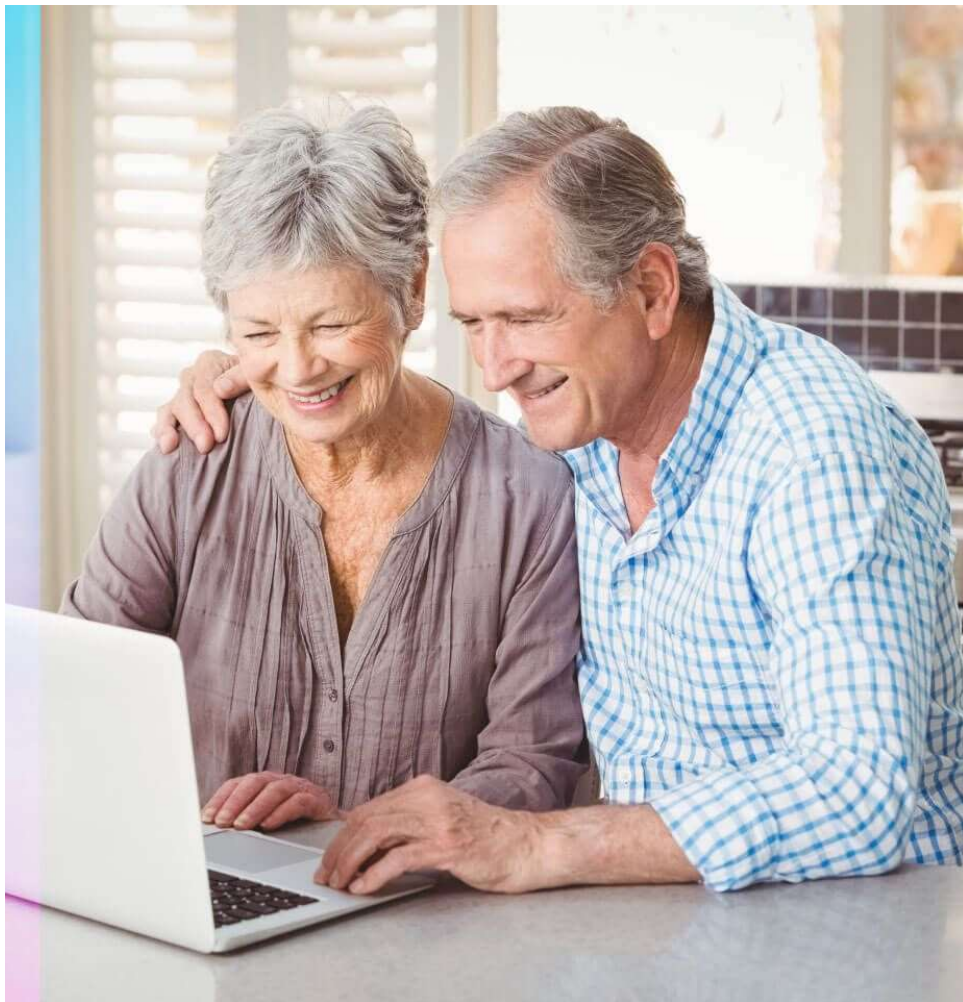

LEARNING NEVER STOPS! A booklet on lifelong learning for the elderly, highlighting the benefits of language learning in later life

Draft version



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Table of contents

LEARNING NEVER STOPS! A booklet on lifelong learning for the elderly, highlighting the benefits of language learning in later lifeError! Bookmark not defined.

Introduction	2
1. The value of education for older citizens: lifelong learning and active ageing	3
2. Education in later life: human right and social need	4
2.1. Senior engagement in non-formal education	4
2.2. The language proficiency gap: bridging generational differences through senior education	6
3. (Language) learning at an advanced age.....	7
3.1. The science behind aging brain	7
3.2. Psychological aspects of (language) learning in old age.....	12
4. Language learning and Successful Aging	15
5. Principles and practical tips of older-adult-friendly education.....	18
5.1. Navigating the transition to communicative methods.....	19
5.2. Optimizing for effective cognitive processing	19
5.3. Fostering affective well-being and independence	21
5.4. Intentional use of technology	21
6.Insights from practice	24
6.1. National reports on promoting active ageing and lifelong (language) learning.....	24
References	29

Introduction

This booklet represents the initial phase of the Golden Languages Erasmus+ project, establishing a theoretical foundation for the importance of effective senior language learning and the optimized language instruction in later life. While the desk research synthesizes global expertise on cognitive scaffolding and affective well-being, it serves as only one pillar of our comprehensive approach to demonstrate how language acquisition acts as a powerful intervention to promote active, successful, and mentally healthy ageing. To ensure our findings are grounded in real-world practice, an extensive empirical investigation will be conducted across our partner countries: the Netherlands, Serbia, Hungary, and Spain.

By engaging directly with both older adult learners and language educators, we aim to capture the authentic voices and diverse teaching-learning experiences within these unique cultural contexts. These insights from the field will complement our theoretical research, allowing us to bridge the gap between academic theory and the lived realities of the senior classroom. Practical implications will be outlined in depth in the following stages of the project, ultimately shaping an evidence-based toolkit for lifelong language learning.

1. The value of education for older citizens: lifelong learning and active ageing

The world's population is aging rapidly, a trend that has become especially clear in developed nations over the last few decades (United Nations, 2024). This demographic change is particularly pronounced in the European Union, where increasing life expectancy (Eurostat, 2024) is contributing to a growing population of older adults who present distinct educational needs (Baumgartner et al., 2023).

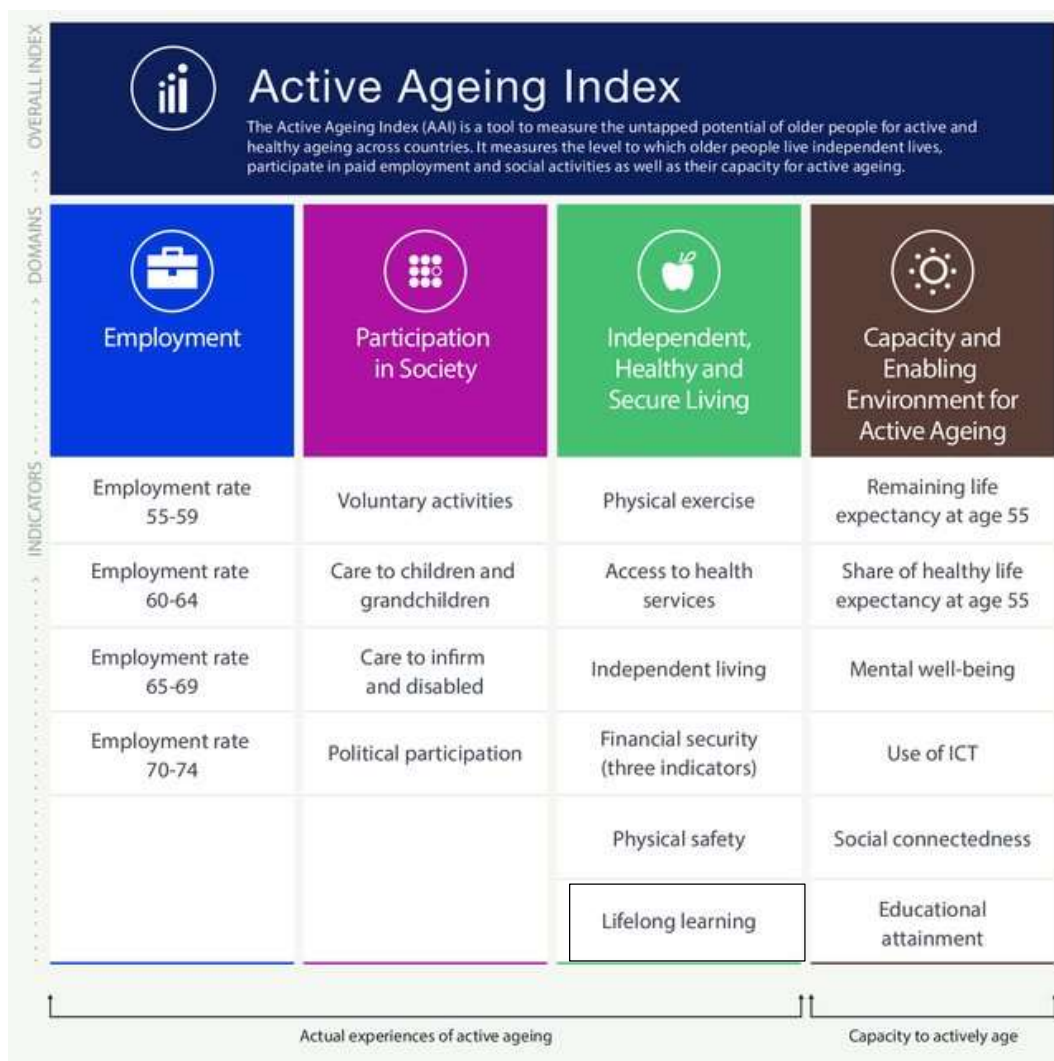
For educators, defining this group can be complex as terminology varies (Schiller, 2022). However, the European Commission's **Green Paper** (2005) provides a helpful framework: *older workers* are those aged 55–64, while *elderly people* are 65–79, and *aged people* are those over 80. In practice, these individuals are usually called *senior* or *older adult learners*, and they are typically over the age of 50/55+ (e.g., Schiller et al., 2020).

