
**BRAIN-FRIENDLY FOREIGN LANGUAGE
LEARNING IN HIGHER EDUCATION: INTEGRATING
NEUROCOGNITIVE PRINCIPLES
AND NEUROLANGUAGE COACHING**

Raikhel A. M.

DOI <https://doi.org/10.30525/978-9934-26-619-5-26>

INTRODUCTION

Over the past twenty years, advancements in neuroscience and cognitive psychology have significantly impacted educational sciences, providing fresh insights into the mechanisms of learning at the neurological level. Language learning, in contrast to numerous other fields of knowledge, necessitates continual interaction among memory, attention, emotions, and social communication—elements that are currently the subject of extensive research in cognitive neuroscience. Consequently, higher education institutions worldwide are progressively investigating the application of neurocognitive concepts in classroom practices.¹ This development is especially opportune for both Ukraine and Europe. Higher education institutions face the dilemma of modernisation: they are required to maintain academic traditions and curricular consistency while simultaneously adapting to swiftly evolving educational, technical, and socio-cultural contexts. Language education is central to this dilemma. Conventional grammar-translation techniques and solely communicative approaches are inadequate to fulfil learners' requirements as they must operate in multilingual, multicultural, and cognitively challenging environments. In this context, neurocognitive techniques offer a novel teaching framework that enhances linguistic proficiency while also fostering students' well-being, motivation, and resilience. The theoretical underpinnings of neurocognitive methodologies in language acquisition are based on numerous fundamental ideas. Memory consolidation elucidates the processes of knowledge encoding, storage, and retrieval, providing insights on optimal repetition schedules and

¹ Oxford R. L. Teaching and researching language learning strategies: Self-regulation in context. 2nd ed. New York: Routledge, 2017.

multimodal reinforcement.² Secondly, attention modulation emphasises the significance of concentration and cognitive load, which directly influence learners' capacity to assimilate new language information. Third, emotional resonance illustrates how affective elements influence the efficacy of language acquisition, indicating that favourable learning environments and motivational guidance are essential. Ultimately, neuroplasticity highlights the brain's enduring ability to adapt and reorganise, thus contesting the belief that effective language acquisition is limited to childhood. Neurolinguistic coaching is a pioneering practice that integrates concepts from neuroscience, applied linguistics, and coaching psychology. This method emphasizes understanding the differences between the thinking brain and the performing brain, while guiding learners through their own learning journey. Learners, rather than teachers, set the goals and actions, which are then supported by a structured, step-by-step progression of language acquisition. Regular goal reviews provide a way to measure progress and achievements subjectively. In addition, grammar is introduced through coaching conversations, enabling learners to internalize structures in a brain-friendly, supportive manner that avoids triggering negative emotional responses.

In contrast to conventional education, which designates the instructor as the principal authority, neurolinguistic coaching enables learners to assume active responsibility over their cognitive and emotional involvement in the learning process. This methodology promotes learner autonomy through guided reflection, goal-setting, and personalised tactics, while also addressing the neurological underpinnings of language development. This approach is especially pertinent in higher education, as university students are both language learners and emerging professionals preparing to operate in intricate international and multicultural contexts. The incorporation of neurocognitive techniques into Ukrainian higher education encounters numerous obstacles. European universities have progressively integrated neuroscience-informed pedagogy into teacher training and curriculum creation, but Ukrainian institutions are just commencing to investigate this approach. Factors including restricted access to interdisciplinary research, conventional methodological perspectives, and insufficient institutional support can impede innovation. There is an increasing acknowledgement that harmonising Ukrainian practices with European norms necessitates a willingness to embrace multidisciplinary solutions that integrate theory with actual implementation. Neurocognitive tactics compel educators and policymakers to reconsider both instructional methods and the overarching

² Kelly C. H. *The Brain Studies Boom: Using Neuroscience in ESL / EFL Teacher Training // Development* (Springer). 2017. P. 79–102

objectives of higher education. They encourage educators to perceive language acquisition as beyond the knowledge of linguistic structures; it evolves into a whole process that fosters critical thinking, intercultural competence, and emotional intelligence.³ These ideas create a robust foundation for rethinking university-level language education in Ukraine by integrating theory and practice within the wider European academic context. In this research the problem is examined comprehensively looking over the theoretical foundations of neurocognitive methodologies in language instruction and positioning them within the expansive framework of neurolinguistics and cognitive science.

