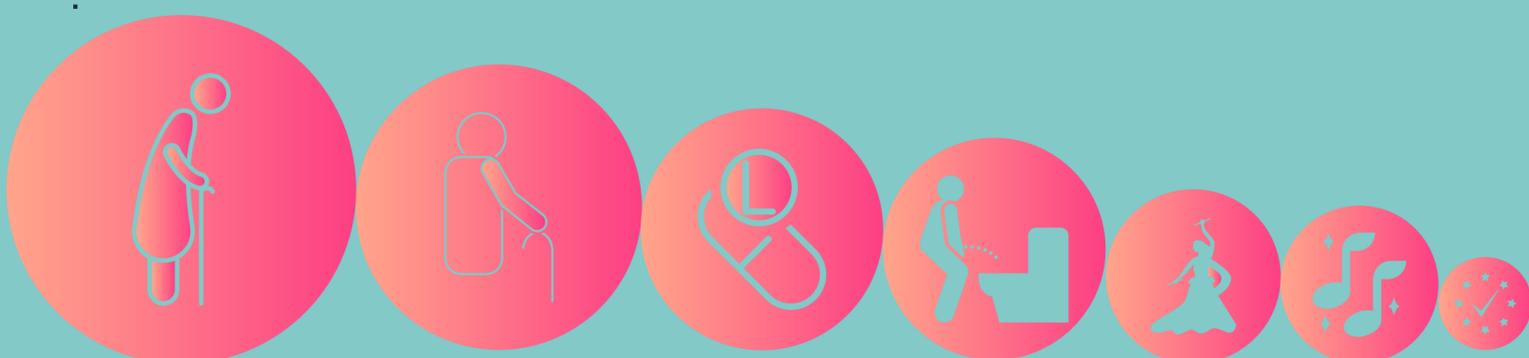
Positive ageing is promoted by gerontology, which focuses on growth, fulfilment, and well-being in later life. By fostering physical and mental health, social engagement, and personal development, gerontology aims to enhance the quality of life for older adults.

ageing is a multidimensional phenomenon encompassing biological, psychological, and social aspects. Gerontology examines the physiological changes, psychological factors, and social influences that impact well-being and adjustment in later life.

Context plays a vital role in gerontology. Older adults are influenced by their families, communities, and societal structures. Gerontologists consider social norms, cultural beliefs, and policy frameworks to develop interventions and policies that promote healthy and active ageing.

Applied research and practice are central to gerontology. It bridges theory and practice by translating research into evidence-based interventions, programs, and policies. Gerontology collaborates with healthcare providers, social service organizations, policymakers, and advocates to support successful ageing and address the needs of older adults and their families.

In conclusion, the principles of gerontology provide a foundation for understanding and addressing the complexities of ageing. By adopting an interdisciplinary approach, recognizing individual differences, promoting positive ageing, considering the multidimensional nature of ageing in context, and applying research to practice, gerontology aims to improve the well-being and quality of life of older adults.



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# WHAT IS AGEING?

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Aging refers to the biological, psychological, and social changes that occur over time as an individual grows older. It is a natural and inevitable process that affects all living organisms, including humans. Ageing involves a series of progressive and cumulative changes at the cellular, organ, and systemic levels, resulting in a decline in physiological function and increased vulnerability to disease and other age-related conditions.

Biologically, ageing is characterized by various molecular and cellular changes. These include DNA damage, telomere shortening, the accumulation of cellular waste products, and a decrease in the efficiency of cellular repair and maintenance processes. These changes contribute to the gradual deterioration of bodily systems, leading to the physical signs of ageing, such as wrinkling skin, reduced muscle mass, diminished sensory abilities, and decreased organ function.

Psychologically, ageing can be accompanied by changes in cognitive abilities, memory, and emotional well-being. While some cognitive processes may decline with age, such as processing speed and certain types of memory, other aspects of cognition, such as wisdom and accumulated knowledge, may improve. Emotional experiences may also change, with research suggesting that older adults tend to experience more positive emotions and are better able to regulate negative emotions compared to younger individuals.

Socially, ageing is influenced by the interactions and roles that individuals have within their families, communities, and societies. As people age, they may experience changes in social relationships, including shifts in family dynamics, retirement, and the loss of loved ones. Social support and engagement play important roles in healthy ageing, as maintaining strong social connections can promote well-being and mitigate the negative effects of ageing.

It is important to note that while ageing is a universal process, the rate and experience of ageing can vary widely among individuals. Genetic factors, lifestyle choices, socioeconomic status, and access to healthcare can all influence how individuals age and their overall health and well-being in later life.

Understanding ageing is a complex and multidisciplinary endeavour, with researchers and experts from fields such as biology, psychology, sociology, and healthcare working together to unravel its mechanisms and implications. The study of ageing aims to promote healthy ageing, develop interventions to address age-related challenges, and enhance the quality of life for older individuals.

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## MAIN THEORIES OF AGEING

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The main competences illustrated by the framework are:

### Information and data literacy

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

### Communication and Collaboration

- Interacting through digital technologies
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- Collaborating through digital technologies
- Netiquette
- Managing digital identity





There are several main theories of ageing that seek to explain the underlying mechanisms and processes of ageing. These theories provide different perspectives on why and how ageing occurs. Here are some of the prominent theories of ageing:

**Wear and Tear Theory:** This theory proposes that ageing is a result of accumulated damage and wear on cells, tissues, and organs over time. It suggests that the body's natural repair mechanisms become less efficient with age, leading to the gradual breakdown and dysfunction of various physiological processes.

**Genetic Theories:** Genetic theories of ageing focus on the role of genetic factors in determining the rate and extent of ageing. These theories suggest that genetic variations and mutations influence lifespan and the susceptibility to age-related diseases. They include programmed ageing theories, such as the Telomere Shortening Theory and the Programmed Longevity Theory, which propose that ageing is genetically programmed and regulated.

**Cellular Senescence Theory:** Cellular senescence theory posits that ageing is driven by the accumulation of senescent cells, which are damaged or dysfunctional cells that have lost their ability to divide and function properly. The presence of senescent cells contributes to inflammation and the deterioration of tissue function, leading to the ageing process.

**Free Radical Theory of ageing:** The free radical theory suggests that ageing is caused by the accumulation of oxidative damage caused by reactive oxygen species (ROS) generated during normal metabolic processes. Over time, the accumulated oxidative damage can impair cellular function and contribute to age-related diseases.

**Hormonal Theories:** Hormonal theories propose that changes in hormone levels with age contribute to the ageing process. For example, the decline in certain hormones, such as growth hormone and sex hormones (e.g., estrogen and testosterone), is associated with age-related changes in the body and increased susceptibility to age-related diseases.

**Caloric Restriction Theory:** This theory suggests that reducing calorie intake without malnutrition can extend lifespan and delay age-related diseases. Caloric restriction is believed to activate cellular mechanisms that promote longevity and protect against age-related damage.

**Immunological Theories:** Immunological theories focus on the role of the immune system in ageing. These theories propose that age-related changes in immune function, including immune system decline and chronic low-level inflammation, contribute to the ageing process and increase vulnerability to age-related diseases.

**Evolutionary Theories:** Evolutionary theories of ageing examine ageing from an evolutionary perspective. They propose that ageing is a result of the declining force of natural selection with age. These theories suggest that natural selection favors genes and traits that promote reproduction and survival in youth but not necessarily in old age, leading to the accumulation of age-related changes.

These theories are not mutually exclusive, and multiple factors and processes likely contribute to the complex phenomenon of ageing. Researchers continue to investigate and refine these theories to gain a deeper understanding of the ageing process and develop strategies for healthy ageing.

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## UNIVERSAL AGEING FEATURES

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Universal ageing features are common characteristics and changes that occur in individuals as they grow older. These features are observed across different cultures and populations and are considered intrinsic to the ageing process. While individual experiences of ageing may vary, the following are some universal ageing features:

**Physical Decline:** One of the most noticeable universal ageing features is the physical decline that occurs with age. This includes changes such as decreased muscle strength, reduced bone density, decreased flexibility, and a decline in sensory abilities (vision, hearing, taste, etc.). The skin may also become thinner and more prone to wrinkles.

**Decreased Physiological Function:** ageing is associated with a decline in the functioning of various physiological systems. For example, the cardiovascular system may become less efficient, leading to reduced cardiac output and an increased risk of cardiovascular diseases. The respiratory system may experience decreased lung capacity and elasticity, affecting breathing. Overall, organ systems may exhibit reduced efficiency and resilience.

**Cognitive Changes:** Cognitive changes are another universal feature of ageing. While older adults may still maintain a high level of cognitive functioning, certain cognitive processes may decline. For instance, processing speed, working memory, and attention may be affected, although accumulated knowledge and wisdom can continue to increase. Age-related cognitive changes can vary among individuals. They are influenced by factors such as lifestyle, genetics, and overall health.

**Emotional and Psychological Shifts:** ageing is also associated with emotional and psychological shifts. Older adults may experience greater emotional stability and a more positive emotional outlook compared to younger individuals. There may be changes in social goals, priorities, and motivations. Additionally, older adults may face unique challenges such as coping with loss, adjusting to retirement, or managing chronic health conditions.

**Social and Relationship Changes:** ageing often involves changes in social networks and relationships. Older adults may experience changes in their roles and relationships within families as children grow up and move away. Social circles may also shrink due to factors like retirement or the loss of friends and peers. However, older adults may also have opportunities for new social connections and engagement within their communities.

**Increased Vulnerability to Age-Related Diseases:** As individuals age, they become more susceptible to age-related diseases and conditions such as cardiovascular diseases, diabetes, cancer, and neurodegenerative disorders. The risk of chronic conditions tends to increase with age, impacting overall health and well-being.

**Changes in Sleep Patterns:** ageing often brings changes in sleep patterns, including difficulty falling asleep, lighter sleep, and more frequent awakenings during the night. Older adults may also experience a shift towards earlier bedtimes and waking up earlier in the morning.

**Decreased Metabolic Rate:** With age, the body's metabolic rate tends to decrease. This can result in a decrease in energy levels and a potential increase in body weight if dietary habits remain unchanged.

**Decline in Immune Function:** The immune system becomes less efficient with age, leading to a decline in immune response and increased susceptibility to infections, as well as a decreased ability to recover from illness or injury.

**Changes in Vision and Hearing:** Age-related changes in vision and hearing are common. These changes may include decreased visual acuity, reduced depth perception, increased sensitivity to glare, and age-related hearing loss (presbycusis).

**Slower Wound Healing:** ageing can lead to a slower rate of wound healing. The body's ability to repair and regenerate damaged tissue becomes less efficient, resulting in delayed healing of cuts, bruises, and other injuries.

**Increased Risk of Falls:** Older adults are more prone to falls due to factors such as decreased balance, muscle strength, and coordination. Falls can lead to fractures and other injuries, impacting mobility and independence.

While these features are commonly observed, individual experiences of ageing can differ greatly based on genetics, lifestyle, socioeconomic factors, and access to healthcare. Additionally, advancements in medical science and healthcare practices can influence the extent to which individuals experience certain ageing features.



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## SELECTED AGEING EXPONENTS

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Selected ageing factors refer to specific variables or elements that are known to influence the ageing process or contribute to age-related changes and outcomes. These factors can have an impact on individuals' health, well-being, and overall experience of ageing. Here are some commonly recognized and selected ageing factors:

**Genetic Factors:** Genetic factors play a significant role in determining the rate of ageing and susceptibility to age-related diseases. Certain genetic variations can influence an individual's lifespan, health, and likelihood of developing conditions such as cardiovascular disease, Alzheimer's disease, or cancer.

**Lifestyle Factors:** Lifestyle choices and behaviours have a profound impact on the ageing process. Factors such as diet, physical activity, tobacco use, alcohol consumption, and stress management can influence overall health, cognitive function, and the development of chronic diseases.

**Socioeconomic Factors:** Socioeconomic factors, including income, education, occupation, and access to healthcare, can influence ageing outcomes. Individuals with higher socioeconomic status tend to have better health outcomes, greater access to healthcare resources, and increased opportunities for healthy lifestyle choices.

**Environmental Factors:** Environmental factors, such as air quality, exposure to pollutants, access to green spaces, and the built environment, can impact the ageing process. These factors can contribute to the development of respiratory diseases, cognitive decline, and other health conditions associated with ageing.