Lifelong learning (LLL) has evolved. Today, lifelong learning is a continuous, personal development process that goes far beyond formal education (Ren, 2025). This type of learning is the heart of **active ageing**. It's a broad approach that looks beyond just physical health, focusing on a person's social life, mental well-being, and financial security as one grows older (WHO, 2002). It focuses on three key pillars: **autonomy** (control over one's life), **independence** (the ability to live alone in a community), and **quality of life** in advanced age (Rojo-Pérez et al., 2021).

To measure how effectively a society supports this lifestyle, the **Active Ageing Index (AAI)** was introduced (Figure 1). As shown in the figure, the index is organized into four distinct domains. Each of these domains and their underlying indicators are evaluated on a weighted scale of 0 to 100 points. In this scoring system, **100 represents the ideal or maximum potential** for active ageing, while the actual score achieved by a country indicates how much of that potential is being realised. For an educator, the AAI is a vital roadmap because **Lifelong Learning**—highlighted in the "**Independent, Healthy and Safe Living**" domain—is a key metric. This structure demonstrates that staying mentally active through education is a quantifiable factor in an older adult's ability to remain independent and secure

(United Nations Economic Commission for Europe, 2019).

Figure 1. *The Active Ageing Index (AAI)*



Source. Active Ageing Index <https://statswiki.unece.org/display/AAI/Active+Ageing+Index+Home>

2. Education in later life: human right and social need

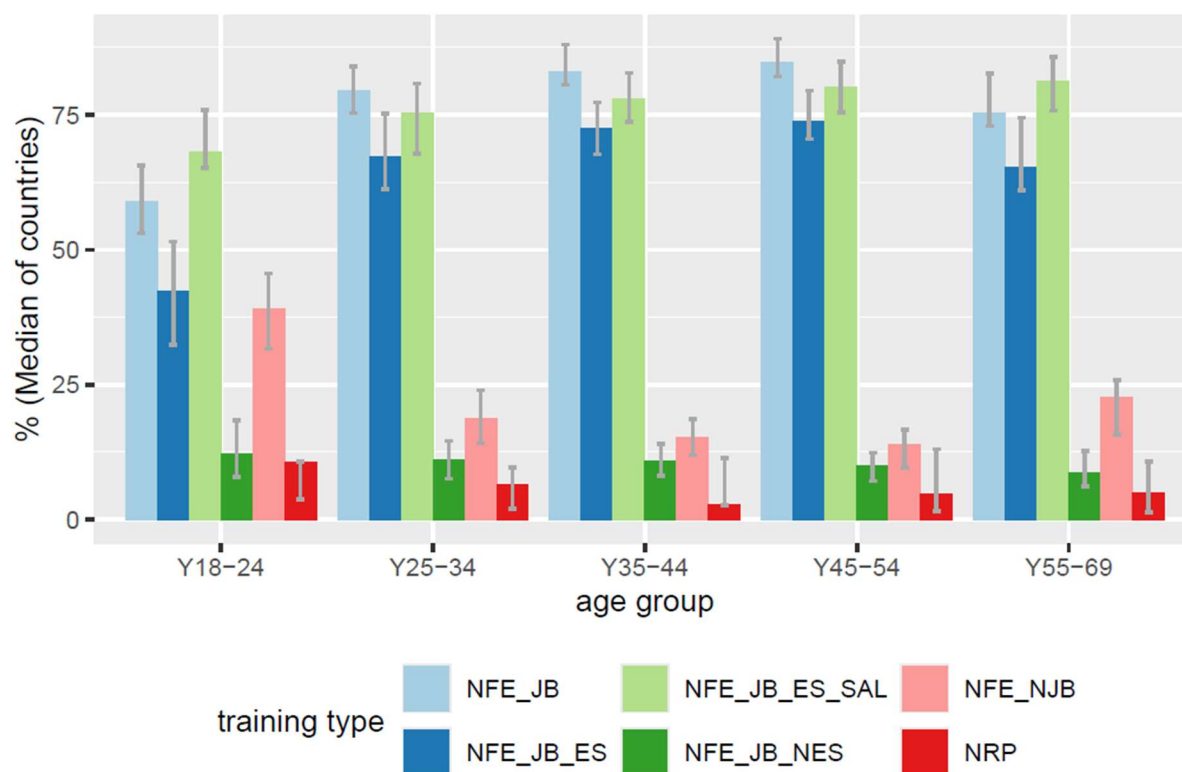
Providing education for older learners is a **social need and a human right**. It addresses socioeconomic inequalities by ensuring that all older adults, regardless of background, have access to a high quality of life (Chin et al, 2024).

When educators help older learners develop new skills, their role extends far beyond the delivery of content. This work not only **stimulates cognitive engagement** but also **fosters social interaction** and a sense of belonging. In addition, it creates meaningful opportunities for learners to continue **growing personally and intellectually** throughout their lives, reinforcing the idea that learning is a lifelong process and a vital part of human well-being (Noble et al., 2021).

2.1. Senior engagement in non-formal education

Figure 2 illustrates how motivations for education shift across the lifespan by categorising non-formal education into professional training—represented by the blue and green columns—and personal interest learning, shown in pink. While job-related activities (NFE_JB) decline sharply after age 55, non-job-related learning (NFE_NJB) remains stable and becomes the primary driver of education for older adults. The final red column (NRP) simply accounts for non-formal education participation. This data confirms that for adults aged 55–69, learning is a voluntary pursuit rather than a career requirement. Consequently, FL educators for this demographic should prioritize cognitive vitality and social participation over professional advancement, acting as essential facilitators in the active ageing process.

Figure 2. *Participation in non-formal education by age group* (Eurostat Adult Education Survey AES 2022)¹



Source: https://ec.europa.eu/eurostat/cache/metadata/en/trng_aes_12m_esms.htm

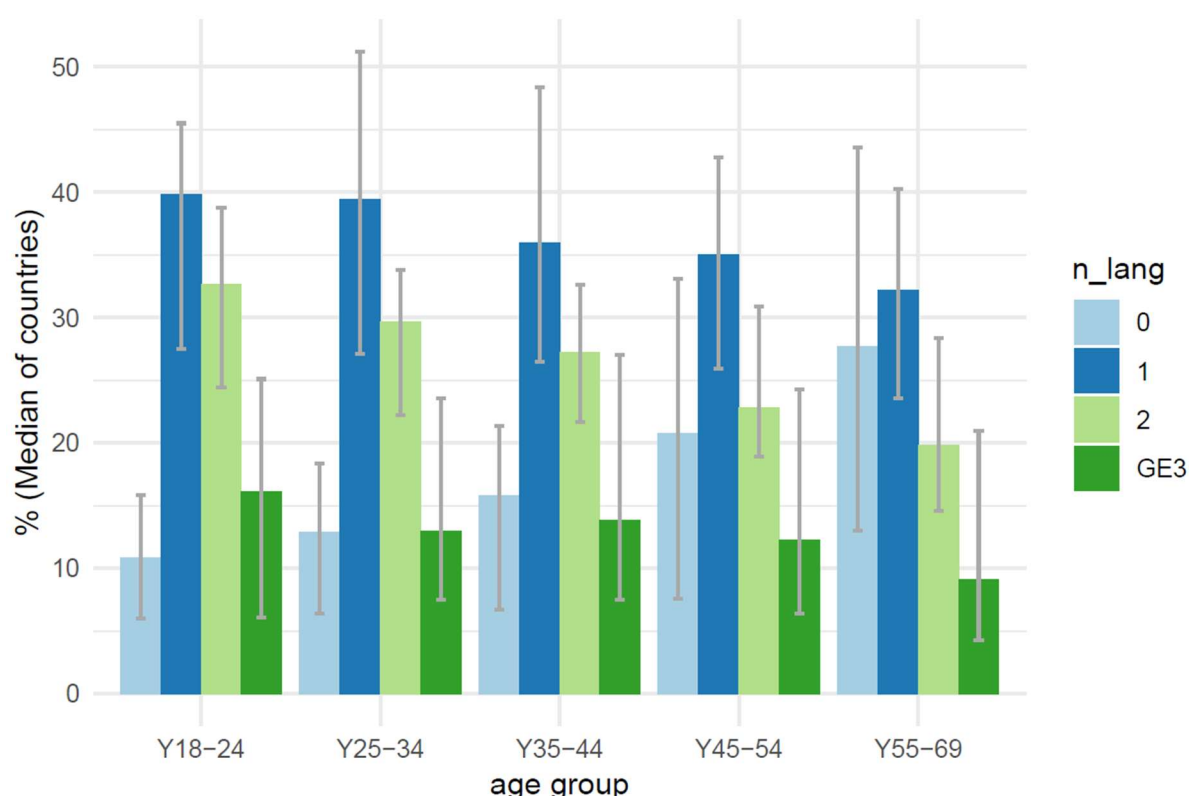
¹ Note: Key terms: **NFE (Non-Formal Education)** Organized learning outside schools and universities.