1. Problem Statement and Research Review

One of the most pressing challenges in contemporary higher education is the effective teaching of foreign languages to students. This difficulty arises from multiple factors, including the specific linguistic demands of future professions, the necessity to operate in multilingual academic and professional environments, the diverse cultural backgrounds of learners, and the cognitive complexities inherent in acquiring a new language. Traditional methods of language instruction, such as grammar-translation or purely communicative approaches, often fail to address these challenges fully, leaving students underprepared and sometimes demotivated. Consequently, there is an urgent need to identify and implement teaching methodologies that not only enhance linguistic proficiency but also engage learners cognitively, emotionally, and motivationally. Exploring neurocognitive approaches, including neurolanguage coaching, offers a promising pathway to address these issues by combining insights from neuroscience, cognitive psychology, and coaching to create brain-friendly, learner-centered, and goal-oriented language education.

In this article, we examine the process of teaching foreign languages through the lens of a “brain-friendly approach,” a contemporary methodology grounded in neurolanguage coaching—a concept developed by Rachel Paling—and the practical application of neuroscience. Our discussion draws upon the most recent research in this area, including Paling’s foundational work on neurolanguage coaching, studies on “language socialization” by M. Lieberman, contributions by Professor C. Kelly, and empirical investigations conducted at the University of Southampton, among others. The primary aim of this study is to systematize the core principles of neuroscience and highlight their practical implementation in higher education language instruction. The examples presented illustrate how neuroscience-informed strategies can transform the

³ Jensen E. *Brain-based learning: The new paradigm of teaching*. Thousand Oaks, CA: Corwin Press, 2008

traditional role of the teacher from a mere transmitter of knowledge to that of a coach—a concept originally rooted in sports—that is increasingly being adapted for educational contexts.

2. Enhancing Student Motivation and Autonomy through Neurocognitive Strategies

Globalization and computerization have significantly shaped language teaching, but they also raise questions about the role of social interaction, which cannot be fully replicated through digital means. Neuroscientific studies, such as those by Lieberman (2013), indicate that humans are inherently social beings, and our brains are wired to connect with others. Learning is more effective when it occurs through social interaction, as generating and sharing information with others strengthens memory and understanding.⁴

For example, in one study, two groups of students completed a reading task: one group was told they would be tested on the material, while the other was asked to teach it to someone else. Although both groups were tested afterward, the group tasked with teaching performed significantly better. This highlights the often-overlooked potential of social learning, as human beings are fundamentally motivated by social needs.⁵

According to an English professor at Kansai University in Japan, language coaches and teachers recognize the power of pair and group work. Facilitating peer communication satisfies students' intrinsic need to build friendships, which is crucial for well-being, reduces the risk of depression, and increases the likelihood of academic success. Kelly also notes that the brain functions as a multiprocessor, with around 50 centers working on separate tasks simultaneously. The depth of language retention depends on how much of the brain is engaged in processing it. "Deep processing leads to deep learning," he explains, as extensive neural connections form when learners engage in multi-sensory input, problem-solving, and active use of new knowledge, rather than passively listening to lists of language rules.⁶ Thus, the goal of language instruction should be to maximize learner activity and engagement. Brain-compatible teaching practices should prioritize how language is acquired rather than focusing solely on its structure. Instruction must address students' emotional, developmental, and social needs, ensuring that the language taught

⁴ Paling R. *Neurolanguage Coaching: Brain friendly language learning*. Kindle Edition. The Choir Press, 146 p.