**Psychosocial Factors:** Psychosocial factors encompass social, psychological, and emotional aspects of an individual's life. Strong social support networks, meaningful relationships, mental well-being, and engagement in activities can positively influence ageing outcomes and contribute to healthy ageing.

**Healthcare Factors:** Access to quality healthcare, preventive services, and timely medical interventions can significantly impact ageing outcomes. Regular medical check-ups, disease management, and appropriate treatments can help address age-related health conditions and promote healthy ageing.

**Hormonal Factors:** Hormonal changes that occur with ageing, such as a decline in reproductive hormones like estrogen and testosterone, can contribute to age-related changes in the body and impact various aspects of health, including bone density, muscle mass, and cognitive function.

**Psychological Factors:** Psychological factors, including personality traits, resilience, coping mechanisms, and mental health conditions, can influence how individuals perceive and experience the ageing process. Positive psychological well-being and effective stress management strategies can contribute to healthier ageing.

**Chronic Diseases and Comorbidities:** The presence of chronic diseases, such as diabetes, cardiovascular disease, arthritis, and respiratory conditions, can significantly impact the ageing process. Management of these conditions effectively is crucial for maintaining overall health and quality of life in older adults.

**Nutrition and Dietary Factors:** Adequate nutrition and a balanced diet rich in essential nutrients are important for healthy ageing. Certain dietary factors, such as calorie intake, macronutrient composition, and specific nutrients (e.g., antioxidants, omega-3 fatty acids), can influence ageing outcomes and the risk of age-related diseases.

**Cognitive Engagement and Mental Stimulation:** Engaging in intellectually stimulating activities, such as learning new skills, solving puzzles, or participating in social interactions, can promote cognitive health and potentially delay the cognitive decline associated with ageing.

**Epigenetic Factors:** Epigenetic modifications, which are changes in gene expression patterns that occur without alterations in the DNA sequence, can influence the ageing process. Environmental factors, lifestyle choices, and stress levels can impact epigenetic mechanisms, which may have long-term effects on ageing outcomes.



# THE ART OF HEALTHY AGEING



The art of healthy ageing refers to the proactive approach and lifestyle choices that individuals can adopt to promote their physical, mental, and emotional well-being as they age. It involves taking steps to maintain a high quality of life, optimize health, and embrace the opportunities and challenges that come with ageing. Here are some key principles and practices that encompass the art of healthy ageing:



**Physical Activity:** Engaging in regular physical activity, including aerobic exercises, strength training, and flexibility exercises, promotes cardiovascular health, muscle strength, mobility, and overall physical function. It also helps manage weight, reduces the risk of chronic diseases, and enhances overall well-being.



**Balanced Nutrition:** Consuming a balanced and nutrient-rich diet is crucial for healthy ageing. It involves incorporating a variety of fruits, vegetables, whole grains, lean proteins, and healthy fats while limiting processed foods, added sugars, and excessive salt. Adequate hydration is also essential for maintaining overall health.



**Cognitive Stimulation:** Keeping the mind active and engaged is vital for healthy ageing. Engaging in mentally stimulating activities such as reading, solving puzzles, learning new skills, or engaging in social interactions can help maintain cognitive function, memory, and mental agility.



**Emotional Well-being:** Nurturing emotional well-being involves managing stress, cultivating positive relationships, engaging in hobbies and activities that bring joy, and seeking support when needed. Practicing mindfulness, meditation, or other relaxation techniques can help reduce stress and promote emotional balance.



**Social Connections:** Maintaining social connections and being part of a supportive community is critical for healthy ageing. Engagement in social activities, such as volunteering, joining clubs or organizations, and staying connected with family and friends, can enhance overall well-being, reduce loneliness, and provide a sense of purpose.



**Preventive Healthcare:** Regular medical check-ups, screenings, and vaccinations are essential for preventing and detecting health conditions early. Following recommended guidelines for preventive care, managing chronic conditions effectively, and adhering to prescribed medications contribute to healthy ageing.

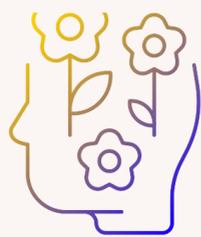


**Sleep and Rest:** Prioritizing sufficient and quality sleep is crucial for overall health and well-being. Establishing a consistent sleep routine, creating a comfortable sleep environment, and practicing good sleep hygiene can support optimal physical and cognitive function.

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# THE ART OF HEALTHY AGEING

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**Positive Mindset:** Cultivating a positive mindset and maintaining a sense of optimism can contribute to healthy ageing. Embracing life's changes, focusing on gratitude, finding meaning and purpose, and embracing opportunities for personal growth and learning can enhance overall well-being.



**Regular Health Screenings:** Routine health screenings, such as blood pressure checks, cholesterol tests, and cancer screenings, can help detect potential health issues early on and allow for timely interventions.



**Medication Management:** Proper management of medications is crucial for older adults. This includes understanding medication instructions, adhering to prescribed dosages, and communicating with healthcare professionals about any concerns or potential interactions.

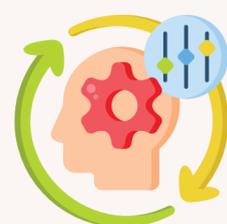
**Fall Prevention:** Taking measures to prevent falls is essential for maintaining physical independence and reducing the risk of injury. This may involve creating a safe living environment, using assistive devices if necessary, and participating in balance and strength training exercises.



**Brain Health:** In addition to cognitive stimulation, promoting brain health involves maintaining cardiovascular health through regular exercise and a healthy diet. Management of chronic conditions like hypertension and diabetes, controlling cholesterol levels, and avoiding smoking are also beneficial for brain health.



**Spirituality and Purpose:** Exploring one's spirituality and finding a sense of purpose can contribute to overall well-being and a positive outlook on life. Engagement in spiritual practices, participating in meaningful activities, or giving back to the community can enhance the art of healthy ageing.



**Adaptation and Resilience:** ageing often involves adapting to changing circumstances, such as retirement, the loss of loved ones, or health challenges. Cultivating resilience, developing coping strategies, and seeking support can help navigate these transitions and maintain emotional well-being.



**Continual Learning:** Embracing a mindset of lifelong learning fosters intellectual stimulation and personal growth. Engagement in ageing through new hobbies, taking courses, exploring new interests, or pursuing creative endeavours can contribute to cognitive vitality and a sense of fulfilment.



**Technology Adoption:** Embracing technology can enhance daily life and connectivity. Learning to use smartphones, tablets, or computers can help older adults stay connected with loved ones, access information, and utilize various digital tools for health monitoring and well-being.



The art of healthy ageing is a holistic approach that recognizes the importance of physical, mental, and emotional well-being in the ageing process. By adopting these principles and practices, individuals can strive for a fulfilling and vibrant life as they age, further enrich their journey of healthy ageing and maximize their overall well-being and quality of life.

## 3.2. Basics of psychology of seniors

### Psychological dimensions of ageing

Ageing is a multifaceted process that encompasses not only physical changes but also psychological transformations. As individuals progress through different stages of life, they encounter various psychological dimensions that shape their experiences and well-being. Understanding these psychological dimensions is crucial for promoting healthy ageing and supporting the mental and emotional well-being of older adults. Here are key psychological dimensions of ageing:

- **Cognitive Functioning:** Maintaining cognitive health through stimulating activities supports overall well-being and delays cognitive decline.
- **Emotional Well-being:** Addressing emotional needs through coping strategies, social support, and mental health resources is crucial for emotional well-being.
- **Psychosocial Adjustment:** Adapting to changes in roles, relationships, and lifestyles requires social connections, meaningful activities, and support.
- **Self-Perception and Identity:** Nurturing a positive self-perception and body image, as well as embracing life experiences, contribute to well-being.
- **Attitudes and Stereotypes:** Challenging ageism, promoting positive attitudes towards ageing, and creating inclusive environments support psychological well-being.
- **End-of-Life Considerations:** Addressing end-of-life considerations, such as death anxiety and finding meaning, fosters peace and fulfilment.
- **Resilience and Positive ageing:** Building resilience, promoting personal growth, and embracing a positive ageing mindset enhance well-being.
- **Understanding and addressing these dimensions** enables society to create supportive environments for healthy ageing and the psychological well-being of older adults.

## AGEING IN THE CONTEXT OF POSITIVE PSYCHOLOGY

Positive psychology is a field of study that focuses on understanding and enhancing human well-being, happiness, and flourishing. In recent years, the application of positive psychology principles to the process of ageing has gained significant attention. Ageing in the context of positive psychology involves recognizing the unique strengths and opportunities that come with growing older and harnessing them to promote a fulfilling and meaningful life in later years. Here, we explore key aspects of ageing in the context of positive psychology.

- **Strengths-Based Approach:** Positive psychology emphasizes a strengths-based approach, focusing on identifying and utilizing personal strengths and resources. In the context of ageing, this involves recognizing the unique strengths and capabilities that older adults possess, such as wisdom, life experience, resilience, and emotional intelligence. By leveraging these strengths, older adults can maintain a positive outlook, adapt to life changes, and continue to thrive.
- **Positive Emotions and Well-being:** Positive psychology emphasizes the importance of cultivating positive emotions and overall well-being. Despite the challenges that ageing may bring, there are numerous opportunities for older adults to experience joy, gratitude, contentment, and other positive emotions. Engagement in activities that bring pleasure and meaning, fostering positive relationships, and cultivating a sense of purpose can contribute to enhanced well-being in later life.
- **Meaning and Purpose:** Ageing provides a unique opportunity for individuals to reflect on their life's purpose and find deeper meaning. Positive psychology emphasizes the importance of having a sense of purpose and engagement with life. Older adults can explore new interests, engage in activities that align with their values, and contribute to their communities. Finding meaning and purpose in later life can lead to increased life satisfaction and a sense of fulfilment.



- **Positive Relationships and Social Connections:** Maintaining positive relationships and social connections is crucial for well-being in the ageing process. Positive psychology recognizes the significance of social support, companionship, and meaningful connections. Older adults can nurture existing relationships, cultivate new friendships, participate in group activities, and contribute to intergenerational connections. Strong social connections can enhance overall well-being, provide a sense of belonging, and combat feelings of loneliness or isolation.
- **Resilience and Adaptation:** Positive psychology highlights the importance of resilience in navigating life's challenges. Ageing often involves facing physical changes, loss of loved ones, or adjustments to roles and responsibilities. Building resilience and developing effective coping strategies can help older adults adapt to these changes and bounce back from adversity. Resilience enables individuals to maintain a positive outlook, navigate transitions, and find new sources of happiness and fulfilment.
- **Lifelong Learning and Growth:** Positive psychology emphasizes the value of ongoing learning, personal growth, and self-improvement. Ageing is an opportunity for continued intellectual stimulation, exploration of new interests, and acquiring new skills. Commitment to lifelong learning promotes cognitive vitality, creativity, and a sense of personal accomplishment.
- Ageing in the context of positive psychology acknowledges the potential for growth, happiness, and well-being in later life. By adopting a strengths-based approach, cultivating positive emotions, finding meaning and purpose, fostering positive relationships, building resilience, and embracing lifelong learning, older adults can experience a fulfilling and meaningful journey through the ageing process.




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### 3.3. PRINCIPLES OF SENIORS' PEDAGOGY

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While "seniors' pedagogy" may not be a widely recognized term, it is possible to outline some general principles that can be applied to the education and learning of older adults. These principles are based on the understanding that older adults have unique characteristics, needs, and preferences when it comes to learning.