NFE_JB (Job-Related NFE) Learning for professional purposes. **NFE_JB_ES (Employer-Sponsored Job-Related NFE)** Training paid fully or partly by an employer. **NFE_JB_ES_SAL (Employer-Sponsored NFE for Employees):** Specifically refers to employer-sponsored training for those who are salaried employees. **NFE_JB_NES (Non-Employer-Sponsored Job-Related NFE)** Job-related learning paid by the learner. **NFE_NJB (Non-Job-Related NFE)** Learning for personal, social, or cultural reasons. **NRP (Non-Formal Education Participation)** The participation rate in non-formal learning.

2.2. The language proficiency gap: bridging generational differences through senior education

Figure 3 showcases the comparison of the number of FLs known across five distinct age groups. The findings highlight a clear shift in the linguistic landscape of Europe: younger generations (Y18-24 and Y25-34) are significantly more likely to speak two or more FLs. There is a steady increase in speaking 0 FLs as age increases. In the Y55-69 age group, the **midpoint percentage of people who do not speak any FL is the highest among all groups**. The data suggests that for the 55-69 age group, the goal of instruction isn't necessarily professional advancement, but rather closing the gap to allow them to participate in a world where English and other major languages are the lingua franca.

Figure 3. *Foreign language skills by age group* (Eurostat Adult Education Survey AES 2022)²



Source. https://ec.europa.eu/eurostat/cache/metadata/en/trng_aes_12m_esms.htm

² Note: Key terms: **n_lang**: The number of foreign languages a person reports being able to speak. **0**: Monolingual (speaks only their mother tongue; no foreign languages known). **1 / 2**: Speaks exactly one or two foreign languages. **GE3 (Greater than or Equal to 3)**: Multilingual individuals who speak three or more foreign languages.

3. (Language) learning at an advanced age

The age-related differences in FL knowledge outlined above highlight the growing importance of language education in later life. This leads to a **closer examination of how language learning functions at an advanced age**. When we look at senior language learning, we have to consider a mix of **external factors**, such as social and cultural environments, and **internal factors**, which involve the brain's cognitive processes. Both play a vital role in how older adults learn (Schiller, 2022).

3.1. The science behind aging brain

To understand how to teach older learners effectively, we must first examine the internal mechanisms that drive the learning process (see Figure 4). This section explores the cognitive systems and neurobiological structures that undergo natural shifts with age, specifically focusing on how memory, brain architecture, and chemical messengers influence a learner's ability to process a new language,

3.1.1. Memory systems: from temporary processing to long-term retention

Cognitive psychology helps us understand how the mind perceives and remembers information (Roussel, 2025). For language teachers, two types of memory are key:

- **Working memory:** Think of this as the brain's temporary "workspace" where information is held for just a few seconds while performing a task
- **Long-term memory:** This is the brain's permanent archive, responsible for storing information (such as vocabulary and grammar rules over years (Baddeley et al., 2010)

3.1.2. Neurobiological foundations of the learning process

While psychology looks at mental processes, **neurobiology** examines the physical "hardware" of the brain: the actual cells, structures, and chemicals that make learning possible. From this perspective, the brain's ability to acquire a new language depends on the health and efficiency of two main components:

- **Grey matter:** Often called the brain's "processing centre," grey matter is primarily composed of neuronal cell bodies. These cells are responsible for receiving and integrating sensory impulses, the essential first step for the "heavy lifting" of learning and cognitive processing.
- **White matter:** Often described as the brain's "cables," white matter consists of long, myelinated fibres (axons) that connect different regions of grey matter. Its primary

function is **impulse transmission** (*communication*); it serves as a high-speed network that allows the "thinking" parts of the brain to talk to one another effectively (see Buyanova & Arsalidou, 2021).

A critical component of white matter, the **myelin sheath** is a protective, insulating layer that surrounds nerve fibres (axons). Much like the insulation on an electric wire, it prevents signal loss and dramatically increases the speed at which electrical impulses travel between neurons, ensuring rapid and efficient communication across the brain's network (Buyanova & Arsalidou, *ibid*).

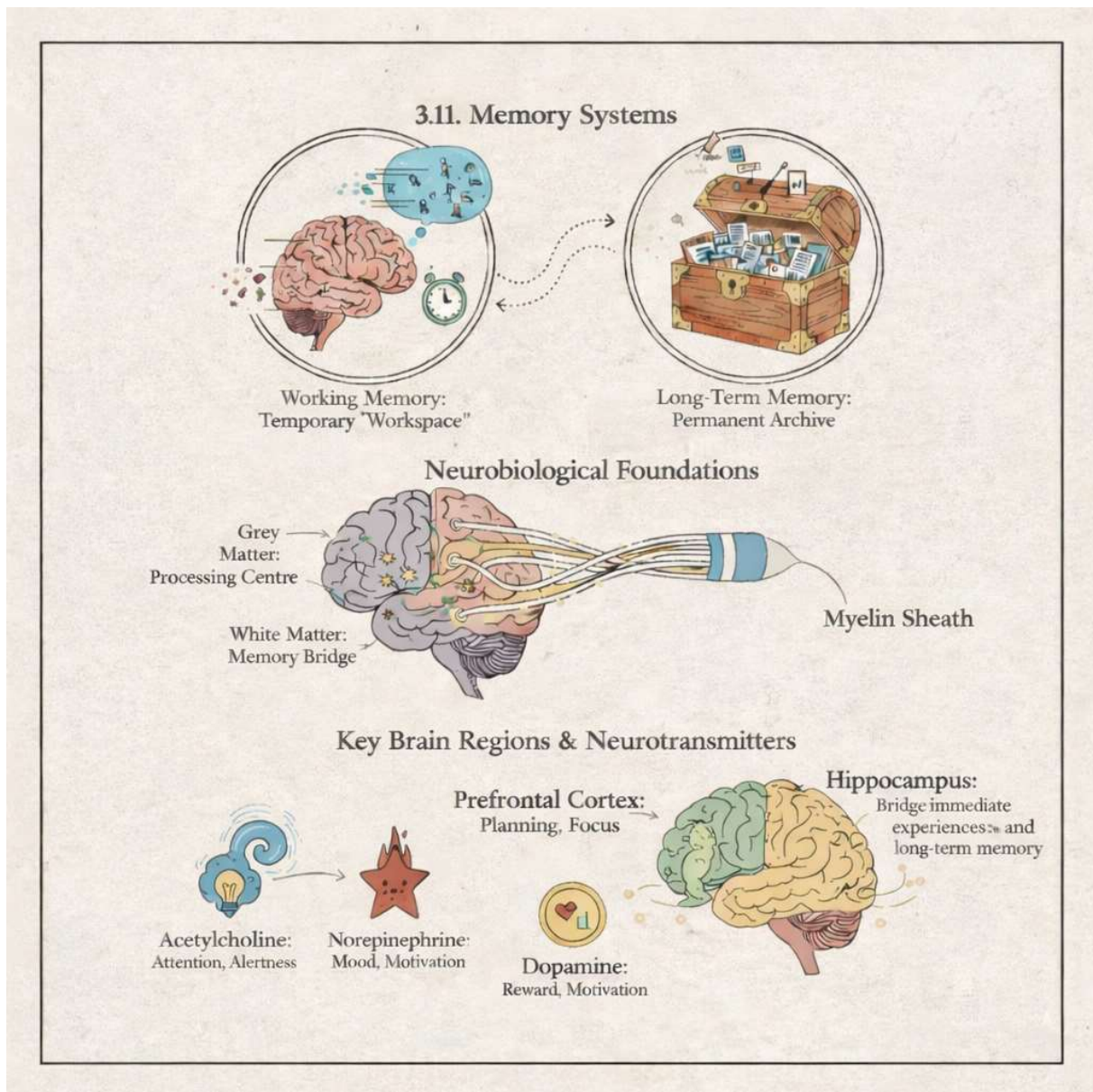
Key brain regions for (language) learning: To understand how we learn, it helps to look at how the brain's memory hub works together with its control centre. Within this partnership, two areas are especially critical for educators to know:

- **The hippocampus:** is a vital part of the brain that acts as a bridge between immediate experiences and long-term memory (Lee & Jung, 2025)
- **The prefrontal cortex:** The centre for working memory and "executive functions" like planning and focus (Baddeley et al., 2010)

For information to be retrieved, these areas must communicate efficiently (Buyanova & Arsalidou, 2021). This communication is fuelled by **neurotransmitters** (chemical messengers):

- **Acetylcholine** is essential for **directing attention**, maintaining alertness, and improving concentration
- **Norepinephrine** This dual-purpose hormone and neurotransmitter is essential for **alertness** and the brain's "readiness" to learn. Beyond helping process new information, it regulates mood, novelty-seeking, and the body's response to stress.
- **Dopamine** Often called the "reward" chemical, this hormone and neurotransmitter is the engine behind **motivation**. It is essential not only for **working memory** but also for coordinating movement and regulating the brain's reward system (Grein, 2013)

Figure 4. *The neurobiological and cognitive architectures of the human brain*



Source: Visual representation was generated using Gemini (Google)

3.1.3. Why learning feels different after 50

As we pass the age of 50, the brain undergoes a series of natural structural shifts that directly impact the (language) learning experience (Figure 5) (Statsenko et al., 2021). One of the most significant changes involves the thinning of the myelin sheath, the protective coating on nerve fibres that acts much like insulation on an electrical wire. As this insulation thins, the transmission of electrical impulses between neurons slows down. This affects the vital link between the prefrontal cortex (which manages incoming data) and the hippocampus, which is

essential for consolidating and retrieving information. Additionally, **declines in white matter, neurotransmitter levels, and sensory processing speed all contribute to a measurable decrease in overall processing speed** (Grein, 2013). For an older learner in a language lab, this can manifest as a "processing lag," where **the learner understands the individual words being spoken but requires extra time to perceive the overall meaning** of a sentence (see Gong et al., 2024).