⁵ Lieberman M. D. *Social: Why our brains are wired to connect*. Oxford: Oxford University Press, 2013. URL: <https://psycnet.apa.org/record/2013-09689-000>

⁶ Kelly C. H. *The Brain Studies Boom: Using Neuroscience in ESL / EFL Teacher Training // Development* (Springer). 2017. P. 79–102

is meaningful, relevant, and delivered in ways that foster active processing, emotional involvement, and deeper learning. Professor Ros Mitchell emphasizes the classroom as a social environment where language knowledge is co-constructed through interaction—both between teacher and students and among the students themselves. This concept is referred to as language socialization. In this framework, the classroom functions as a social group or community, united by a common goal: the joint development of language competence. While classroom members do not live together or spend leisure time together, their collective engagement in learning allows them to progress from less skilled to more proficient language users. Active participation from all members is essential; without it, meaningful learning cannot occur. From this perspective, the modern language teacher increasingly assumes the role of a neurolanguage coach, whose responsibilities extend beyond knowledge transmission to creating a brain-friendly, socially interactive learning environment. The coach facilitates active engagement, designs tasks that stimulate deep cognitive processing, and promotes deep learning.

Rachel Paling raises the concept of a “perfect learning state”, highlighting intention and motivation as its core components. Stories emerge as a particularly powerful teaching tool in this context. Neuroscientific research indicates that information presented in narrative form is retained more effectively than through conventional explanations or lectures. Interestingly, the effect is not solely due to familiarity or interest: the narrative format itself, structured as sequences of events with cause-and-effect relationships, aligns with the way our brains naturally process information.⁷ Stories encapsulate experiences in a memorable way, making them highly effective for learning.

Physical activity also plays a critical role in cognitive function. While traditionally associated with general health, neuroscience now demonstrates that movement enhances blood flow and supports brain function.⁸ Teachers should therefore incorporate short, simple movements into lessons to optimize learning. Examples include having students stand while collecting or submitting materials, participate in standing pair work, or use movement to answer questions. Such practices boost energy, mood, and cognitive performance, supporting better retention and engagement.

Memory Consolidation and Linguistic Acquisition Memory is fundamental to all learning processes, although it assumes a particularly vital function in

⁷ Kelly C. H. *The Brain Studies Boom: Using Neuroscience in ESL / EFL Teacher Training // Development* (Springer). 2017. P. 79–102

⁸ Kelly C., Sandy C. *Brain-based learning and the active approach*. *The Language Teacher*, 2008. URL: http://www.bbbforlearning.com/uploads/1/0/4/4/10446722/brain_based_learning_is_active_learning.pdf

language teaching. Students must not only acquire individual vocabulary and grammatical units but also integrate them into intricate systems of speech and communication. Cognitive neuroscience delineates various memory types crucial to this process: working memory (facilitating short-term manipulation of linguistic input), declarative memory (repository of explicit knowledge, including vocabulary lists and grammar rules), and procedural memory (unconscious acquisition of skills, such as fluent speaking or comprehension). The consolidation process—transferring knowledge from short-term to long-term storage—relies on repetition, context, and significant association. Neuroscientific research emphasises the hippocampus's pivotal involvement in this transmission, whereas sleep and rest are essential for the stabilisation of new linguistic knowledge. This concept has immediate educational implications: instead of focusing on rote memorisation, language training can utilise spaced repetition, multimodal reinforcement (such as integrating reading, listening, and speaking tasks), and introspective activities that enhance brain connections. In higher education, the issue lies not only in the quantity of linguistic information but also in the efficacy of its retention and application.⁹ Employing memory-sensitive strategies—such as microlearning, retrieval practice, and contextualised exposure—educators can markedly improve students' capacity to recall and utilise new language structures. Consequently, memory consolidation functions as both a theoretical basis and a practical instrument in neurocognitive language education. *Attention Management and Cognitive Load* Attention is a fundamental aspect of learning, as it influences the efficacy with which students assimilate incoming information. Neuroscience differentiates between focused attention (continuous concentration on a particular task) and divided attention (changing focus among several stimuli). In language education, efficient attention management is frequently impeded by substantial cognitive load, especially in university environments where students manage intricate academic, social, and professional obligations. Research indicates that attentional resources are finite and can be readily exhausted if instructional design fails to consider cognitive limitations. Introducing extensive new vocabulary without adequate scaffolding overwhelms working memory, resulting in irritation instead of acquisition. Neurocognitive pedagogy emphasises approaches such as segmenting knowledge into smaller pieces, alternating between intensive and comprehensive tasks, and incorporating moments of mindfulness or brief rests to replenish attentional capacity. This principle is especially pertinent in the Ukrainian and broader European higher education environments due to the predominance of