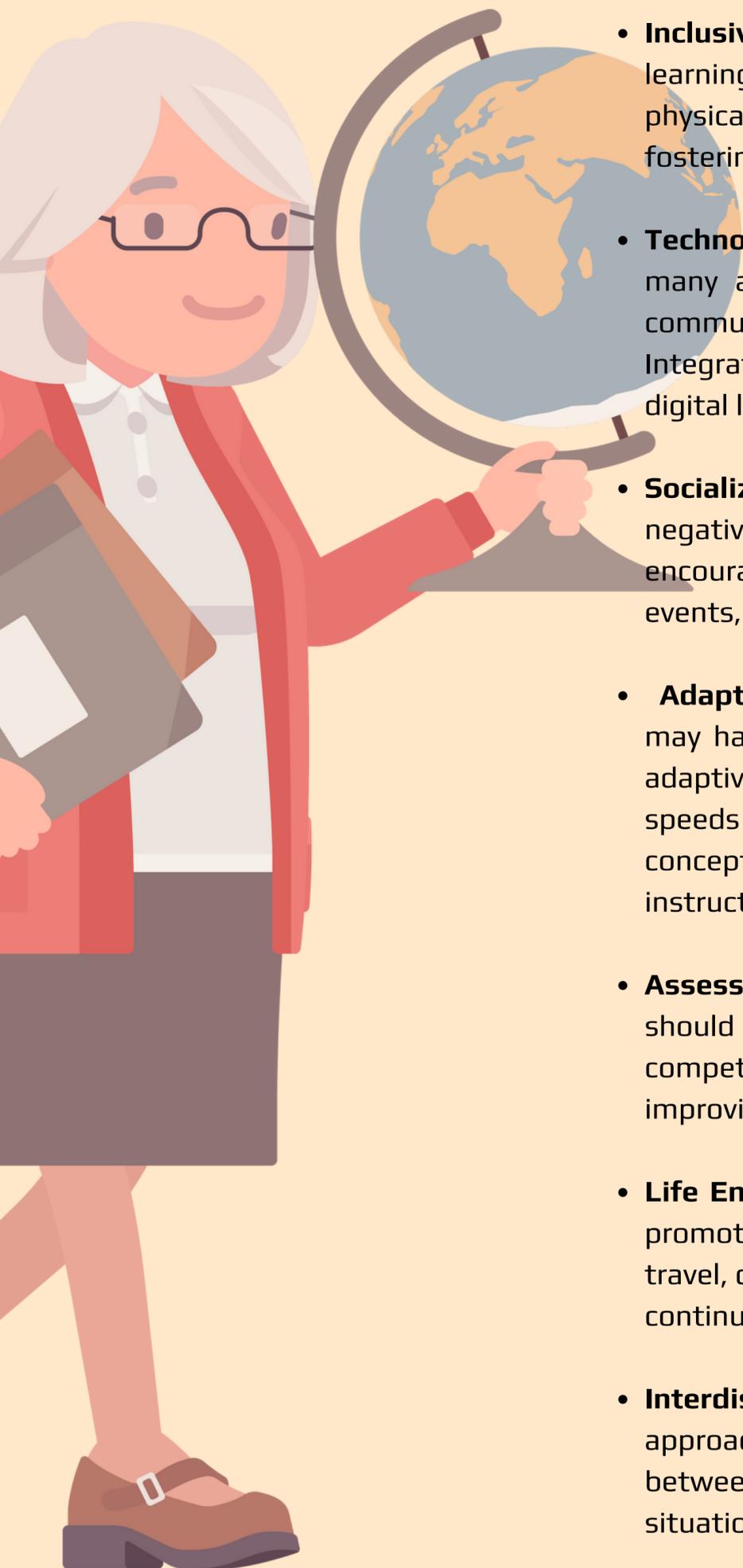
**Continuous Evaluation and Improvement:** Regularly evaluate the effectiveness of pedagogical approaches for older adults and make adjustments as needed. Seek feedback from learners to ensure their needs are met and to improve the learning experience.

## SENIOR PEDAGOGY

Senior pedagogy, also known as senior education or gerontology, refers to the specialized approach to teaching and learning designed to meet the unique needs and preferences of senior citizens, typically those aged 60 and above. This form of education recognizes that older adults have distinct characteristics, experiences, and learning styles that require tailored strategies and methodologies. Senior pedagogy aims to promote lifelong learning and enhance the quality of life for older individuals by fostering intellectual, social, and emotional growth.

There are several key principles and considerations in senior education to be taken into account:

- **Respect for Life Experience:** Senior learners often bring a wealth of life experiences and knowledge to the classroom. Educators should acknowledge and respect this, incorporating opportunities for seniors to share their wisdom and insights with their peers.
- **Flexible Curriculum:** Senior pedagogy recognizes that older adults have diverse interests and goals. Therefore, it promotes a flexible curriculum that allows seniors to choose subjects and activities that align with their interests and needs, whether it's history, art, technology, or wellness.



- **Active Learning:** Senior education encourages active participation and engagement. It's essential to design interactive lessons that involve discussions, hands-on activities, group projects, and experiential learning to keep seniors mentally and socially stimulated.
- **Health and Wellness:** Promoting physical and mental health is a fundamental aspect of senior pedagogy. Classes may incorporate exercise programs, meditation, and cognitive training to support overall well-being.
- **Inclusive Environment:** Creating an inclusive and supportive learning environment is crucial for senior learners. This includes physical accessibility, respect for different abilities, and fostering a sense of belonging among students.
- **Technology Integration:** While not all seniors are tech-savvy, many are interested in learning how to use technology for communication, information retrieval, and entertainment. Integrating technology into senior education can enhance their digital literacy skills and connect them to the modern world.
- **Socialization:** Seniors often face social isolation, which can negatively impact their mental health. Senior pedagogy encourages socialization through group activities, clubs, and events, fostering friendships and a sense of community.
- **Adaptive Teaching Methods:** Recognizing that older adults may have varying cognitive abilities, senior pedagogy employs adaptive teaching methods that cater to different learning speeds and styles. This may involve breaking down complex concepts, providing additional support, or offering individualized instruction.
- **Assessment and Feedback:** Evaluation in senior education should be constructive and focus on growth rather than competition. Feedback should be encouraging and aimed at improving skills and knowledge.
- **Life Enrichment:** Beyond traditional subjects, senior pedagogy promotes life enrichment. This may involve exploring hobbies, travel, cultural activities, and volunteer work, enabling seniors to continue discovering new passions and purposes.
- **Interdisciplinary Approach:** Encouraging an interdisciplinary approach to learning allows seniors to explore connections between various fields and apply knowledge in practical, real-life situations.

Senior pedagogy is a holistic approach. It helps education to recognize the value of lifelong learning for older adults. It seeks to empower seniors with the tools and knowledge they need to lead fulfilling lives and remain engaged in society. By tailoring educational experiences to the unique needs and preferences of seniors, senior pedagogy can contribute to a higher quality of life in the later years.

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# LIFELONG LEARNING

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Lifelong Learning encourages and supports a lifelong learning mindset among older adults, recognizing that learning continues throughout life and that older adults have a wealth of knowledge and experience to share.

## Active learning

Active Learning is an Individualized Approach that recognizes the diverse backgrounds, abilities, and interests of older learners. Tailor educational programs and approaches have to meet the specific needs and preferences of each individual:

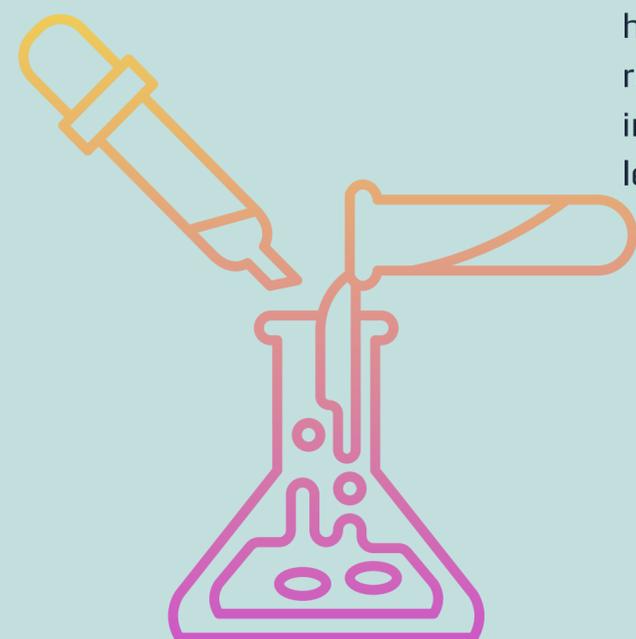
- **Active Participation:** Foster active participation and engagement in the learning process. Provide opportunities for older adults to contribute their knowledge and experiences, participate in discussions, and take an active role in their own learning.
- **Meaningful and Relevant Content:** Offer educational content that is relevant, meaningful, and applicable to the lives and interests of older adults. Connect learning to real-life situations and provide practical applications.
- **Positive and Supportive Environment:** Create a positive and supportive learning environment that values and respects the contributions of older adults. Foster a sense of community, promote mutual support, and encourage social interaction among learners.
- **Flexibility and Accessibility:** Recognize and accommodate the diverse learning styles, abilities, and needs of older adults. Provide flexible learning formats, such as online or blended learning options, and ensure physical accessibility to learning spaces.
- **Health and Well-being:** Consider the health and well-being of older learners. Create an environment that promotes physical comfort, incorporates breaks, and takes into account any specific health considerations or accommodations.



## Experiential learning

Experiential learning for seniors is an approach to education that emphasizes hands-on, practical experiences as a means of learning and personal growth. It recognizes that older adults benefit from active engagement and direct involvement in learning activities. Here is some information about experiential learning for seniors:

- **Definition and Principles:** Experiential learning involves learning through action, reflection, and application. It is based on the principle that individuals learn best when they are actively engaged in experiences that are relevant and meaningful to their lives. Experiential learning for seniors focuses on creating opportunities for older adults to participate in real-life activities, projects, and interactions that foster personal growth, skill development, and social connections.
- **Benefits for Seniors:** Experiential learning can provide several benefits for seniors. It promotes cognitive stimulation, enhances problem-solving and decision-making skills, fosters creativity, and encourages lifelong learning. It can also contribute to improved self-esteem, confidence, and a sense of purpose. Additionally, experiential learning allows older adults to build social connections, share experiences, and learn from others in a supportive and collaborative environment.



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# LIFELONG LEARNING

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- **Examples of Experiential Learning Activities:** Experiential learning for seniors can take various forms, depending on the interests and goals of the participants. Some examples of experiential learning activities for seniors include:
- **Volunteering:** Engaging in volunteer work allows seniors to contribute to their communities, gain new skills, and make a positive impact.
- **Intergenerational Programs:** Participating in programs that bring together different age groups, such as mentoring or community service projects, promotes intergenerational learning and understanding.
- **Outdoor and Nature-based Activities:** Activities such as gardening, nature walks, or birdwatching provide opportunities for seniors to connect with nature, engage in physical activity, and learn about the environment.
- **Arts and Crafts Workshops:** Participating in art, music, or crafts workshops allows seniors to express themselves creatively, learn new techniques, and explore their artistic abilities.
- **Group Discussions and Reflection:** Facilitating group discussions and reflection sessions encourages seniors to share their experiences, perspectives, and insights, fostering mutual learning and personal growth.
- **Incorporating Reflection:** Reflection is an essential component of experiential learning. It involves taking time to process and make sense of the experiences, insights, and lessons learned. Providing structured reflection activities or discussion forums allows seniors to reflect on their experiences, connect them to broader concepts, and deepen their understanding.
- **Facilitating Learning Environments:** Creating supportive learning environments is crucial for successful experiential learning for seniors. This includes providing clear instructions, guidance, and support throughout the learning process. It also involves fostering a safe and inclusive space where seniors feel comfortable sharing their thoughts, asking questions, and engaging in discussions.

Experiential learning for seniors recognizes the value of active engagement, practical experiences, and reflection in the learning process. By providing opportunities for hands-on learning, personal growth, and social connections, this approach promotes meaningful and enriching educational experiences for older adults.