This slower transmission speed is further complicated by physical changes in the cerebral cortex, such as a physical shrinking of the brain's surface. These changes **impact how the brain filters sensory data**; specifically, a decrease in the brain's natural "inhibitory" chemicals makes it difficult for older learners to "tune out" background noise. Because the communication between the areas responsible for focus and decision-making and the auditory processing centres is less efficient (Qiu et al., 2021) **focusing on specific words in a noisy environment becomes significantly more taxing** (Yang et al., 2024). Also, **distinguishing similar-sounding phonemes** in a foreign language becomes **more challenging** (Hisagi et al., 2024). Nevertheless, it is likely that age-related **hearing loss** plays a significant contributing role in this decline (Qiu et al., 2021). In the classroom, this means that while older adults' intellectual ability remains high (Grein, 2013), their biological capability to **perceive rapid, natural speech is working under more strenuous conditions** (Gordon-Salant, 2001).

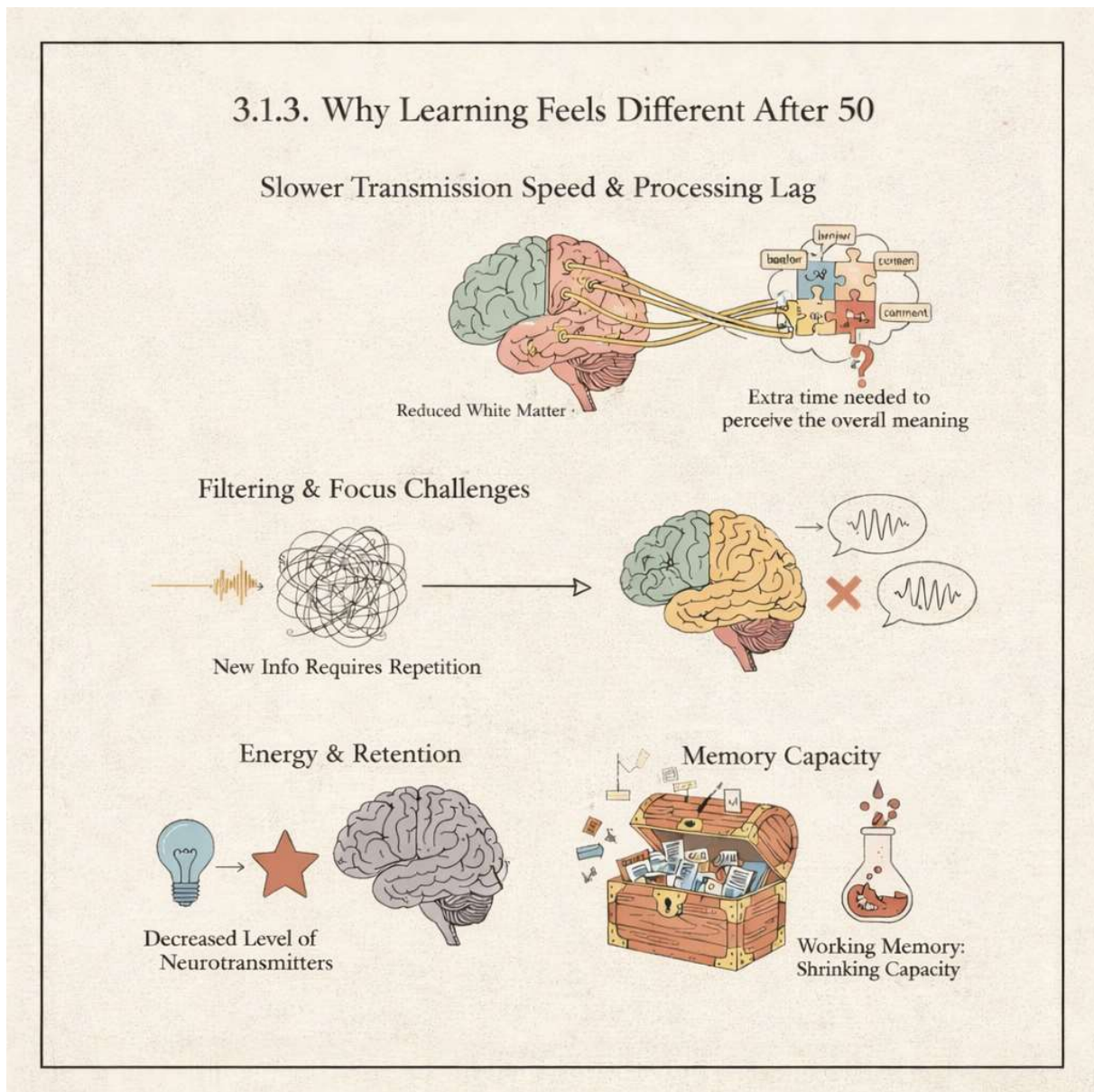
Furthermore, a dip in the production of neurotransmitters like dopamine and acetylcholine can make **sustained concentration feel more exhausting** (Rieckmann & Nyberg, 2020). Because the chemical messengers that promote connections between neurons are less abundant, **the "binding" of new information**, such as a new list of vocabulary, requires **more frequent repetition to become permanent** at an advanced age (see Bäckman et al., 2010).

Nevertheless, mental focus is also heavily influenced by other factors such as sleep quality. Since sleep patterns often change with age, educators should be aware that **physical fatigue and reduced recovery time can significantly impact a learner's cognitive stamina during class** (see Sella et al., 2024).

When we look at memory, the challenge is often not about the "storage" of information, but the "retrieval" of it. While **long-term memory** remains a robust archive of life experience (Duff et al., 2020), the **working memory begins to shrink in capacity** at an advanced age (Gilchrist et al., 2008). This area acts as the brain's temporary workspace; as its capacity decreases, older

learners may find it harder to **integrate information across longer paragraphs or maintain focus during complex lessons** (see Waters & Kaplan, 2005).

Figure 5. *How the brain learns and changes over time*



Source: Visual representation was generated using Gemini (Google)

3.1.4. Pedagogical implications of the aging brain

For an educator, understanding these biological shifts is vital. It becomes clear that when an older learner pauses or struggles, they aren't necessarily failing to understand the logic of the language. Instead, they are simply navigating a cognitive system where **the pathways for perception and memory retrieval have become longer and more taxing** to travel. Thus, older

adults require **more time to process sensory input** and **more frequent repetition to firmly "bind" new information** into long-term storage (Grein, 2013).

Ultimately, while certain cognitive abilities like rapid attention and working memory capacity may decline (Gilchrist et al., 2008), it is important to recognize the specific effort required to learn at this stage. By understanding that older learners are dealing with biological hurdles - such as slower information retrieval and reduced sensory filtering, educators can better appreciate why **older adults require a different pace and more frequent reinforcement** to successfully master a new language (see Schiller et al, 2020).

3.2. Psychological aspects of (language) learning in old age

While the biological "hardware" explains how the brain processes information, the **psychological "software", such as motivation, self-belief, and emotional regulation** determines whether an older learner stays committed to the long journey of language acquisition (Dörnyei & Ryan, 2015). Furthermore, **an older learner's emotional state is inextricably linked to their cognitive success**, acting as a primary catalyst for effective learning (Simpson et al., 2014). For educators, understanding these internal drivers is key to maintaining a productive class (see Figure 6).

3.2.1. What drives the older learner?

Unlike younger students who may study for grades or career advancement, older adults are often driven by a mix of **personal growth and social connection** (Kim & Merrian, 2004).