⁹ Paling R. *Neurolanguage Coaching: Brain friendly language learning*. Kindle Edition. The Choir Press, 146 p.

lecture-based learning. Conventional lecture styles frequently neglect attention spans, which studies indicate average approximately 15–20 minutes for adults. A transition to interactive, task-orientated, and problem-solving activities aids in sustaining concentration while alleviating cognitive overload. By synchronising pedagogical methods with neuroscientific understanding of attention, educators can cultivate a more enduring and captivating learning experience that addresses both the constraints and capabilities of human cognition.

Emotional Resonance and Motivation in Language Acquisition The significance of emotions in education has frequently been undervalued in conventional pedagogy, which typically emphasises cognitive results above affective ones. Neuroscience has shown that emotions are intrinsically linked to cognition, affecting both memory consolidation and attentional regulation. The amygdala is crucial in assigning emotional importance to experiences, hence improving recall and long-term retention. In language teaching, emotional resonance is crucial due to the essentially social and affective nature of communication. Students are more inclined to retain and utilise language associated with personally significant or emotionally resonant circumstances. Consequently, neurocognitive methods prioritise activities that promote emotional involvement, including storytelling, role-playing, and real-world simulations. These methods enhance linguistic proficiency while fostering intercultural awareness and empathy—capabilities that are more vital in European and global settings. Neurolinguistic coaching exemplifies a particularly potent implementation of this theory. This technique combines coaching psychology with neuroscientific insights to assist students in controlling language anxiety, establishing personal objectives, and maintaining intrinsic motivation. According to R. Paling, motivation plays a crucial role in language learning, as information is difficult to retain without it. She identifies three types of learners, or “coachees”:

1. Those who are already motivated (“yes, motivated”),
2. Those who are not currently motivated but have aspects of their life that could inspire them to learn the target language, and
3. Those who are not motivated and have no apparent reasons in their life to learn the language.¹⁰

From this, it follows that motivation is a key determinant of success in language acquisition. As educators, our role is to help students discover their sources of motivation and sustain them throughout the learning process. Ideally, many learners are either already motivated or can find elements in their personal

¹⁰ Paling R. *Neurolanguage Coaching: Brain friendly language learning*. Kindle Edition. The Choir Press, 146 p.

or professional life that encourage language study. Additionally, teachers can foster a positive shift in mindset, especially for students who have struggled with language learning in the past, helping them to overcome previous difficulties and approach the process with renewed confidence and determination. In higher education, where students frequently encounter significant stress and performance pressure, emotional scaffolding is an essential instrument for promoting resilience and well-being. Ukrainian institutions should utilise this strategy to tackle a critical difficulty in the post-crisis educational environment: fostering students' psychological and emotional well-being while maintaining academic success.

3. Bridging Coaching and Pedagogy for Effective Language Acquisition

Neuroplasticity and Continuous Language Acquisition The most groundbreaking revelation in contemporary neuroscience is the notion of neuroplasticity—the brain's enduring capacity to reorganise itself by establishing new neural connections. This principle undermines previous beliefs that language acquisition is solely effective in childhood or adolescence. Research indicates that people, even university students, possess a significant ability to learn new languages when education is congruent with brain processes. Neuroplasticity underscores the significance of repetitive, purposeful, and adaptive practice in language acquisition. In contrast to rote procedures that foster superficial and tenuous connections, neurocognitive strategies prioritise profound learning experiences that consistently reconfigure brain networks. Multisensory learning, which integrates visual, aural, and kinaesthetic modalities, together with adaptive digital technology and interdisciplinary challenges, enhances and broadens neural connections. Within the realm of higher education in Ukraine and Europe, neuroplasticity presents a compelling rebuttal to doubts regarding innovation in language instruction. It illustrates that even within conventional academic frameworks, there exists potential for continuous learning and adaptation. Furthermore, it emphasises the necessity of providing students with not only linguistic information but also metacognitive awareness—an insight into their own cognitive processes of learning. By cultivating this understanding, educators enable students to become proactive participants in their lifetime learning endeavours. The four neurocognitive concepts delineated above—memory consolidation, attention management, emotional resonance, and neuroplasticity—constitute the foundation of neuroscience-informed language teaching. They offer both theoretical rationale and practical guidance for executing tactics that are more congruent with the realities of human cognitive learning. In higher education in Ukraine and Europe, these ideas facilitate a reevaluation of language instruction that enhances linguistic proficiency

while simultaneously fostering student well-being, motivation, and intercultural competency.