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# LIFELONG LEARNING

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## Self-directed learning

Self-directed learning for seniors is an approach that empowers older adults to take control of their own learning process and pursue knowledge and skills based on their interests and goals. Self-directed learning refers to the process in which individuals take responsibility for their own learning, including setting goals, identifying learning needs, and selecting appropriate learning activities. In the context of seniors, it involves older adults actively engaging in self-guided learning experiences. Here are some key points about self-directed learning for seniors



- **Autonomy and Choice:** Self-directed learning for seniors emphasizes autonomy and choice. Older adults have the freedom to determine what they want to learn, when and how they want to learn it. They can explore topics that interest them and align with their personal goals, passions, and curiosities.
- **Personalized Learning:** Self-directed learning allows seniors to personalize their learning journey. They can tailor learning activities to their preferred learning styles, pace, and depth of exploration. This approach recognizes that older adults have diverse backgrounds, prior knowledge, and learning preferences.
- **Resources and Tools:** Self-directed learners can access a wide range of resources and tools to support their learning. These may include online courses, books, educational websites, tutorials, workshops, and community resources. Technology has made learning resources more accessible and allows seniors to learn at their own convenience.
- **Reflection and Evaluation:** Self-directed learning involves reflection and self-assessment. Older adults can reflect on their learning experiences, evaluate their progress, and make adjustments as needed. Reflection helps them gain insights, identify areas for improvement, and reinforce learning outcomes.
- **Lifelong Learning Mindset:** Self-directed learning encourages a lifelong learning mindset among seniors. It recognizes that learning is not limited to formal education but can continue throughout life. Older adults can embrace continuous learning, adapt to new technologies and knowledge, and stay intellectually engaged.
- **Benefits of Self-directed Learning:** Self-directed learning for seniors offers several benefits. It promotes intellectual stimulation, cognitive functioning, and memory retention. It enhances self-esteem, confidence, and a sense of accomplishment. Self-directed learning also encourages active engagement and independence, empowering seniors to stay intellectually curious and continue personal growth.
- **Supportive Networks:** While self-directed learning is self-directed, seniors can still benefit from supportive networks and learning communities. Engaging in discussions, joining interest groups, or participating in online forums allows for sharing experiences, gaining insights, and fostering social connections.
- **Self-directed learning for seniors empowers older adults to take charge of their own learning journey. It encourages autonomy, personalization, and a lifelong learning mindset. With access to resources and support, older adults can engage in meaningful and fulfilling self-directed learning experiences that contribute to their personal growth and well-being.**



# LIFELONG LEARNING

## Intergenerational learning

Intergenerational learning for seniors involves the exchange of knowledge, skills, and experiences between different age groups. Intergenerational learning refers to the process of older adults engaging in learning activities alongside younger generations, fostering mutual learning and understanding.

- **Sharing Knowledge and Experience:** Seniors have a wealth of knowledge and life experiences to share with younger generations. They can pass on wisdom, skills, and cultural traditions that contribute to intergenerational learning.
- **Learning from Younger Generations:** Intergenerational learning is a two-way process. Seniors can learn from younger individuals about technological skills, contemporary perspectives, and innovative ideas. This fosters personal growth and helps seniors stay connected to evolving societal changes.
- **Bridge Building:** Intergenerational learning helps bridge the generation gap and promotes empathy, respect, and understanding among different age groups. It challenges stereotypes and encourages intergenerational relationships based on shared learning experiences.
- **Activities and Programs:** Intergenerational learning activities can take various forms, including mentoring programs, joint projects, community service initiatives, or educational workshops. These activities create opportunities for interaction, collaboration, and mutual learning.
- **Benefits for Seniors:** Engaging in intergenerational learning benefits seniors in multiple ways. It promotes cognitive stimulation, social connectedness, and a sense of purpose. It also provides opportunities for personal growth, enhanced well-being, and a broader perspective on societal changes.
- **Benefits for Younger Generations:** Younger individuals benefit from intergenerational learning by gaining wisdom, life skills, and historical perspectives. They develop empathy, respect, and appreciation for older adults, breaking down age-related stereotypes.
- **Community Integration:** Intergenerational learning strengthens community bonds and social cohesion. It brings together individuals from different age groups, fostering a sense of belonging and creating a supportive learning environment.



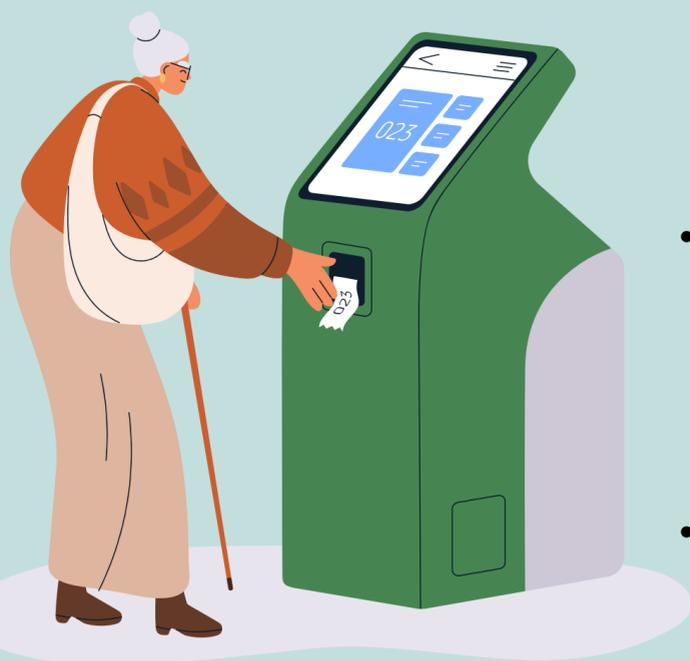
Intergenerational learning for seniors encourages the exchange of knowledge, skills, and experiences between older adults and younger generations. It promotes mutual learning, understanding, and the building of meaningful relationships. By leveraging the strengths and experiences of all age groups, intergenerational learning enriches the lives of seniors and contributes to a more connected and inclusive society.

# LIFELONG LEARNING

## Technology-enhanced learning

Technology-enhanced learning for seniors refers to the use of technology to support and enhance the educational experiences of older adults. Here are some key points about technology-enhanced learning for seniors:

- **Access to Information and Resources:** Technology provides seniors with access to a wealth of information and educational resources. Online platforms, digital libraries, and educational websites offer a wide range of content, including courses, tutorials, articles, and multimedia materials.
- **Flexible Learning Formats:** Technology enables flexible learning formats that cater to the needs and preferences of seniors. Online learning platforms and virtual classrooms allow for self-paced learning, interactive modules, and multimedia presentations. This flexibility accommodates individual learning styles and schedules.
- **Skill Development:** Technology offers opportunities for seniors to develop new skills or enhance existing ones. Online courses and tutorials cover various topics, from computer literacy and digital skills to specialized subjects. Learning technology-related skills empowers seniors to engage in the digital age and stay connected.
- **Social Connection and Collaboration:** Technology facilitates social connection and collaboration among seniors. Online discussion forums, video conferencing tools, and social media platforms enable communication, interaction, and knowledge sharing with peers, instructors, and experts from around the world.
- **Cognitive Stimulation:** Engaging with technology-enhanced learning stimulates cognitive functions for seniors. Interacting with multimedia content, participating in online quizzes, and solving interactive exercises provide mental challenges and promote cognitive health.
- **Personalized Learning:** Technology allows for personalized learning experiences. Adaptive learning platforms can assess individual strengths and weaknesses, providing customized content and recommendations. Seniors can focus on specific areas of interest, set their learning pace, and track their progress.
- **Health and Well-being Support:** Technology-enhanced learning can also support the health and well-being of seniors. For example, there are fitness apps, meditation guides, and online wellness programs designed specifically for older adults. These resources promote physical activity, mental well-being, and healthy lifestyle choices.
- **Continuous Learning:** Technology enables seniors to engage in continuous learning throughout their lives. They can explore new subjects, stay up-to-date with current events, and access lifelong learning opportunities. Technology-enhanced learning encourages a mindset of ongoing personal growth and intellectual stimulation.



Technology-enhanced learning for seniors harnesses the power of technology to expand educational opportunities, foster social connections, and support personal development. By embracing technology, older adults can access a vast array of resources, engage in interactive learning experiences, and stay connected in an increasingly digital world.

## 4. Overcoming barriers in the learning environment

New technology can be overwhelming for anyone, but it is often even more intimidating if you are a senior adult. Many physical, cultural, mental, and even psychological factors come into play, and for some, the challenges become real obstacles.

In terms of social barriers, the ones we can underline are: remote living, isolation from the family, isolation from social life after retirement, unwanted loneliness and financial constraints.

In terms of physical barriers, we can underline the biological changes with age that affect one's brain function even if the person is still healthy. Changes include struggling with memory, difficulty with complex concepts, and slowed thinking. They can pose challenges as an older person seeks to learn new technology. Nevertheless, like a muscle, "brain power" increases as the person uses it.



Another physical condition that affects seniors' learning is definitely vision impairment and hearing issues. The loss of sight and hearing might cause them to shy away from screens and technology, which require the ability to see clearly and up close and to hear audio and video materials. But the good news is that as older people address the condition and seek medical treatment for such issues, their health condition may be significantly improved. In addition, some applications and other technical devices have been developed to ease the use of ICT tools for people experiencing hearing and vision problems.

Last but not least, mobility issues, which can be related to back pain, fall risk, and sarcopenia among older adults, limit the use of ICT and media in face-to-face courses. It would then be advisable to favor online learning if possible.

An important barrier to seniors' adoption of technology are psychological constraints, and more specifically, technology anxiety, technophobia (also known as the fear of technology), or simply technology rejection. These barriers can arise for several reasons: lack of support, instructions, or clear guidance, lack of knowledge and confidence, complexity of technologies, feeling of inadequacy compared to the young generation, scepticism and an inability to perceive the advantages of technology in daily life.

As a trainer, it is important to know the psychological issues that underpin rejection or fear of technology and address them in order to build confidence and trust in technologies.



## 4.1. ADAPTATION OF COMMUNICATION STYLE AND PEDAGOGY

Adapting your communication style to seniors is essential for effective interaction, ensuring clear understanding, and combating the above-mentioned barriers.

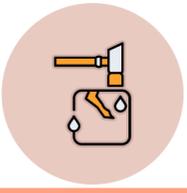
- **Speak clearly and slowly:** Enunciate your words clearly and avoid speaking too quickly. This allows seniors to better comprehend your message and follow the conversation.
- **Use simple and concise language:** Simplify your language and avoid using complex jargon or technical terms.
- **Give time for processing:** Allow seniors sufficient time to process information and formulate their responses. Be patient and avoid rushing or interrupting them while they are speaking.
- **Pay attention to non-verbal communication:** Maintain good eye contact, use facial expressions that convey warmth and empathy.
- **Active listening:** Nod, summarize key points, and ask follow-up questions to show that you are actively engaged in the conversation and value input.
- **Be empathic and respectful:** Show empathy and respect towards seniors by acknowledging their experiences, opinions, and concerns.
- **Use positive and encouraging language:** Offer praise, acknowledge achievements, and provide constructive feedback in a respectful manner.
- **Repeat and rephrase:** This helps reinforce understanding and ensures that seniors grasp the key messages you are conveying.
- **Be aware of ageism:** All seniors have diverse needs, knowledge, and skills. Although there are some similarities across generations, avoid falling into the trap of treating seniors' according only to their age and not to their personalities.
- **Humour:** Using humour can be a powerful tool when teaching seniors, as it can increase engagement, create a positive learning environment, and enhance memory retention. Ensure that your humour is appropriate for the audience. Consider the cultural background, sensitivities, and preferences of the seniors you are teaching. Avoid offensive or controversial jokes and focus on light-hearted, inclusive humour that everyone can enjoy. Use humour that seniors can relate to based on their life experiences. Jokes about ageing, generational differences, or common situations faced by seniors can resonate well. Share funny anecdotes or personal stories related to the topic you are teaching. These stories can provide a humorous and relatable context for the subject matter, making it more memorable and enjoyable for seniors.

## 4.2. FOSTERING PARTICIPATION AND MOTIVATION

To be engaged, older students need to feel that they are in an environment where they are accepted and affirmed. Trainers should create a warm and inviting classroom. In order to foster participation, they should ensure that everyone has enough space to speak and that everyone listens. You can allocate turns so each participant speaks when indicated. Or you can indicate when an activity is halfway finished, allowing those who didn't express themselves to do so. It is important to establish classroom norms and protocols that guide trainees to:

- Contribute
- Stay on task
- Help each other
- Encourage each other
- Share
- Solve problems
- Give and accept feedback from peers





## ICEBREAKERS

You can use icebreakers to create a warm environment, as these activities help people get to know one another. You can also use them to help seniors get acquainted with the course content and expectations.