There might be different orientations for older adults to learn a foreign language (Eguz, 2019), such as those described below, although individual motivations are often multifaceted and can overlap over time (Schiller, 2022):

- **Goal-oriented:** Learning for a specific aim, such as preparing for a trip or talking to grandchildren abroad (see Klimczak-Pawlak & Kossakowska-Pisarek 2018)
- **Activity-oriented:** Participating primarily for the social contact and the classroom community (Koutska, 2024)

- **Learning-oriented:** Studying out of a deep, intrinsic interest in the language and culture itself (Schiller & Dörnyei, 2021). **Cognitive interest** may also play an important role, where the primary reward is the acquisition of new knowledge and the mental stimulation it provides (Eguz, 2019).ⁱ

3.2.2. The power of self-belief

A learner's success is deeply tied to their self-efficacy: the belief in their own capability to achieve specific goals (Bandura, 1991). In older adulthood, this belief can be undermined by two distinct and independent mechanisms. First, an individual's educational biography plays a role; past failures in formal schooling can leave a lasting footprint of insecurity (Berndt, 2003). Second, and entirely separate from personal history, are prevailing societal stereotypes regarding ageing and memory. Even those with a history of academic success may internalise these ageist myths, leading to a "stereotype threat" that diminishes their self-concept when approaching a new and complex task like language acquisition. (Gómez, 2016; Pfenninger & Singleton, 2019). When self-efficacy is high, learners persist through difficulties; when it is low, they may give up at the first sign of a complex exercise (see Popescu et al, 2024).

3.2.3. The "affective filter": anxiety and self-esteem

One of the most significant psychological hurdles for older adults is **language anxiety** (Habratt, 2018). Many of them might view themselves as knowledgeable, socially adept adults. Thus, being forced into a "beginner" role where they cannot express complex thoughts can lead to a fear of losing face or appearing incompetent (see Barber, 2020):

- **Speaking and listening** are the highest sources of **anxiety**
- **The affective filter.** high anxiety acts as a "filter" that blocks incoming information, making it nearly impossible for older adults to process input effectively (Berndt, 2003)

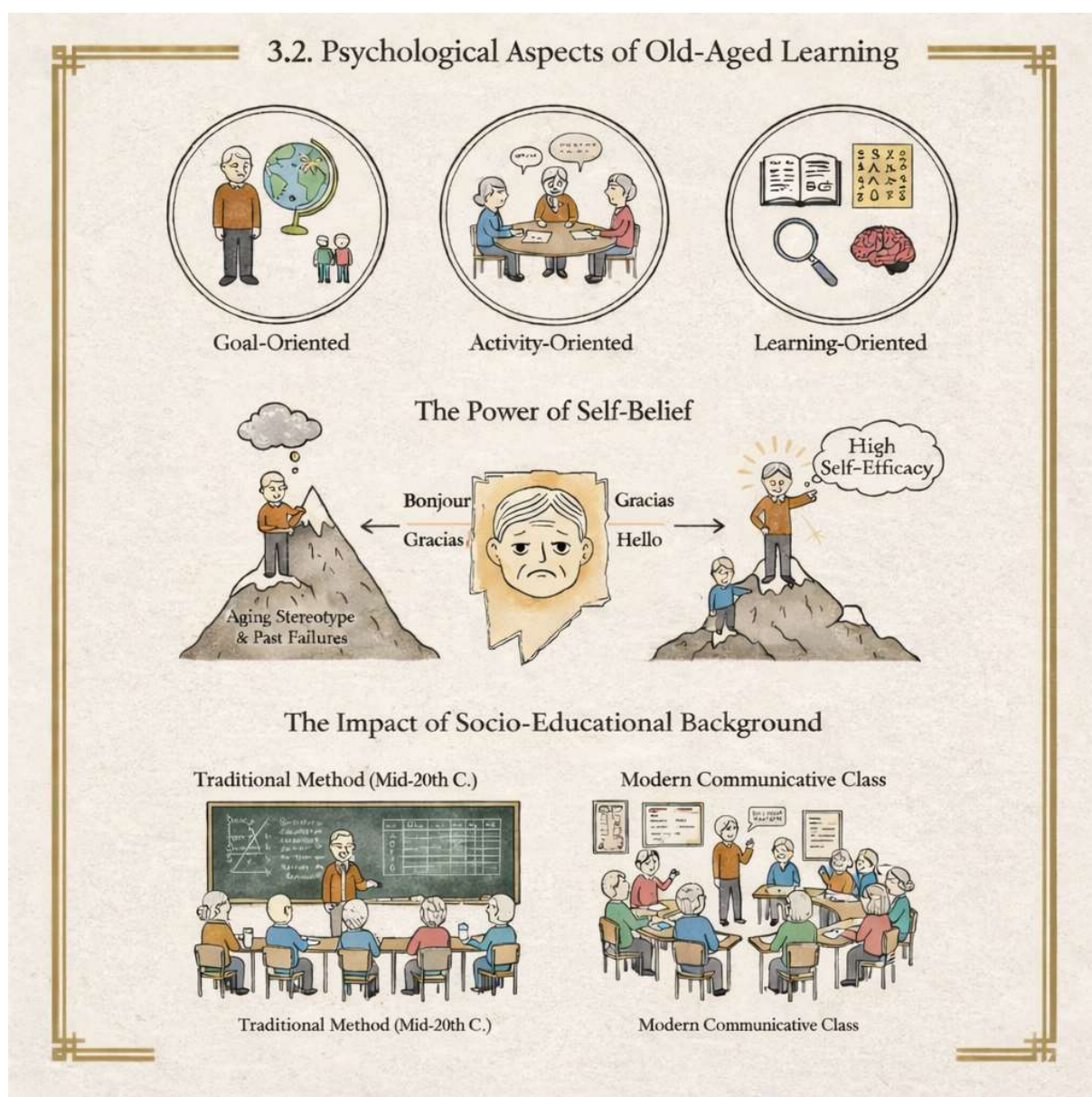
3.2.4. The impact of socio-educational background

A senior learner's current psychological state is often a reflection of their history in the classroom (Gómez, 2016). In many parts of **Europe**, particularly in the mid-20th century, foreign language teaching was characterized by **frontal management**, teacher-centred authoritarianism, and the traditional **grammar-translation method** (Kaczor, 2011; Grein, 2020).

While learners socialised in this rigid environment may initially find modern, communicative classrooms challenging (Kacetyl & Klímová, 2021), there is a fundamental tension here: while traditional rote-learning methods remain a common starting point, they may not always align

with the unique cognitive profiles and learning preferences of older adults. Research suggests that learners benefit more from **contextual, meaning-based instruction** rather than abstract grammar drills (Al-Wosabi, 2024). Consequently, while transitioning from a passive translation role to an active, self-directed one may feel unfamiliar (Schiller et al., 2020), it is a necessary evolution in older adulthood.

Figure 6. *Psychological aspects of old-aged learning*



Source: Visual representation was generated using Gemini (Google)

3.2.5. Pedagogical implications of the senior psychological profile

For the educator, recognizing these psychological foundations is as essential as understanding the biology of the aging brain. It becomes evident that an older learner's hesitation or lack of independence is often not a lack of interest, but the result of an "educational legacy" rooted in rigid, teacher-centred traditions that makes active self-reflection challenging (Grein, 2020). While their cognitive interest provides a strong internal drive (Eguz, 2019), their progress is deeply sensitive to the "affective filter"; if the classroom environment triggers a fear of losing face, anxiety can negatively impact their learning achievement (Barber, 2020). Ultimately, **teaching older adults means acknowledging that their educational history and self-belief are just as influential as their cognitive speed**, requiring a shift in perspective that views the learner as an autonomous individual (Schiller, 2022) navigating both biological hurdles and past educational socialization (Berndt, 2003).

4. Language learning and Successful Aging

Building on the concepts of Lifelong Learning (Ren, 2025) and active aging (Rojo-Pérez et al., 2021), we can look at **Successful Aging** (Kim, & Park, 2017) as the practical "gold standard" for older individuals. Unlike other models on healthy aging, **Successful Aging is a comprehensive cognitive, psychological, and social framework** centred on the individual's internal drive and ability to thrive. It is an active process focused on how a person adapts to the changes of time while staying involved in the world:

- Keeping the mind sharp and preserving high mental and cognitive functionality, serving as a **powerful potential delaying factor in the process of cognitive decline**.
- Staying involved through active engagement with life and social activities.
- Being resilient by psychologically adapting to the many changes that come with getting older (see Trică et al., 2024)

In this light, the **language classroom** is much more than a place to learn grammar; **it is a tool for Successful Aging** that also focuses on the preservation of brain reserve. (Klimova & de Paula Nascimento e Silva, 2024) (see Figure 7). To maximize appeal, educators should frame the course as a pursuit of **linguistic mastery and social connection**, which serves as the active engine for **cognitive health** rather than a mere remedial exercise. In the upcoming paragraphs, we will outline how FL learning can promote Successful Aging:

Despite age-based changes outlined in the previous chapters, the brain remains remarkably flexible. **Neuroplasticity** is the brain's lifelong ability to create new connections between nerve

cells. Our brains can literally change shape based on new experiences and thoughts (Gazerani, 2025). For older learners, intensive language learning is one of the best ways to "exercise" this plasticity and boost learning performance (Ware et al, 2021).