Neurocognitive Approaches in Language Instruction The shift from theoretical knowledge to practical application is a significant problem in higher education. Although neuroscience and cognitive linguistics provide significant insights into the brain's language acquisition processes, these concepts must be translated into specific teaching strategies to influence classroom practices effectively. This section delineates essential neurocognitive methods applicable in university-level language education. Each is intended to improve linguistic proficiency while concurrently fostering motivation, well-being, and learner independence. *Memory-Conscious Techniques*: Spaced Repetition is grounded in the principle of memory consolidation, entails presenting learners with new vocabulary or grammatical structures at progressively extended intervals. This technique fortifies brain connections and diminishes the probability of forgetting. Digital platforms like Quizlet, Anki, or university learning management systems (LMS) can be utilised to automate spacing schedules, hence enhancing the scalability of this method in higher education settings. Retrieval practice, defined as the process of recalling information without explicit clues, significantly augments memory consolidation. Rather than reviewing texts or notes, students may participate in low-stakes exams, flashcard exercises, or peer-teaching sessions. Ukrainian and European universities might incorporate retrieval activities at the conclusion of lectures, allowing students to actively reconstruct essential linguistic concepts instead of passively examining them. *Methods for Enhancing Attention*: Chunking—partitioning information into smaller, significant units—enhances understanding and memory retention. Instructors can categorise business-related terminology into theme clusters, such as "finance," "marketing," and "negotiation" instead of providing an extensive list. Microlearning entails the provision of content in brief, concentrated segments, typically through digital platforms or hybrid learning modules.¹¹ In a European setting, where internet resources are progressively included into curricula, microlearning can enhance traditional lectures by providing students with brief, manageable practice opportunities. Ultimately, incorporating thoughtful pauses—concise intervals for contemplation, dialogue, or silent assessment—facilitates the restoration of attentional focus. In Ukraine, where lecture-centric teaching prevails, the integration of mindful pauses constitutes a straightforward yet impactful innovation that necessitates minimal alteration of the current curriculum. *Emotionally Engaged Learning*: Emotional

¹¹ Paling R. The Differences between Language Teaching and Language Coaching. Efficient Language Coaching. URL: <http://www.languagecoachingcertification.com/differences-language-teaching-and-language-coaching/>

resonance is crucial to successful language acquisition, as emotionally charged events are more likely to be encoded and recalled. A potent strategy is narrative construction. Educators might incorporate storylines that resonate with students' personal, cultural, or professional experiences. For instance, students pursuing English for international business may examine and recount success narratives of European start-ups, thereby associating terminology with significant situations. Role-playing exercises enable students to engage in genuine conversational situations, such as job interviews, negotiations, or intercultural interactions. These challenges not only cultivate emotional engagement but also replicate the tension and unpredictability of authentic communication, equipping students for professional interactions. Simulations, such as fake international conferences or project-based cooperation, provide enhanced immersion. By placing language acquisition in authentic, problem-solving scenarios, simulations stimulate both cognitive and emotional involvement. For Ukrainian institutions, where students frequently lack direct exposure to foreign settings, such simulations might act as a conduit to global academic and professional realities. *Neurolinguistic Coaching*: Neurolinguistic coaching is a transformative approach that combines neuroscience, applied linguistics, and coaching psychology. In contrast to teacher-centred paradigms, coaching empowers the learner to actively engage in cognitive and emotional development. Coaches assist students in establishing personal objectives, tracking advancement, and contemplating their learning experiences. This may manifest as individualised coaching sessions, small-group workshops, or guided self-reflection diaries. Students are urged to express their reasons for language acquisition, recognise individual obstacles (such as worry or distraction), and explore techniques that correspond with their own cognitive characteristics. In Ukrainian higher education, neurolinguistic coaching serves as an effective instrument for mitigating student disengagement and stress—challenges intensified by social and political instability. In Europe, where coaching is progressively included in corporate training, using these methods at the university level equips students for both academic achievement and professional adaptation, fostering lifelong learning.