### **ICEBREAKER no 1: Find a participant who**

In a paper, write some sentences such as “Find a participant who has a Facebook profile” or “Find a participant who has a tablet” or “Find a participant who has installed an antivirus”. Distribute the papers around. Trainees have to ask each other questions in order to find the participant that suits the description.

### **ICEBREAKER no 2: Two truths, One lie**

Participants tell two truths and one lie about themselves. Ex: “I have won a mathematics prize”, “I have been to Japan” etc. The others have to find the lie. The trainer can also participate.

Motivation will be fostered as a result of adapted training, interactive material, relevant thematic, and a participative environment.

## 4.3. IMPROVING MEMORY AND CONCENTRATION

Improving concentration and memory in seniors taking a digital course requires specific strategies tailored to the online learning environment.

- **Create a conducive learning environment:** Ensure the learning environment is quiet, well-lit, and free from distractions. Seniors should have a comfortable chair and a clutter-free workspace to enhance their focus and concentration.
- **Minimize distractions:** Encourage seniors to turn off notifications on their devices, close unnecessary tabs or applications, and mute or silence their phones to minimize distractions while engaging in the digital course.
- **Practice retrieval and self-testing:** Retrieval practice involves actively recalling information from memory rather than passively reviewing it. Encourage seniors to quiz themselves on key concepts or use flashcards to test their knowledge.
- **Utilize mnemonic techniques:** Seniors can use acronyms, visualization techniques, or association strategies to remember complex information. Use as many practical exercises as possible, as it provokes active learning and simplifies memorizing.
- **Practice self-care:** Seniors should prioritize self-care to support their overall cognitive function. Adequate sleep, regular exercise, and a healthy diet can positively impact memory and concentration. Encourage them to manage stress levels through relaxation techniques or activities they enjoy.



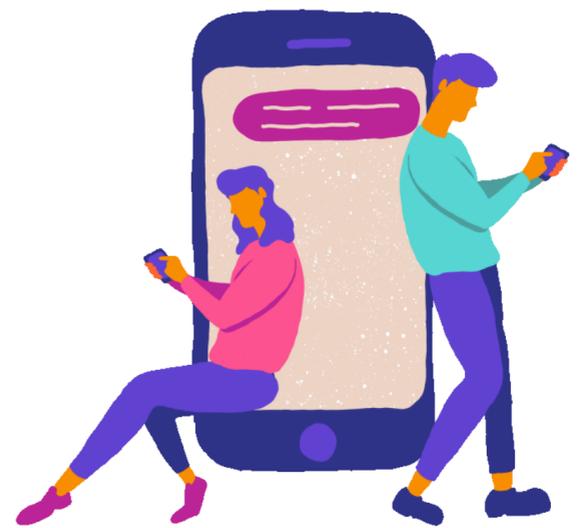
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## 4.4. FOSTERING SOCIAL LEARNING

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**Social learning** for adults refers to the process of acquiring knowledge, skills, and behaviours through interactions and collaboration with others. It recognizes that learning is not limited to individual efforts but is deeply influenced by social and interpersonal dynamics. Here is a summary of the main social learning methods:

- **Group discussion:** Group discussions allow seniors to share their thoughts, opinions, and experiences related to the subject being taught.
- **Cooperative learning activities:** Requiring seniors to work in teams or pairs to accomplish a task allows them to build team spirit and foster cooperation and sharing skills.
- **Online communities and forums:** If seniors feel comfortable with ICT communication tools, create online forums or a WhatsApp group so they can interact between them, share resources, and engage in discussions related to their learning interests. This allows for social learning to take place virtually, fostering connections among seniors who may not be geographically close.
- **Peer-to-peer learning:** The idea is to create collective intelligence. The principle is simple: learners acquire knowledge not only from a trainer who shares all his or her “wisdom”, but also from their peers. Each learner is both a giver and a receiver of knowledge. They work with their colleagues to solve a problem based on a variety of information.



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## 4.5. ENVIRONMENTAL FACTORS

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Overcoming environmental barriers when teaching adults is crucial to creating a supportive and effective learning environment. Here are strategies to address common environmental barriers:

- **Physical Environment:**
  - Ensure the learning space is comfortable, well-ventilated, and free from distractions. Arrange seating to promote interaction and engagement.
  - Address any physical accessibility issues, such as ramps or elevators, for individuals with mobility challenges.
- **Technological Infrastructure:**
  - Provide technical support and training for adults who may not be familiar with the technology used in the learning environment.
  - Have backup plans in case of technical issues, such as alternative communication methods or materials.
- **Accessibility:**
  - Implement accommodations for learners with disabilities, such as providing accessible materials, sign language interpreters, or closed captioning for videos.
  - Conduct accessibility assessments to identify and rectify any barriers in the learning environment.
- **Cultural Sensitivity:**
  - Promote cultural sensitivity and inclusivity in instructional materials and interactions.
  - Encourage open dialogue and mutual respect among participants with diverse backgrounds and perspectives.
- **Flexibility:**
  - Offer flexible scheduling options, including evening or weekend classes, online courses, or asynchronous learning, to accommodate different adult learners' needs.
  - Allow for self-pacing and individualized learning plans when possible.

# ENVIRONMENTAL FACTORS

- **Resources and Materials:**
  - Ensure that learning materials are current, relevant, and readily available to all learners.
  - Provide multiple formats (print, digital, and audio) to cater to various learning preferences.
- **Social Environment:**
  - Foster a supportive and inclusive learning community through icebreakers, team-building activities, and group discussions.
  - Establish clear communication channels for learners to connect with instructors and peers.
- **Motivation and Engagement:**
  - Relate learning objectives to adults' personal and professional goals to boost motivation.
  - Incorporate interactive and hands-on activities to keep learners engaged.
- **Assessment and Feedback:**
  - Use fair and transparent assessment methods that align with learning goals.
  - Provide prompt and constructive feedback to help learners track their progress and make improvements.
- **Safety and Well-being:**
  - Create a safe and respectful learning environment where learners feel comfortable expressing themselves.
  - Establish guidelines for appropriate behaviour and conflict resolution.
- **Crisis Preparedness:**
  - Develop emergency plans and communication protocols to address unexpected events or crises.
  - Ensure learners are aware of emergency procedures and support available.
- **Transportation and Logistics:**
  - Provide information on transportation options and parking facilities for learners who need to commute.
  - Consider remote or hybrid learning options to reduce transportation barriers.
- **Financial Support:**
  - Explore financial aid options or scholarships to help adults overcome financial barriers to education.
  - Provide information on cost-effective resources, such as open educational resources (OER) or low-cost textbooks.
- **Community Partnerships:**
  - Collaborate with local organizations, employers, or community groups to provide resources, support, and networking opportunities for adult learners.

By addressing these environmental barriers and tailoring the learning environment in a proactive way, it answers the needs of adult learners, instructors, and educational institutions. In that way, we create a more accessible and inclusive setting that promotes successful learning outcomes.

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## 4.6. TEACHING RESOURCES

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BTaking into account the challenges related to ageing that we underlined, here are a few tips on how to adapt your teaching resources.

- **Clear and concise material:** Seniors may benefit from simplified language and clear instructions. Avoid complex jargon or technical terms and opt for plain language explanations. Do not hesitate to provide additional explanations and definitions for the mentioned concepts and tools.
- **Multimedia integration:** Visual aids can help clarify concepts, while audio resources can accommodate different learning preferences. Use larger fonts and high contrast to enhance readability. Ensure that the sound is loud, clear and audible enough.
- **Real-world relevance:** Relate the content to seniors' everyday experiences and real-world examples. Highlight practical applications to foster interest and relevance.
- **Chunking information:** Seniors may find it easier to process and retain information when it is organized into smaller sections or modules, such as in the MILEAGE micro-lessons.
- **Reinforce key points and repeat:** Emphasize important concepts and repeat essential information throughout the resources.
- **Provide flexible learning options:** Offer a range of learning materials and formats, such as printed handouts, digital resources, or audio recordings, to accommodate different preferences and learning styles.



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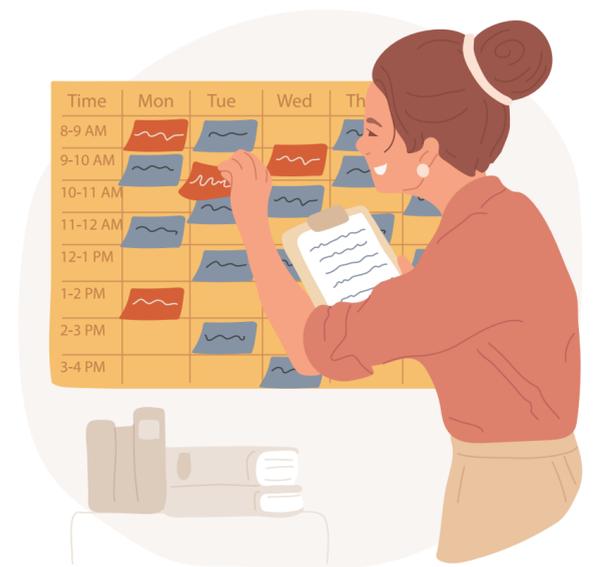
## 4.7. HOW TO DEVELOP CURRICULUM

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Creating a digital literacy curriculum for seniors requires careful consideration of their unique needs, abilities, and learning styles. Here are a few steps you can follow when developing your curriculum.

- **Conduct a needs analysis** (e.g., interviews, questionnaires) in order to determine their ICT level, understand the challenges they face, and understand their expectations in terms of learning.
- **Define learning objectives** that are measurable, attainable, and relevant.
- **Identify specific topics:** You can choose these topics among our MILEAGE curriculum resources, which offer you different micro-lesson modules that address specific concepts without overwhelming the learners.
- **Include practical exercises and activities** that allow seniors to apply their newly acquired skills. You can select among different resources in our MILEAGE curriculum.
- **Emphasize online safety:** You can use our modules on scams, protecting personal information, creating strong passwords, and understanding privacy settings on various platforms
- **Provide ongoing support:** Be available for questions during and after classes. Establish dedicated communication channels according to seniors' preferences (email, phone, WhatsApp, group chat on other messengers). Give them enough material and resources, and take into account that many seniors appreciate printed material.

Remember to approach the curriculum development process with empathy and patience, considering the diverse backgrounds and varying levels of technological familiarity among seniors. Be open to making adjustments as necessary.



## 4.8. ASSESSMENT AND EVALUATION METHODS

Assessing the effectiveness of a digital course for seniors involves evaluating various aspects of the course to determine its impact on learning outcomes and the user experience.

- **Assessment goals:** Determine what aspects of the course you want to evaluate, such as content comprehension, usability, engagement, or overall satisfaction.
- **Assessment methods and tools:** Common assessment methods include surveys, interviews, quizzes, and observation. Consider using a combination of methods to gather comprehensive data. Ensure the assessment tools are clear, concise, and easy for seniors to understand and complete.
- **Assess content comprehension:** Evaluate how well seniors understand and retain the course content. This can be done through quizzes or tests with multiple choices or open-ended questions.
- **Usability and accessibility:** Consider factors such as ease of navigation, readability of text and visuals, clarity of instructions, and availability of support features. Gather feedback on any challenges or barriers seniors may have encountered.
- **Engagement and participation:** This can be assessed through tracking participation rates and completion rates of modules or activities.
- **Direct feedback from seniors:** Ask about their overall experience, their satisfaction, their abilities, and areas for improvement. Encourage them to provide specific examples and suggestions.
- **Improvements and iteration:** Make necessary improvements to the digital course to address any identified issues or areas for enhancement. Revise and refine the course.



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## 5. PLANNING AND PERFORMING THE LEARNING SESSION WITH SENIORS

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### 5.1. Teaching methods.

Correct and adapted teaching methods are essential for the successful acquisition of new knowledge and skills. These methods are intended to support seniors with different interests, abilities, and learning styles to create a safe, productive, and enjoyable learning environment. An appropriately chosen method contributes to facilitating the teaching process and motivates students to achieve the goal.

The important factor is the proper choice of technique to be used while working with adults and Seniors, including the way of communicating with seniors. It's important to use language that is respectful, clear, and considerate of their needs and preferences. Seniors may have varying degrees of hearing loss or cognitive changes. Avoid using jargon, complex terminology, or excessive technical language. Use simple and straightforward sentences to ensure understanding.