In addition to these structural benefits, the language classroom also provides a vital countermeasure to functional cognitive shifts. While working memory capacity may naturally shrink with age (as previously discussed; Gilchrist et al., 2008). **engaging in the complex exercises dealing with FL improves learning competences.** Unlike passive hobbies (such as watching television, listening to familiar music, or rote reading) the active mental effort required in language classrooms provides a unique, long-lasting boost that **can keep the brain more resilient** against the natural slowing of age (Grossmann et al., 2021 in Klimova & de Paula Nascimento e Silva, 2024; Singleton & Záborská, 2020)

As established in the preceding sections, natural changes in the brain's structure and chemical messengers can lead to a decrease in processing speed (Rieckmann & Nyberg, 2020), however, the brain's architecture remains remarkably adaptable (Gazerani, 2025). Research shows that even short-term language programs can physically improve these pathways. Just four months of study can enhance white matter integrity, effectively repairing the "insulation" on the brain's wiring. This allows signals to travel faster once more, which can help older adults overcome that frustrating "processing lag" and **connect new concepts more efficiently** (see Bubbico et al., 2023).

Drawing on the earlier examination of the brain architecture, aging often brings changes in how the brain filters sensory information (Yang et al., 2024). Remarkably, the act of switching between two languages acts as a targeted mental workout. By practicing translation and code-switching, **students train their brains to ignore distractions and maintain focus** on relevant information (Bubbico et al., 2023). Also, intensive study can **sharpen attentional switching**, the ability to move focus between different tasks, in a short period of time (Bak et al, 2016 in Ware et al., 2021).

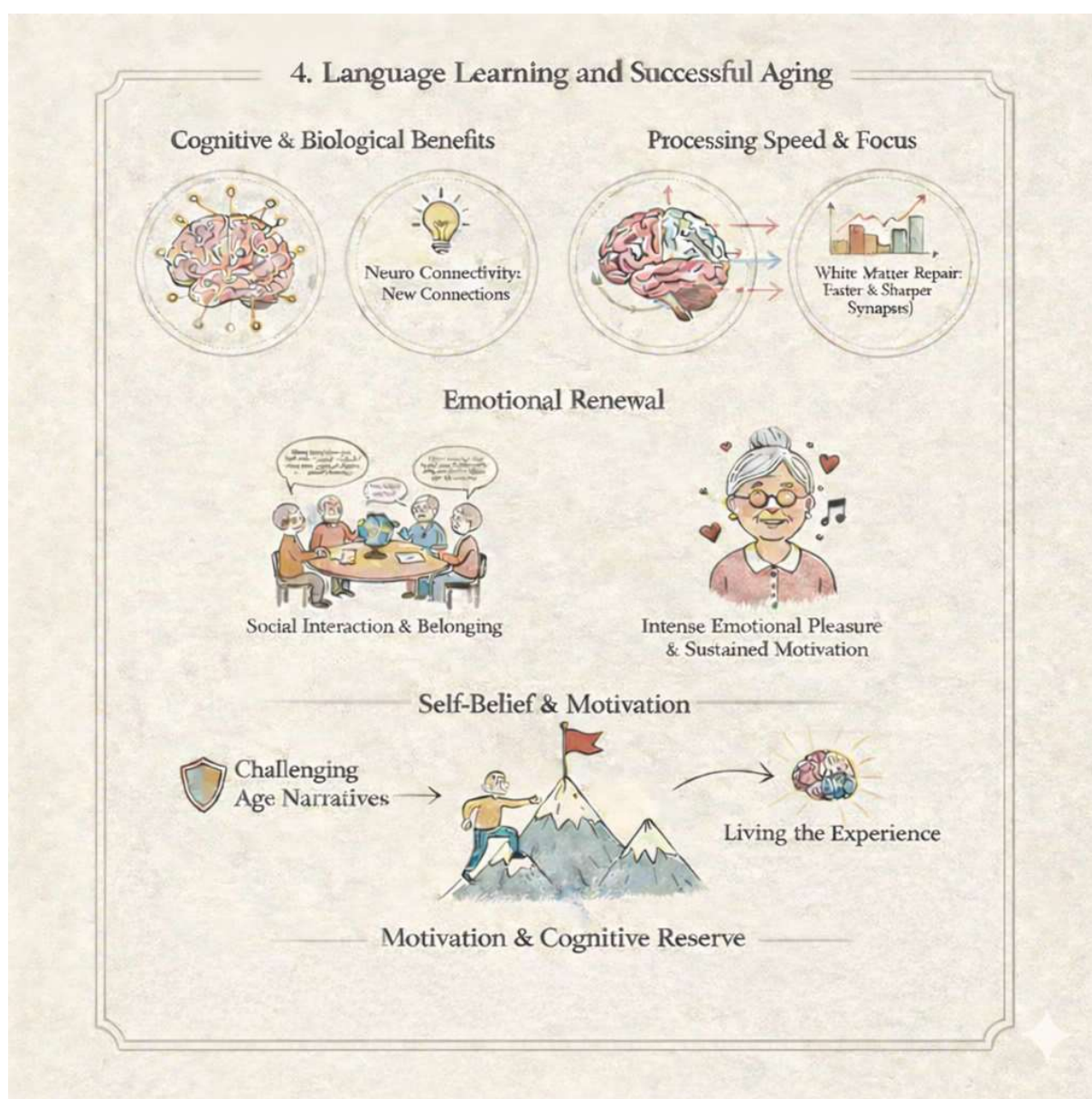
While moderate levels of stress can sometimes enhance focus, excessive or higher-level anxiety can block learning (Maher & King, 2023). This is often triggered when older individuals feel incompetent (Barber, 2020) and feeling isolated can create a vicious cycle where loneliness impairs general cognitive functions, including semantic memory retrieval, making it harder for older adults to process language efficiently (Li et al., 2025). This is why the social aspect of the

FL classroom is so vital. When the language **class serves as a space for social interaction** and integration, it fosters a feeling of belonging that **helps enhance overall wellbeing** (Noble et al., 2021; Singleton & Záborská, 2020), also contributing to a **higher level of subjective happiness** in the case of older learners (Pikhart et al., 202).

In line with the points raised earlier, the belief that one is "too old" to learn can be as much of a hurdle as any biological change (Mazerolle et al., 2021). However, as students master new skills, their **self-efficacy grows** (Schiller et al, 2023). This success counters negative stereotypes and leads to **higher self-concept and a more positive outlook on aging** (Pfenninger and Polz, 2018 in Klimova & Pikhart, 2020). While they may require more repetition to 'bind' vocabulary due to the increased cognitive load of accumulated life experience, their tendency **to 'savour' the experience** (deeply enjoying cultural nuances and new perspectives) provides the **intense emotional pleasure and sustained motivation** needed to overcome some processing challenges. (Singleton & Záborská,2020).

In summary, for a language teacher, these findings redefine **the classroom as a crucial environment for both biological and psychosocial renewal**. By facilitating intensive mental effort, the instructor provides a platform for older learners to exercise neuroplasticity and enhance cognitive capabilities (Ware et al., 2021; Bubbico et al., 2023). Beyond the neurological benefits, the evidence suggests that the language learning experience fosters a sense of belonging (Singleton & Záborská, 2020) and can enhance self-efficacy (Schiller et al, 2023), allowing older learners to achieve significant gains in subjective happiness and overall wellbeing (Noble et al., 2021; Pikhart et al., 2021).

Figure 7. *Language learning and succesful aging*



Source: Visual representation was generated using Gemini (Google)

5. Principles and practical tips of older-adult-friendly education

To ensure teaching older adults is effective and senior-friendly, instructional approach should harmonize the biological realities of the aging brain with the internal drivers and lived experiences of the learner (Schiler, 2022) (see Figure 8). These guidelines are designed to help language educators navigate the unique needs of the older adult classroom (Schiller et al., 2020) while prompting strategies that consider the cognitive and affective effects of aging (Dorner & Schiller, 2023).

5.1. Navigating the transition to communicative methods

As outlined above, many older adults were socialized in rigid, teacher-centred "grammar-translation" environments (Grein, 2020). Thus, moving directly into a high-intensity **communicative strategies should be phased in step-by-step** (Schiller et al., 2020):

- Introduce **collaborative tasks gradually** to build confidence, viewing the classroom as a vital **social phenomenon** where community-building is as important as the language itself (Kotuska, 2024).
- Older learners may feel frustrated when they cannot express their sophisticated thoughts with a beginner's vocabulary (cf. Barber, 2020). Emphasize **that successful communication is about mutual clarity** rather than perfect grammar (see Greilberger et al., 2013)
- Since speech production can be challenging, **teach learners to use synonyms, circumlocution** (describing a word they forget), or **non-verbal gestures** to maintain the flow of conversation (Oxford, 1990).
- The strategic use of the native language (L1) can serve as a safety net to keep a conversation moving; however, its usefulness depends on linguistic distance. of the native and the target language (see Kuperman, 2025)
- When listening, encourage learners **to use contextual clues** to guess unknown words or **relate new language items to existing life** knowledge (Oxford, 1990; Vandergrift, 2007).

5.2. Optimizing for effective cognitive processing

5.2.1. Sustaining focus: scaffolding attention in the senior classroom

As processing speed and attention capacity naturally shift (Baddeley et al., 2010), the teacher must act as a "cognitive scaffold" (MacKay-Brandt, 2011).