Multimodal and Technology-Enhanced Education Neuroplasticity emphasises the significance of diverse and flexible practice in reinforcing brain connections. Multimodal learning—integrating visual, aural, and kinaesthetic modalities—facilitates enhanced cognitive processing by activating several brain regions. For example, when acquiring new vocabulary, students can observe the written form, hear the pronunciation, demonstrate the meaning, and utilise it in both written and spoken contexts. Technology is essential in enabling multimodal methods. Digital storytelling platforms, virtual reality simulations, and language learning applications foster immersive settings that enable

students to engage with language in significant manners. Such technologies are already included in mixed and online curricula at European universities. For Ukrainian institutions, enhancing access to digital technologies may signify both a problem and an opportunity for modernisation and alignment with European standards. The neurocognitive strategies mentioned—memory-sensitive approaches, attention-enhancing techniques, emotionally engaged learning, neurolinguistic coaching, and multimodal technology—provide tangible avenues for connecting theory and practice in university language education. Although their implementation necessitates adapting to local circumstances, these tactics closely coincide with the ambitions of both Ukraine and Europe for contemporary, student-centered pedagogy. Ultimately, they facilitate the attainment of linguistic proficiency as well as the cultivation of autonomy, drive, and intercultural preparedness—attributes vital for success in a globalised academic and professional environment.

Trends in Neurocognitive Language Education in Europe Over the past two decades, Europe has experienced a progressive transition towards learner-centred, evidence-based methodologies in higher education. Inspired by the Bologna Process and the European Higher Education Area (EHEA), institutions have adopted competency-based curricula that prioritise transferable skills, critical thinking, and intercultural competence. In this context, language acquisition has progressively utilised neuroscience and cognitive psychology to develop more efficient pedagogical strategies. Universities in Germany, Finland, and the Netherlands have included modules on neurocognitive learning into teacher education programmes, providing prospective educators with insights into memory, attention, and neuroplasticity. European institutions are currently engaging in experiments with virtual reality simulations, language acquisition applications, and gamified platforms. These instruments closely correspond with neuroscience by providing multimodal reinforcement and adaptive feedback. Coaching has transcended the corporate realm to universities in the UK, Spain, and Scandinavia, where students are assisted in establishing learning objectives, alleviating anxiety, and fostering autonomy through systematic reflection. Neuroscience-informed education in Europe is progressively linked to social-emotional learning (SEL), acknowledging that emotions, motivation, and psychological safety are crucial for enduring academic success.¹² These trends collectively establish Europe as a frontrunner in integrating higher education with neuroscientific findings. Nonetheless, implementation significantly differs among countries and institutions, contingent upon resources, educator training, and policy endorsement.

¹² European Commission. The European higher education area in 2020: Bologna Process implementation report. Luxembourg: Publications Office of the European Union, 2020