Seniors may take a bit longer to process information or respond. Be patient and allow them sufficient time to comprehend and formulate their thoughts. Avoid interrupting or rushing them during conversations. Show attentiveness and be willing to listen actively.

Use positive language and provide encouragement during conversations and interactions. Focus on their strengths and accomplishments rather than any limitations they may have.

Get to know each senior individually and adapt your teaching method and language to their preferences. Above all always show the respect.

#### **Mentoring**

Mentoring is a way of learning that is based on the experience of the mentor and their mutual relationship with the mentee. The mentor's knowledge and influence help the mentee achieve their goals. Such relationships are usually long-term and based on mutual respect, listening, and cooperation. The interaction between mentor and mentee is conducted through dialogue.

#### **How to use it to work with Seniors**

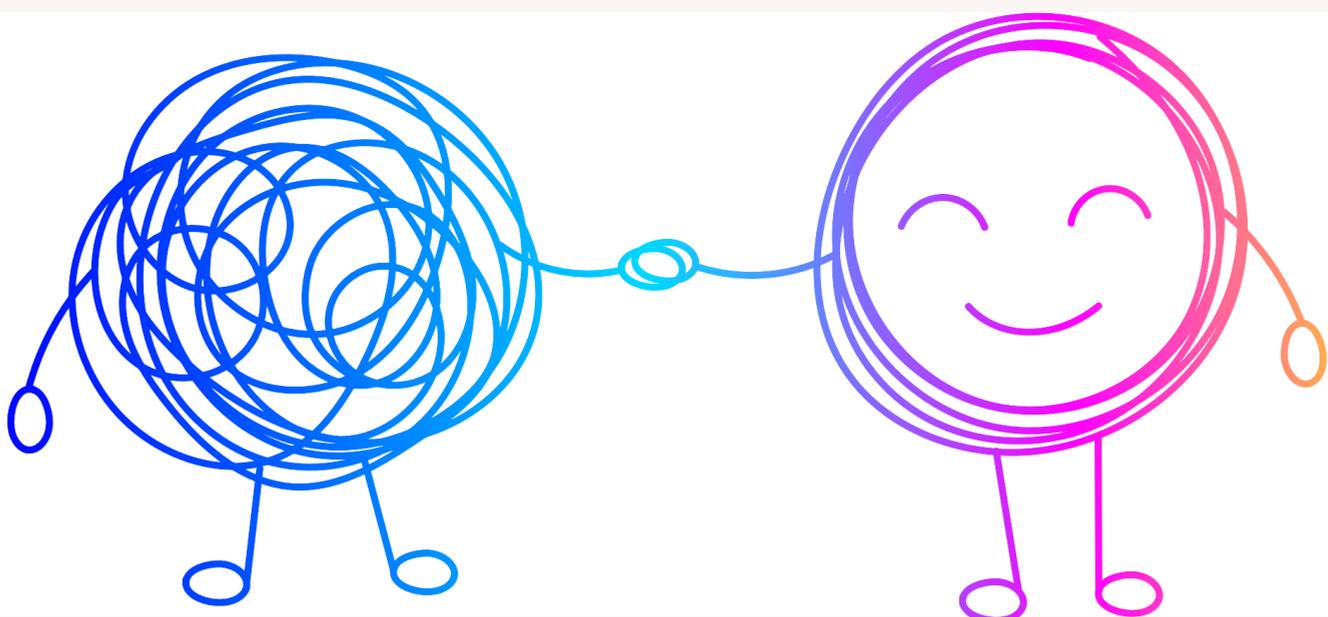
First of all, it is important to understand that seniors have unique life experiences with education that could be very different from those of younger people. Mentors need to know their abilities, strengths, and weaknesses in order to adapt the methods.

Another essential point is to provide feedback, positive or negative. Whenever a senior is successful in learning, their progress needs to be acknowledged. On the contrary, if something goes wrong, it is necessary to point out the mistake. This is the only way a senior can move forward in their learning.

#### **Coaching**

Coaching consists of a dialogue between the coach and the senior student. In the initial phase, it is necessary to clarify what is important to the senior and what his values and goals are. The difference between mentoring and coaching is that a mentor is someone who shares their knowledge, skills, and experience to help others in their further development. On the other hand, a coach is someone who provides guidance to a senior on their goals and helps them reach their full potential. Coaching is less directive and more structured.

Coaching seniors has its specifics due to their unique needs and circumstances.



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## 5.1. How to use coaching to work with Seniors

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The key points to keep in mind when coaching seniors, are:

- Empathy and respect. Seniors have a wealth of life experiences and knowledge. They need coaching with empathy, acknowledging and respecting their wisdom and perspective. It is essential to understand that they may have different values, goals, and priorities than younger individuals.
- Tailor-made coaching. A coach should customize their coaching approach to suit seniors' unique circumstances.
- Health and well-being. Seniors may have physical limitations or other health issues that may influence their learning. A coach should prioritize their well-being and safety during coaching sessions. Any mobility, sensory, or cognitive impairments they may have should be considered and the coaching techniques should be adjusted accordingly.
- Communication. Seniors may have different communication preferences or limitations. A coach should be patient and attentive, allowing them time to express their thoughts. It is necessary to use a clear language, and if necessary, to adapt the communication style to accommodate any hearing or vision difficulties.
- Life changes. Seniors often face significant life changes, such as retirement, the loss of loved ones, or changing family dynamics. A coach should be aware of their emotional situation and support them through these challenges. This is also connected with loneliness and social isolation, which can be common among seniors. A coach could encourage social connections and provide opportunities for them to engage with their communities.
- Long-term planning. The assistance should be clearly planned for a specific period of time. Coaching is usually provided long-term, with a clear strategy.
- Flexibility and patience. Seniors may require more time and flexibility in their coaching process. A coach should be patient, adaptable, and willing to adjust the approach as needed. The progress may be slower, but it is focused on creating a supportive and comfortable environment.

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## Peer-to-peer learning

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Peer-to-peer learning among seniors is a valuable educational approach that capitalizes on the wisdom and life experiences of older adults to facilitate learning within their peer group. This method has gained recognition for its numerous benefits in enhancing the well-being and personal development of seniors.

One of the most significant advantages of peer-to-peer learning for seniors is its potential to foster social engagement and combat feelings of loneliness and isolation. As individuals age, social connections can become increasingly important for maintaining mental and emotional health. Participating in peer-led learning activities provides seniors with opportunities to build new relationships, share stories, and bond over common interests, ultimately promoting a sense of belonging and community. Peer-to-peer learning creates a comfortable and supportive learning environment for seniors. Many older adults feel more at ease when learning from their peers who share similar life experiences, challenges, and perspectives. This comfort encourages active participation and open communication, leading to more meaningful and enriching learning experiences.

Another key benefit of this approach is that it taps into the vast reservoir of knowledge and expertise that seniors possess. Throughout their lives, older adults have accumulated a wide range of skills, insights, and practical wisdom. Peer-to-peer learning allows them to share this valuable knowledge with others, contributing to the overall growth and development of the group. Peer-led learning is also highly adaptable, enabling seniors to focus on topics that align with their interests and needs. Whether it's exploring new hobbies, discussing health and wellness, or delving into personal development, the content can be tailored to cater to the specific preferences of the participants. This personalization enhances engagement and motivation among seniors. Furthermore, engaging in peer-to-peer learning can have a positive impact on cognitive health. The mental stimulation and active engagement associated with learning can help seniors maintain cognitive function, improve memory, and delay the onset of cognitive decline. It underscores the idea that learning is a lifelong endeavor with tangible cognitive benefits. In some cases, peer-to-peer learning extends beyond generational boundaries through intergenerational programs.

This approach encourages seniors to share their life experiences and insights with younger generations, fostering mutual understanding, empathy, and respect between age groups. It strengthens the sense of community and bridges the generation gap.

Peer-to-peer learning for seniors offers a range of advantages, from enhancing social connectedness and promoting mental well-being to utilizing the wealth of knowledge and experiences seniors bring to the table. It is a dynamic and inclusive educational approach that empowers older adults to continue their intellectual and personal growth while enriching the lives of their peers and communities.

### **Social learning.**

Social learning for seniors is a dynamic and highly effective approach to education and personal development that recognizes the unique needs and experiences of older adults. This approach emphasizes the role of interaction and collaboration among seniors in the learning process, offering a wealth of benefits tailored to this demographic. It creates a vibrant community of learners, acknowledging that older adults have a wealth of life experiences, knowledge, and wisdom to share. It encourages seniors to come together to learn from one another, fostering a sense of camaraderie and mutual support. This not only combats social isolation, which can be a prevalent issue among seniors, but also creates a nurturing environment where participants feel valued and respected. One of the key advantages of social learning for seniors is the comfort it offers. Seniors often feel more at ease learning from their peers who understand the unique challenges, interests, and life stages they are experiencing. This comfort factor encourages active participation and open communication, enabling more profound and meaningful learning experiences. This approach utilizes the wealth of knowledge and expertise that seniors have accumulated throughout their lives. Whether it's sharing personal stories, skills, or insights, social learning allows seniors to actively contribute to the enrichment of the group. In doing so, they not only empower themselves but also provide invaluable resources to their peers. The flexibility of social learning is another noteworthy aspect. It allows seniors to choose topics and activities that align with their interests and needs, making the learning experience more engaging and personally relevant. Whether it's exploring new hobbies, discussing health and wellness, or delving into cultural and historical topics, the content can be tailored to cater to the specific preferences of the participants. This technique promotes cognitive health and mental well-being. Engaging in active learning and participating in group discussions can help seniors maintain cognitive function, improve memory, and foster a sense of purpose. It underscores the notion that learning is a lifelong journey that can have tangible cognitive benefits. Using it helps to extend beyond generational boundaries, fostering intergenerational connections. Seniors can share their life experiences, insights, and wisdom with younger generations, creating a bridge between age groups. This intergenerational exchange not only enhances understanding but also strengthens a sense of community and mutual respect. Social learning for seniors is a dynamic and inclusive educational approach that recognizes the unique strengths and needs of older adults. By bringing seniors together to learn from each other, it provides a sense of community, mutual support, and personal growth. It combats social isolation, fosters cognitive well-being, and celebrates the wealth of knowledge and life experiences seniors bring to the table.



This approach encourages seniors to share their life experiences and insights with younger generations, fostering mutual understanding, empathy, and respect between age groups. It strengthens the sense of community and bridges the generation gap.

Peer-to-peer learning for seniors offers a range of advantages, from enhancing social connectedness and promoting mental well-being to utilizing the wealth of knowledge and experiences seniors bring to the table. It is a dynamic and inclusive educational approach that empowers older adults to continue their intellectual and personal growth while enriching the lives of their peers and communities.

### Role-playing

Learning by role-playing can be an engaging and effective approach for seniors to acquire new skills, enhance cognitive abilities, and promote social interaction.

Role-playing provides seniors with an opportunity to practice and develop various skills. They can engage in simulated scenarios that reflect real-life situations they may encounter, such as problem-solving, decision-making, communication, or conflict resolution. By actively participating in these scenarios, seniors can refine their abilities and gain confidence in handling similar situations in their daily lives.

This method stimulates cognitive functions such as memory and attention. Seniors must recall information, process it, and apply it in a practical context during role-playing exercises. This mental engagement can enhance cognitive flexibility, critical thinking, and creativity.

Role-playing allows seniors to explore and express different emotions in a safe environment. By assuming different roles, they can experiment with a range of feelings and learn to manage them effectively. It provides an opportunity to connect with others, share experiences, and build relationships.

The method also enables seniors to step into the shoes of others and understand different perspectives. This promotes empathy and compassion as they consider the motivations, emotions, and needs of the characters they portray. By experiencing various viewpoints, seniors can broaden their understanding of the world around them.

Role-playing can be a source of enjoyment and entertainment for seniors. It provides an outlet for creativity, imagination, and playfulness. Engaging in enjoyable activities contributes to overall well-being, reduces stress, and promotes a positive mindset.

To facilitate effective learning through role-playing with seniors, it is important to create a supportive and inclusive environment and provide clear instructions, encouragement, and constructive feedback. The complexity of scenarios must suit individual abilities and interests. Sessions should be interactive, dynamic, and flexible to meet the specific needs and preferences of the participants.