- Selecting **content should prioritize depth** to allow for "savouring" and thorough integration, rather than rushing through a wide range of topics (see Gómez, 2016).
- Break **complex information into smaller, purposeful "chunks"** to ease the integration of new data and reduce the load on working memory (Delaud et al., 2012).
- Concentration is easily distracted by excessive stimuli (Koutska, 2024). **Avoid background noise in recordings** and ensure **visual materials are high-contrast and clear** (Czaja & Sharit, 2016).

5.2.2. Strengthening memory through multi-sensory strategies

Since the "binding" of new information into long-term memory requires more frequent repetition in later life (see Bäckman et al., 2010), use **techniques that engage multiple neural pathways**.

- Information is much easier to remember when the brain processes it through two different channels at once. By consistently pairing spoken or written words with images, icons, or real objects, you create a "double entry" in the learner's memory. (Mayer, 2009) **Pair verbal input with its visual appearance** to foster efficient retrieval (Sharm & Sites, 2008).
- Arrange words into **pictorial representations, such as mind-maps** and concept webs, to help categorize information meaningfully and create logical "mental anchors" that facilitate easier memory retrieval (Baddeley et al., 2010).
- Encourage older learners to anchor new expressions within a narrative or a personalized context, such as a **short story or a life experience**, provides the brain with a logical "home" for the data (Irie, 2021).
- **Word-focused, puzzle-based learning activities** (like scrabble, crossword puzzles, and sentence scramble) require learners to actively retrieve, manipulate, and construct language (see Njoroge et al., 2013). They engage older adults in cognitively stimulating problem-solving, and because each **can incorporate game-like elements** (such as scoring, challenge levels, and progression) they are easily gamified. Incorporate these features to provide older adults with highly motivating tools for vocabulary development, helping them sustain the attention and effort needed to reinforce lexical knowledge through repeated, meaningful practice (Tan, 2025).

5.2.3. Fostering long-term retention

- Encourage **self-testing** rather than just re-reading. Recalling information repeatedly helps identify "problem areas" and significantly strengthens long-term retention (Roediger & Butler, 2011).
- Focus on encouraging older adults recall a specific language fact at **increasing intervals**. If the learner successfully recalls the information, **the time interval until the next check is doubled**. This process helps migrate knowledge from short-term to long-term memory (Henry et al., 2009)

5.3. Fostering affective well-being and independence

Because an older learner's **internal motivation** and **emotional state** are primary drivers of their ability to process and retain new information, **an empowering learning environment** is a neurological necessity that must be constantly maintained to eliminate insecurities (Koutska, 2024). It can be promoted through both **in-class instructional support** and **out-of-class engagement strategies** (Schiller, 2022).

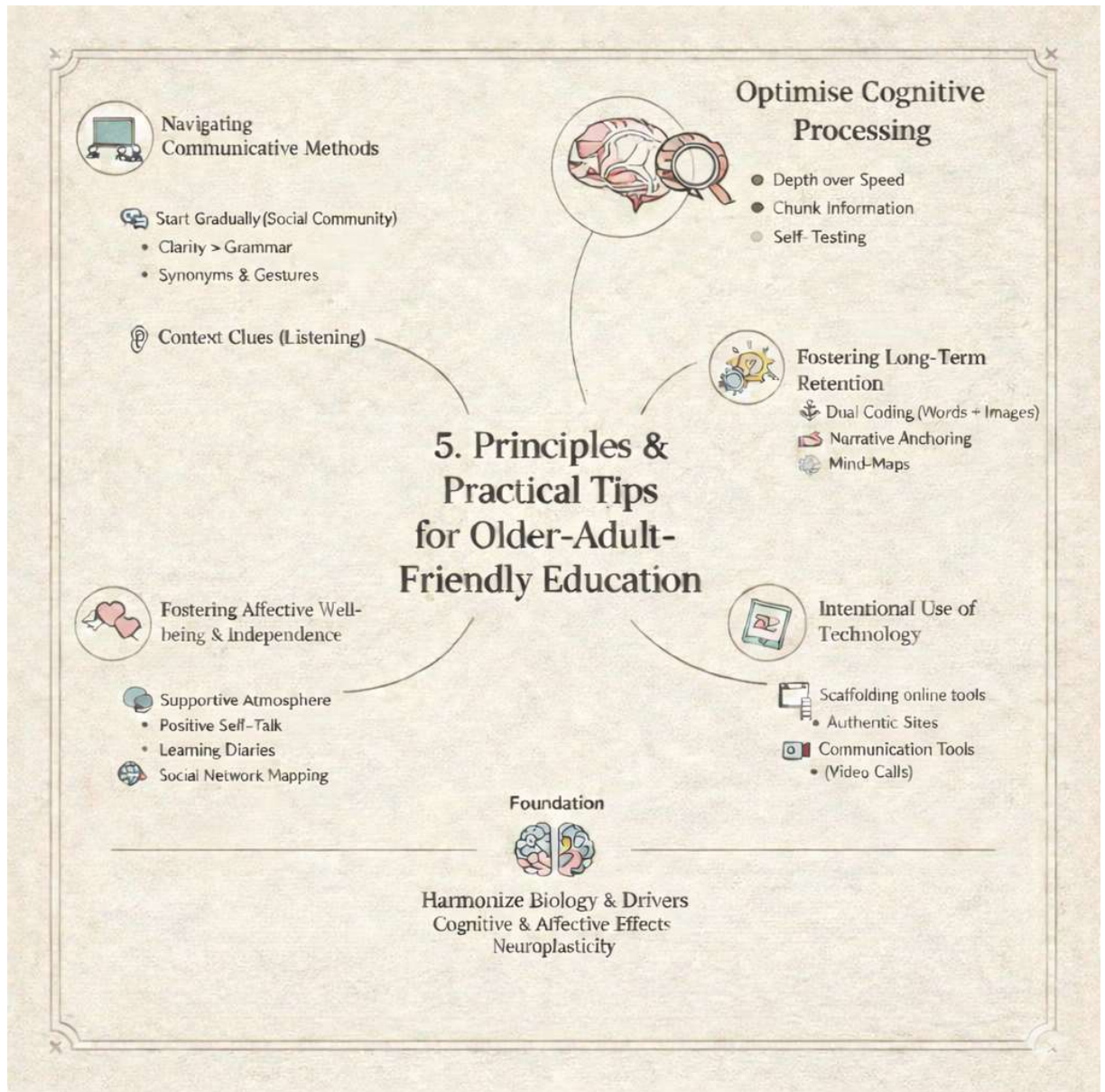
- Create a **supportive, respectful atmosphere** that reduces performance anxiety (Greilberger et al., 2013).
- Encourage older learners to **consciously make positive statements** about their own progress to boost positive self-concept (Wijirahayu & Dorand, 2018).
- Use **learning diaries or journals to record emotional and cognitive reactions**. This "introspection" helps students analyse their own progress and reduces inhibitions (Schiller, 2022).
- Help students **map out their social networks and physical locations** where they can practice the language independently (Clark & Toretta, 2018).

5.4. Intentional use of technology

Because a senior learner's **emotional state is in link with their cognitive success** (Simpson et al., 2014), **digital media** should be introduced as a way to enhance **effective learning** rather than a source of frustration. **To prevent technical hurdles** from triggering performance anxiety (Puebla et al., 2022), educators must provide an "affective bridge" through the following strategies:

- Provide clear, incremental **"scaffolding" for any online tools** used. Ensure platforms have clear menus, help sections, and customizable settings for audio and visual needs (Garcia et al., 2021).
- Encourage the use of **authentic sites** or local information portals. This connects language learning to their existing habit of staying up-to-date, enhances their internal motivation and fosters a sense of being integrated into society (Mitrulescu & Negoescu, 2024)
- **Use interpersonal communication tools** (video calls, social sharing networks) to help older adults practice speaking with family or peers, transforming technology into a bridge for social interaction (Balkhi et al., 2023)

Figure 8. Principles and practical tips of older-adult-friendly education



Source: Visual representation was generated using Gemini (Google)

In summary, to optimize the educational experience for older learners, **educators must act as a "cognitive scaffold"** (MacKay-Brandt, 2011) by prioritizing depth (Gómez, 2016), "chunking" information (Delaud et al., 2012), and minimizing sensory distractions (Koutska, 2024; Czaja & Sharit, 2016) **to support shifting processing speeds and attention** (Baddeley et al., 2010). Strengthening the "binding" of memory requires **multisensory strategies** like dual coding (Mayer, 2009), semantic **mind-mapping** (Baddeley et al., 2010), and **narrative**

anchoring (Irie, 2021), alongside **retrieval techniques** like self-testing (Roediger & Butler, 2011) and spaced repetition (Henry et al., 2009). Crucially, fostering affective well-being (Koutska, 2024) can be maintained through tools like **self-encouragement** (Wijirahayu & Dorand, 2018), learning diaries (Schiller, 2022), and social network mapping (Clark & Toretta, 2018). By introducing technology as an "affective bridge" (Garcia et al., 2021) and leveraging authentic interpersonal media (Balkhi et al., 2023), **educators transform learning into a vehicle for social integration and motivation** (Mitrulescu & Negoescu, 2024).