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## 5.2. Setting the goals

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Setting goals is an essential part of the learning process, as it provides direction, motivation, and a sense of accomplishment.

When setting goals, factors such as prior knowledge, learning style, and cognitive abilities should be considered. An educator should involve seniors in the goal-setting process to empower them and ensure their goals are common. It is necessary to discuss their learning objectives, interests, and any specific areas they wish to focus on.

Goals must be clear, specific, and measurable to provide a clear target for seniors to work towards. The educator should help them specify goals in concrete terms, such as “Improve computer skills to send emails independently”. Such goals are easy to track and evaluate. It is also advisable to break down goals into milestones. For seniors, smaller milestones can provide a sense of progress and make the learning process more manageable.

All the set goals must be realistic within the given timeframe. A poster with a colourful calendar and highlighted milestones and goals could be a great help in monitoring progress. The goals should not be binding and should reflect the situation through flexibility and adaptability.

Any milestone or goal reached should be confirmed in order to create a supportive and encouraging learning environment.



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## 5.2. Real-world scenarios

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Using real-world scenarios as a teaching method for seniors can be highly effective in enhancing their learning experience and practical application of knowledge. The activities should be engaging, meaningful, and applicable to their everyday lives. By connecting learning to real-world contexts, seniors can see the practical relevance of their education and experience a more enriching and empowering learning journey.

**Problem-solving activities:** Present seniors with real-world problems or challenges relevant to their lives. This could include scenarios like logging in to social networks, storing data, or addressing common issues encountered in daily life. Encourage seniors to brainstorm solutions, weigh pros and cons, and make informed decisions. This approach helps them develop critical thinking skills and practical problem-solving strategies.

**Guest speakers and experts:** Invite guest speakers or subject matter experts to share their real-world experiences and expertise with seniors. These speakers can offer insights, practical tips, and first-hand knowledge related to specific topics. Seniors can benefit from hearing personal stories and gaining perspectives from professionals who have applied their skills and knowledge in real-world contexts.

**Case studies and storytelling:** Present real-life case studies or stories that illustrate relevant concepts, challenges, and solutions. Engage seniors in discussions, analyse the scenarios, and draw connections between the lessons learned and their own lives.



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### 5.3. Collaboration and social interaction

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Collaboration and social interaction are vital components when teaching seniors, as they promote engagement, foster a sense of community, and enhance the learning experience. By fostering collaboration and social interaction, seniors can enjoy a sense of community, mutual support, and an enhanced learning experience. This can be done through group discussions, peer learning, cooperative projects, mentoring and intergenerational programs, group activities and workshops, community engagement, social events, or communication platforms.



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### 5.4. Feedback and support

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Providing support and feedback while teaching seniors is essential for their growth, motivation, and overall learning experience. Supporting and providing feedback to seniors is a continuous process.

One of the main ways to support seniors is to encourage questions and active participation. Create a safe and encouraging environment where seniors feel comfortable asking questions, seeking clarification, and actively participating in discussions or activities. Encourage their curiosity and provide opportunities for them to share their thoughts, ideas, and experiences. Actively listen to their input and validate their contributions.

Feedback, even negative feedback, is an important element in the learning journey. Feedback should always be understandable and shared with the senior in real time, as long as it is relevant.

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### 5.6. Creation of a positive and inclusive learning environment.

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The learning environment is crucial to seniors engagement, motivation, and overall learning experience. Treat seniors with respect, dignity, and empathy. Value their experiences, knowledge, and perspectives. Create an atmosphere where they feel valued, heard, and appreciated. Encourage mutual respect among learners and foster a sense of belonging.

Promote collaborative learning experiences where seniors can work together, share ideas, and support one another. Create opportunities for group discussions, small group activities, and peer learning. Encourage seniors to learn from each other's experiences and perspectives.

Employ teaching strategies that accommodate diverse learning styles, abilities, and preferences. Use a variety of instructional methods, such as visual aids, hands-on activities, discussions, and multimedia resources. Incorporate technology and assistive devices to support seniors with specific needs.

Provide learning materials and resources that are accessible and suitable for seniors. Ensure font sizes are large and legible, use clear visuals, and consider the readability of printed materials. Offer materials in alternative formats, such as audio recordings or digital versions, to accommodate different learning preferences.

Offer frequent and specific positive reinforcement to seniors. Acknowledge their efforts, achievements, and progress. Celebrate their successes and milestones, both big and small. Recognize and highlight their strengths, fostering a positive and encouraging atmosphere.

Invest in professional development opportunities for educators and trainers working with seniors. Stay updated on best practices, research, and advancements in senior education. Continuously expand your knowledge and skills to provide the best possible learning environment.

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## 5.7. Useful tips

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### **Opportunities for practice**

By incorporating opportunities for practice, you enable seniors to actively engage with the material, reinforce their learning, and develop their skills and confidence.

Hands-on activities allow seniors to apply what they have learned. For example, if teaching technology skills, provide opportunities for seniors to practice using computers, smartphones, or specific software applications.

Among other opportunities for practice, there are problem-solving exercises, case studies, role-playing, group projects, quizzes and assessments, skill demonstrations, or excursions.

### **Visual aids and demonstrations**

Using clear and visually appealing materials, such as charts, diagrams, pictures, or videos, helps seniors better understand concepts and retain information. Demonstrations provide concrete examples and practical applications, making the learning experience more engaging and relatable. Visual aids and demonstrations cater to different learning styles, enhance comprehension, and support seniors in their learning journey.

### **Time of the sessions**

When determining the time of the sessions, it is important to consider their preferences and needs. Seniors may have different energy levels and attention spans throughout the day, so scheduling sessions during their peak times of alertness and focus can enhance engagement. Offering a balance between shorter sessions to prevent fatigue and longer sessions for in-depth learning can cater to their needs and optimize their learning experience.

### **Up-to-date on digital technologies**

Staying up-to-date on digital technologies when teaching seniors digital skills is essential for effective instruction. Familiarizing yourself with the latest devices, software applications, and online tools allows you to provide relevant and comprehensive guidance. It enables you to address common challenges, troubleshoot technical issues, and offer valuable tips and resources, ensuring seniors gain the necessary skills to navigate the digital world confidently and independently.

### **Flexibility and adaptability**

Flexibility and adaptability are crucial when teaching seniors. Be open to modifying your teaching methods, pacing, or content delivery to accommodate their requirements. Adjusting the curriculum, materials, or activities ensures that seniors can engage effectively, learn at their own pace, and have a meaningful learning experience.

### **Opportunities for feedback**

Regular check-ins, individual or group discussions, and informal assessments allow seniors to reflect on their progress, ask questions, and receive constructive guidance. Feedback promotes continuous improvement, boosts confidence, and helps address any challenges or misconceptions seniors may have, fostering a supportive and effective learning environment.

### **Positive reinforcement**

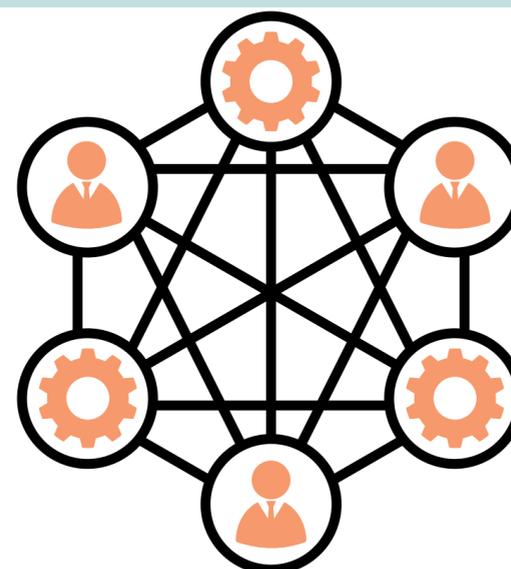
Positive reinforcement is a powerful tool. Praising their efforts, achievements, and progress can boost their confidence, motivation, and overall engagement in the learning process. By highlighting their strengths and providing specific feedback on their successes, seniors feel valued and encouraged to continue their learning journey with enthusiasm and a sense of accomplishment.

### **Assessment possibilities**

Various assessment possibilities can be used to evaluate progress and understanding. These may include quizzes, written assignments, presentations, group projects, practical demonstrations, or performance-based assessments. Tailoring assessments to seniors' abilities, providing clear guidelines and feedback, and considering alternative assessment methods can ensure a comprehensive and fair evaluation of their learning outcomes.

# 6. Learning techniques

Learning techniques are specific strategies and methods that individuals employ to enhance their ability to acquire, retain, and apply knowledge effectively. These techniques can be valuable for students, professionals, and anyone seeking to expand their skill set or deepen their understanding of various subjects.



## 6.1. Active learning

Active learning is an effective learning technique that promotes engagement, participation, and critical thinking. It involves hands-on activities, discussions, problem-solving, and collaborative projects. By actively participating in the learning process, seniors are able to apply their knowledge, share their experiences, and contribute to their own learning. Active learning enhances motivation, retention of information, and the development of practical skills, making it a valuable approach for seniors to actively and meaningfully engage in their learning journey.

## 6.2. Mnemonics

Mnemonics improve memory and recall. Mnemonics involve creating associations or mental shortcuts to help learners remember information more easily. This could include using acronyms, visual imagery, rhymes, or chunking information into smaller, manageable parts. By leveraging these memory aids, seniors can enhance their retention and retrieval of knowledge, making learning more efficient and enjoyable. Mnemonics can be particularly helpful for learners who may face challenges with memory or information overload.

## 6.3. Visualization

Visualization is a learning technique that involves creating mental images or visual representations of information to enhance understanding and memory retention. When using visualization, learners, including seniors, mentally picture concepts, ideas, or processes in their minds. This technique taps into the brain's ability to process visual information effectively. By engaging the visual cortex, visualization helps seniors form stronger connections and associations with the material being learned. Visualization can be applied across various subjects, from imagining historical events to visualizing scientific concepts or even mentally rehearsing steps in a task. It fosters comprehension, improves memory recall, and makes learning more engaging and memorable for seniors.

## 6.4. Repetition and practice

Repetition and practice promote mastery and retention of information, particularly for seniors. Repetition involves revisiting and reviewing material multiple times to reinforce learning and strengthen memory. Practicing refers to actively engaging in tasks or activities related to the subject matter, allowing seniors to apply what they have learned and develop their skills.

Through repetition, seniors have more opportunities to encode information into their long-term memory, making it easier to recall later. It helps solidify concepts, vocabulary, and procedures, ensuring they become ingrained and readily accessible. Repetition can take various forms, such as re-reading, summarizing, or quizzing oneself on the material.

Practicing complements repetition by providing seniors with hands-on experience and real-world application of knowledge. It allows them to refine their skills, build confidence, and develop fluency. Practice can involve solving problems, completing exercises, engaging in simulations, or participating in role-playing scenarios relevant to the subject matter.

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## 6.5. Technology-assisted learning

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Technology-assisted learning, also known as e-learning or digital learning, involves the use of technology tools and resources to facilitate the learning process. It has become increasingly prevalent and beneficial for seniors as a learning technique. Some key aspects of technology-assisted learning for seniors are:

- **Access to Information:** Technology enables seniors to access a vast amount of information and educational resources from various online platforms, websites, and digital libraries. This allows them to explore a wide range of topics, access up-to-date content, and engage in self-directed learning.
- **Multimedia content:** technology offers multimedia elements such as videos, interactive presentations, animations, and audio recordings. These resources can enhance seniors' understanding of complex concepts, provide visual and auditory stimulation, and cater to different learning styles.
- **Personalized learning:** technology-assisted learning often includes adaptive learning systems and personalized learning platforms. These tools can assess seniors' abilities and provide customized learning paths, adjusting the content and pace to match their individual needs and progress.
- **Communication and collaboration:** Online platforms and communication tools facilitate interaction and collaboration among seniors. They can participate in discussion forums, engage in virtual group projects, or connect with peers and experts from different locations. This fosters social interaction, knowledge sharing, and a sense of community.
- **Skill Development:** Technology offers interactive simulations, virtual labs, and gamified learning experiences that allow seniors to practice and develop specific skills in a safe and engaging environment. It can be particularly useful for learning digital skills, computer literacy, or utilizing specific software applications.
- **Flexibility and Convenience:** Technology-assisted learning provides seniors with the flexibility to learn at their own pace and convenience. They can access learning materials and resources whenever and wherever they choose, accommodating their personal schedules and preferences.
- **Monitoring and Feedback:** Technology platforms often incorporate assessment features, quizzes, and progress tracking tools. These enable seniors to monitor their own progress, receive immediate feedback on their performance, and identify areas that may require further attention or review.
- **Assistive Technologies:** Technology can assist seniors with specific needs through the use of assistive devices, screen readers, magnifiers, and other accessibility features. These tools ensure equal access to learning materials and resources for seniors with visual, hearing, or mobility impairments.

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## 6.6. Multi-sensory learning

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Multi-sensory learning engages multiple senses simultaneously to enhance learning. It incorporates visual aids, auditory cues, hands-on activities, and movement to reinforce learning and memory retention. By stimulating different senses, it creates a richer and more immersive learning experience for seniors, improving comprehension and engagement. The key aspects are: engaging senses, reinforcing learning, visual elements, auditory elements, movement and kinesthetic learning, cross-modal associations, and personalization.



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## 6.7. Personalized learning

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Personalized learning is a learning technique that tailors instruction to meet the individual needs, preferences, and pace of each learner, including seniors. It involves adapting content, methods, and assessment to align with the learner's specific goals and abilities. Personalized learning empowers seniors to take ownership of their learning, promotes self-directed learning, and increases engagement and motivation. It recognizes that seniors have unique learning styles, prior knowledge, and interests, allowing for customized learning paths and targeted support to maximize their learning outcomes.

# 7. Scenarios, micro lessons and digital skills

This report focuses on the utilization of scenarios and digital skills in the context of media and information literacy (MIL) and the enhancement of digital competences for active ageing. The report explores the concept of scenarios, provides real-life examples, discusses the importance of digital skills, highlights the education of seniors in new media, and presents a framework catalogue of digital competences. Scenarios are a Tool for Active Learning

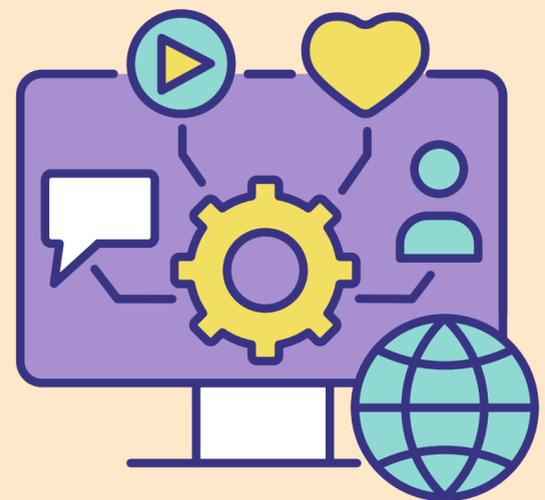


## 7.1. Digital skills

Digital skills are essential for seniors to effectively utilize digital technologies and participate in the digital society. These skills enable seniors to access information, communicate with others, and engage in various online activities.

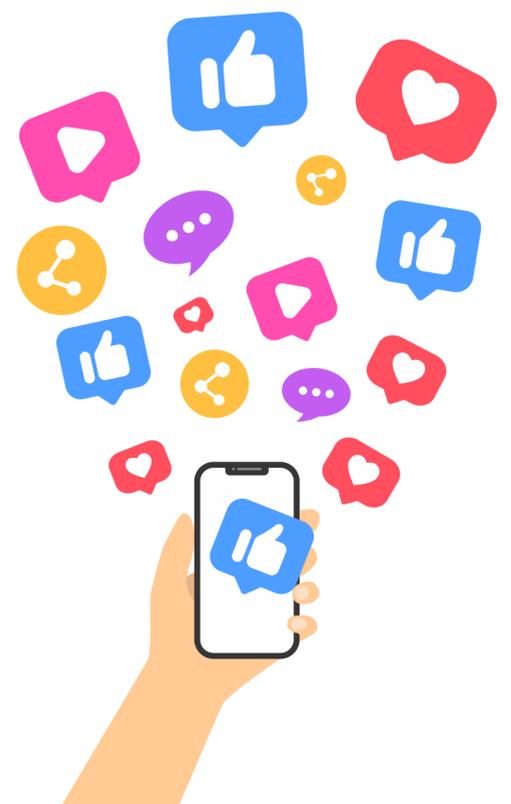
Digital skills encompass a range of competencies, including:

- Basic digital literacy: Understanding and using digital devices, operating systems, and software.
- Media literacy: Critically analysing and evaluating media content for accuracy, bias, and credibility.
- Online communication: Effectively communicating and collaborating with others through digital platforms.
- Online safety and privacy: Protecting personal information and maintaining online security.
- Critical thinking and problem-solving: Applying logical reasoning and analytical skills to assess digital information and navigate complex issues.
- Adaptability to new technologies: Being open to learning new technologies and adapting to digital advancements.



## 7.2. Education of seniors in new media

Providing education on new media platforms and tools is crucial for empowering seniors in the digital age. Seniors may have limited exposure to emerging technologies and require support to navigate the evolving media landscape effectively. Tailored educational programs and workshops can address the specific needs of seniors, offering training on digital devices, social media platforms, online security, and other relevant topics. These initiatives provide seniors with the necessary knowledge and skills to become digitally literate and confident users of media and technology.





## 7.4. Micro-lessons

Microlearning offers quick and practical answers to specific problems. This skill-based approach to learning delivers information in small, highly focused chunks, making it ideal for individuals who want to maximise knowledge retention in the shortest time possible. With microlearning, the knowledge you acquire is hands-on and directly relevant to your needs. And because microlearning goes hand in hand with online training, it eliminates constraints imposed by time and space.

Anyone can benefit from microlearning because the core of this approach entails short, highly focused, and highly applicable content. Regardless of one's age, educational background, or career, learners learn best when they feel that they've received a customised training solution – that is when the content is focused on skills needed in their daily lives, when it's informal, and when it's available at the point of need.

In today's digital landscape, where players' responsibilities continuously evolve, it is essential to ensure that seniors know how to behave and use proper measures to protect their data and themselves. Improving their digital literacy and skills play a crucial role in achieving this goal.

The learning process intends to increase seniors' ability to identify and avoid dangers associated with various online elements and risks. While fake news and digital misinformation affect people of all ages, studies have shown that seniors are more susceptible. The micro-lessons aimed at showing how those 'dangers' have been created, by whom, why, and for what purpose, to foster participants' ability to get a better grasp of the complexity of our society and be able to recognise them in the future. The MILEAGE program partners will use the MEDIA and INFORMATION LITERACY concept to develop the learning contents of the program. The program will empower them to defend themselves from 'different virtual dangers' (fake news, online scams, 'phishing') while being empowered in using ICT tools with confidence in every aspect of their life (e-government, social media, music and video in streaming...).

Seniors face pretty much the same risks online as everybody else – hackers have an ever-expanding array of tools to fleece users out of their money, steal user data, destroy devices, and spread dangerous files and scams across the web.

Some of the most common online threats facing seniors today include:

- **Malware:** A software designed to damage a computer, steal data, or financially exploit unsuspecting users. Common malware types include ransomware, trojans, and spyware.
- **Data breaches:** The release of personal information (such as email addresses, usernames, passwords, and even credit card numbers and social security numbers) to the general public and dark web servers. Recent high-profile data breaches have affected millions of social media users.
- **Scams:** Hackers are constantly coming up with new ways to deceive users into giving away their personal information and money, including scam emails, text messages, websites, social media accounts, and online dating profiles.
- **Identity theft:** Using another person's personal information (e.g., name, social security number, credit card, etc.) without permission.



**SCAM  
ALERT**

## Micro-lessons

Some of the most common online **fraud scams** are:

- **Romance scams:** Criminals pose as interested romantic partners on dating websites or social media and exploit seniors for money.
- **Lottery and charity scams:** Hackers appear to represent legitimate charities, lotteries, or sweepstakes and then convince seniors that they have won a contest or persuade them to make a donation.
- **Tech support scams:** Criminals claim to be tech support and flag a fake computer or mobile device issue. They offer to solve the problem by using a program to take over a device to gain personal information.
- **Grandchild scam:** Criminals pose as grandchildren and ask for financial assistance.
- **Government impersonation scam:** Criminals claim to be government employees and demand payment or personal information regarding taxes, social security, pensions, etc.

Scammers reach out to users via phone calls, text messages, email, and even plain-old snail mail. But one of the most common and dangerous techniques is called phishing. Phishing is the act of creating fake websites, phone numbers, or email addresses that mimic legitimate sources for the purpose of getting information, stealing money, or deploying malicious programs on user devices.

Nowadays, millions of phishing messages are sent every day via email, social media, or text messages (known as 'smishing'). These messages may inform you that you have money waiting for you, ask you to fill out a survey, or may even trick you into reimbursing a government or financial institution.

The learning program in detail:

Each lesson has a quite narrow and specific learning outcome, in line with the micro-learning principle. It offers a more organized and structured way to present those issues and risks and allows them to take their time reflecting and internalizing the information.



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## Overview on the lessons and their purpose

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### INSTANT Messaging and SOCIAL PLATFORMS

- What is instant messaging?
- What are its advantages? What are the main challenges in using it?
- How to choose the most suitable instant messaging application.
- How to use instant messaging safely and securely.



### HOW TO RECOGNIZE A FAKE PROFILE

- What a social profile is.
- What a fake social profile is.
- Reasons for creating a fake profile.
- How to recognize a fake profile.
- How common fake profiles are.
- How to prevent fake profiles.

### AVOID EMAILS SCAMS

- What are email scams
- The most popular types of scams
- How to protect yourself from scams
- Real examples of email scams



### DEBUNKING FAKE NEWS

- Learn about fake news and why it exists.
- Reflect on how our own opinions impact the way we evaluate information.
- Discuss and practice using criteria for evaluating the information you find online.
- Learn how to verify information found online before sharing it with others.

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## Overview on the lessons and their purpose

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### AVOID PHISHING

- What is phishing?
- How does phishing work?
- Types of Phishing You Need to Know to Stay Safe
- How will I know if I've been phished?
- How can you protect yourself from phishing?



### ONLINE PAYMENTS: PAYING ONLINE SECURELY

- What is online payment?
  - How does online payment work?
  - What are the benefits of online payments?
  - What are the different types of online payments?
- Is it safe to pay online and how to reinforce its security?

### ONLINE BANKING

- Accessing banking services via your technological devices
- What is online banking?
- What are its advantages?
- What are the main challenges in its use?
- What are the main services available online and how to access them?
- How to use online banking safely and with confidence?



### RULES FOR POLITE BEHAVIOUR WHEN COMMUNICATING WITH OTHER PEOPLE ON THE INTERNET

- What is "Netiquette"
- Rules of netiquette
- How to behave on social networks and through online chats

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## Overview on the lessons and their purpose

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### DATING ONLINE USING APPS SAFELY

- What are online dating apps?
- What are its advantages? What are the main challenges in its use?
- How to choose the most adapted app?
- How to use online dating apps safely and with confidence?



### RISKS RELATED WITH TRAVELLING AND BOOKING TRAVELS AND ACCOMMODATION ONLINE

- Most recurring scams and how to avoid them
- Different APPs pros and cons - how to use and what to look out for?
- Which data should we give during the reservation process?
- Understand and identify the challenges of files.



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## 8. CONCLUSIONS

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The development of digitization is very fast, and the pace of the acquisition of new skills by seniors does not match this speed. The digital literacy of seniors is increasingly, in general. So far, however, the prevailing majority are those who have used ICT only marginally or, for example in their job and under specific conditions.

Therefore, it is absolutely necessary that people aged 60+ can continue in education and expand their knowledge in the field of ICT. This will prevent their social and digital exclusion. Seniors need support to bridge the personal and online worlds, often unaware of the risks and dangers they may face. On the other hand, some seniors are too worried about the digital world and avoid the challenges associated with ICT.

Using the MILEAGE PROGRAM seniors can receive quality education from properly trained trainers who will guide them through courses in an adequate and effective way, with respect, a human approach and understanding.



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