This desk research provides the foundational framework for the booklet, while more comprehensive strategies and **in-depth explanations of age-friendly education will be outlined in the next phase of this Erasmus+ project**. The following section of the booklet transitions from theory to practice by outlining the **national landscapes** of senior education within our partner countries. Additionally, it presents the results of our **initial field exploration**, capturing the authentic perspectives of older adults on their language-learning journeys and the pedagogical insights of educators specialized in teaching senior citizens.

6. Insights from practice

This section focuses on describing the authentic learning experiences of older adults, as well as the insights of instructors who specialize in teaching them.

The first part will present an overview of the national landscape of older adult language education in the participating countries—**the Netherlands, Hungary, Serbia, and Spain**. This includes national reports, key initiatives, and existing programs that support language learning for older adults.

6.1. National reports on promoting active ageing and lifelong (language) learning

Hungary

In Hungary, education for older adults is increasingly seen as part of lifelong learning, helping people stay active, involved, and socially connected as they age. National policy documents, such as the National Strategy for Older People (2010–2035), stress the importance of maintaining physical, mental, and emotional well-being later in life, as well as supporting older adults' sense of purpose through continued learning. While later-life education is not regulated as a separate field, priorities such as reducing digital inequality, highlighted in the Hungarian National Social Inclusion Strategy (2030), and expanding community-based lifelong learning programs reflect the growing recognition of learning as a key factor in enabling citizens to remain active in a fast-changing world. This approach is further supported by Hungary's commitments under the Madrid International Plan of Action on Ageing (2016), which aims to promote lifelong learning through senior academy forums, digital literacy programs, and intergenerational solidarity initiatives.

In practice, lifelong learning for older adults mostly takes place through a wide range of non-formal educational programs that have developed notably since the early 2000s. In Hungary, education for older people first centred on informal community talks and health-related guidance, but over time it has grown into a more organized and regionally connected system. Today, these initiatives appear in several forms, most commonly Universities of the Third Age, Senior Academies, and Pensioner Free Universities. With professional support from higher

education institutions, these programs now operate in almost every major city (Kovács et al., 2020).

Language learning among older adults in Hungary is still developing, with most opportunities currently provided by private language schools and community-based lifelong learning programs (Dobos, 2016). Although this area has not traditionally been prominent, recent trends show a clear rise in language skills compared to earlier decades, pointing to growing interest in learning languages later in life. At the same time, participation in (language) learning programs often depends on previous educational background (Hungarian Central Statistical Office, 2024). To better meet the different needs of older adults, more specialized programs are appearing, including FL courses designed specifically for the “50+” age group with slower, more flexible learning paths, showing a gradual shift in how adult education responds to older learners (Schiller, 2022).

Spain

Spain is one of the most ageing countries in Europe. According to the National Statistics Institute (INE) (2024), more than 20% of the population is older than 65 and the 55+ age group is still growing. This rapid ageing has encouraged politics and programs linked to the “active ageing”, where continuous learning - including language learning - is considered a key tool to maintain cognitive activity, social participation, quality of life and international relationships. Compared to other European countries, Spain has had low rates of participation in permanent education for older adults according to the *Adult Education Survey* done by Eurostat. Nevertheless, this tendency has been changing due to a higher educational level in the new generation of retired people, more specific training offers and an increase in learning interest as a social activity (Ministry of Education and Vocational Training, 2023).

The Official Language Schools (public centres dependent on autonomous communities) are the main ways that this learning is taking place. They are not specifically designed for older people, but many students are 55+ (In Madrid, there were 193 students from that age group); they offer accessible prices and the methodology is more academically inclined. Many Spanish universities have specific programs for 55+ adults. Some examples are:

- **UNED** (National University of Distance Education, n.d.) **Sénior**: it has more than 10.000 students and 20+ associated centres. The program aims for a life-long learning and personal enrichment of older people.

- **Universidad de Salamanca ((Servicio de Formación Continua, n.d.):** it is only for former students of the Universidad de Salamanca and for members of the Alumni-USAL that are over 50 years old.
- **Universidad de Granada (n.d.):** The Permanent Open Training Classroom is an initiative of the University of Granada launched in 1994 with the aim of meeting the educational demand of people over 50 years of age, who are admitted to the University without any other prior requirement than having reached that age.

This concept of active ageing in Spain is related to the guidelines of the World Health Organisation. In this Spanish concept, the focus has been incorporated in national and autonomous strategies for older people, where permanent learning plays a very important part.

In Spain, language learning for older adults is embedded in a dual structure: formal regulated education (Official Language Schools) and university-based senior programs. Unlike purely recreational models, the Spanish system allows older adults to access official certification pathways aligned with the Common European Framework of Reference for Languages (CEFR) (Council of Europe, n.d.). This institutional recognition reinforces the perception of language learning not only as leisure, but as an academically legitimate and socially valued activity. Furthermore, the increasing educational level of new retired people and the expansion of university programs for older adults have contributed to a gradual cultural shift: learning languages is no longer perceived as age-dependent, but as part of lifelong personal development.

Serbia

In Serbia, population ageing is becoming increasingly significant, with a growing proportion of citizens aged 55 and above. According to “Demographics of Serbia” (2024) , approximately **22.6% of the population is aged 65+**, placing Serbia among the older societies in Europe This demographic shift has contributed to a gradual recognition of the importance of **active ageing**, a concept promoted through national strategies and aligned with international frameworks such as the **Madrid International Plan of Action on Ageing** (2016) and WHO guidelines. Recent policy developments, including the *Strategy for Active and Healthy Ageing*, emphasize lifelong learning, social participation, and intergenerational solidarity as key pillars for improving quality of life in later years (MFWD, 2023).

Although Serbia does not have a single comprehensive system specifically dedicated to lifelong learning for older adults, elements of this field are embedded in broader adult education and social inclusion policies. National and international reports highlight the need to strengthen participation in lifelong learning, which remains relatively low: only about **5% of adults aged 25–64 participate in education or training activities** (EFT, 2020). This indicates both a challenge and an opportunity for expanding educational provision for older learners, particularly in the context of rapid digital and social change.

In practice, education for older adults in Serbia is mainly delivered through **non-formal and community-based initiatives**. Since the early 2000s, programs such as **Universities of the Third Age** have developed in cooperation with cultural institutions, NGOs, and educational centres. A notable example is the involvement of the Novi Sad Open University, which has historically played an important role in adult and continuing education, including language learning and digital literacy programs. It has also contributed to the development of “Universities of the Third Age” initiatives in Serbia, offering courses, workshops, and seminars tailored to adult learners (“Novi Sad Open University,” 2024). Similar initiatives can be found in Belgrade, Niš, and other urban centres, often linked to faculties, cultural centres, or civil society organizations.

Language learning opportunities for older adults in Serbia are present but remain relatively limited and fragmented. Most foreign language courses are offered by **private language schools**, adult education centres, and some institutions involved in continuing education. Participation in language learning is often influenced by prior educational background, socio-economic status, and regional disparities, with access more concentrated in urban areas.

Nevertheless, interest in language learning among older adults is gradually increasing. Motivations include travel, communication with family members abroad, migration-related connections, and the use of digital technologies. In response, there is evidence of language schools offering courses tailored to the “50+” age group, characterized by **slower pacing, flexible methodologies, and a focus on communication rather than formal assessment**. These developments align with broader trends identified in international and national reports, which emphasize the importance of lifelong learning in maintaining cognitive health, social inclusion, and active participation in society (MLEVSA, 2021)

Despite these positive trends, challenges remain. These include limited public funding, lack of a coordinated national framework for senior education, and unequal access between urban and

rural areas. However, Serbia's ongoing demographic transition and policy focus on active ageing create favourable conditions for further development. Strengthening institutional support, expanding targeted programs, and integrating language learning more clearly into active ageing strategies could significantly enhance opportunities for older adult learners.

The Netherlands

In the Netherlands, there is no specific central policy dedicated exclusively to education for older adults (senior citizens). Instead, this policy is integrated into broader frameworks for adult education and social participation. Government policy on lifelong learning focuses primarily on training that contributes to professional functioning (Rijksoverheid, n.d.).

The main providers of foreign language courses for adults, and especially seniors, are the Volksuniversiteiten (Stichting Volksuniversiteit, 2026). There are 59 these in the Netherlands. They receive no funding but charge participants. There is no central registration of participants and specifically language participants. There are tens of thousands of participants who can take courses in dozens of languages. The most popular courses are English, Spanish, French, and Italian.

Besides the community colleges, there are commercial institutes that offer very intensive courses. The best known is Regina Coeli (The Nuns of Vugt). Institutes like Elycio also offer this for several languages. In addition, there are courses offered by mainstream universities. A well-known one is Babel at Utrecht University, but almost all universities offer this, often also for non-students. This is the case, for example, at the University of Amsterdam (Universiteit van Amsterdam [UvA], n.d.) and Tilburg University (n.d.)

Finally, there are institutions that offer a combination of language and cultural training. These include the Alliance Française for French, the Goethe-Institut for German, and the Instituto Cervantes for Spanish. There are also courses at Hovo (HOVO Nederland, 2026), but these focus more on classical languages. All these institutions primarily target older adults

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