4. The Ukrainian Context: Obstacles and Prospects

Ukraine confronts a more intricate reality. The higher education system is significantly shaped by conventional paradigms, including lecture-based teaching, grammar-translation methodologies, and an emphasis on theoretical knowledge. Multiple obstacles impede the rapid adoption of neurocognitive pedagogy: Ukrainian universities frequently prioritise stability and continuity, hindering the implementation of innovative methodologies. Teacher training programs infrequently incorporate neuroeducation, resulting in numerous educators' lack of familiarity with its ideas. Financial constraints hinder access to sophisticated digital technologies and transdisciplinary cooperation. The persistent conflict and economic difficulties have fostered an atmosphere of increased stress, adversely affecting pupils' motivation, focus, and emotional fortitude. Simultaneously, there exist significant prospects for reform. Ukrainian institutions are progressively participating in European exchange programmes (Erasmus+, Horizon Europe), which provide access to modern educational frameworks. Moreover, the ongoing national initiative to harmonise higher education with European standards provides an advantageous context for the incorporation of neuroscience-informed techniques. The resilience exhibited by children and educators throughout crises highlights a willingness to embrace creative, comprehensive strategies that improve linguistic proficiency and promote emotional well-being. *Case Study:* Mukachevo State University (MSU), a Ukrainian university, is implementing neurocognitive techniques within its academic framework. As a regional university with strong European ties, MSU is at the intersection of traditional Ukrainian academic culture and European innovation. The university educates a significant number of English language educators and students in commerce, tourism, and international relations, placing language acquisition as a core part of its curriculum. In recent years, faculty interest in student-centered, multidisciplinary methods has increased. MSU has begun exploring spaced repetition and retrieval practice with digital flashcard platforms and classroom review games, incorporating neuroscientific research findings. Educators have also introduced attention and microlearning, incorporating microlearning modules and group discussions. Storytelling and project-based learning have been introduced in business English and tourism curricula. MSU has commenced the incorporation of online tools like Padlet and Kahoot into language courses through Erasmus+ agreements. These instruments facilitate multimodal learning and augment interactivity, conforming to neurocognitive principles of engagement and feedback. The situation at MSU exemplifies overarching inconsistencies throughout Ukrainian higher education. The university is firmly entrenched in academic traditions and encounters resource constraints. Conversely, its receptiveness to European collaboration,

robust focus on teacher preparation, and innovative faculty generate impetus for reform. This contradiction reflects the broader national conflict between tradition and innovation—a conflict that neurocognitive techniques are adept at resolving. *Comparative Analysis: Ukraine and Europe* European universities systematically educate instructors in neuroeducation, whereas Ukrainian universities, including MSU, remain in the exploratory phase. Europe utilises sophisticated digital tools, whilst Ukraine frequently depends on innovative adaptations of available platforms. While both contexts recognise the importance of well-being, war-induced stress and instability in Ukraine intensify this need. The potential for innovation in Ukraine may paradoxically increase, as necessity frequently stimulates creativity. Institutions such as MSU exhibit resilience and a willingness to embrace multidisciplinary solutions that correspond with European trends. The incorporation of neurocognitive techniques into higher education offers both benefits and problems throughout Europe and Ukraine. European universities provide frameworks for systemic innovation, whereas Ukrainian institutions, such as Mukachevo State University, demonstrate the adaptability of these ideas in resource-limited contexts. By synchronising memory-oriented activities, attentional support, emotional involvement, and coaching methodologies with the distinctive requirements of students, Ukrainian institutions can modernise their curricula while addressing the psychological realities of modern learners. Ultimately, MSU's incremental implementation of neurocognitive techniques underscores Ukraine's ability to establish itself as a creative collaborator within the European Higher Education Area.

CONCLUSIONS

The integration of neurocognitive approaches and neurolanguage coaching into higher education represents a profound opportunity to transform language learning in Ukraine and similar contexts. Grounded in principles such as memory consolidation, attentional control, emotional resonance, neuroplasticity, and associative learning, these methodologies provide a scientifically informed framework that advances not only linguistic proficiency but also students' motivation, resilience, and self-awareness. Central to this approach is the development of teacher and learner awareness: educators are encouraged to reflect on their own teaching strategies to identify the most effective techniques, while guiding students to understand their own strengths, preferred learning styles, and cognitive processes. This dual focus ensures that language learning becomes a personalized, self-directed journey rather than a mere accumulation of vocabulary, grammar, and conversational patterns.

Goal setting is another crucial element. By encouraging learners to articulate individual and group objectives—whether academic, professional, or

personal—educators can facilitate structured, incremental progress. Discussing often-overlooked goals, such as cognitive development, memory improvement, or personal growth, sparks engagement and fosters a sense of ownership in the learning process. Motivation, a cornerstone of effective instruction, requires careful cultivation throughout the course. Initial enthusiasm may naturally decline due to increased complexity, competing responsibilities, or the first “language plateau.” In response, teachers can employ empathetic, individualized strategies, including active listening, structured learning plans, and visible progress indicators through measurable tasks, automated quizzes, or point-based systems. These methods maintain engagement, reinforce achievement, and encourage sustained effort.

Creating a brain-friendly learning environment further enhances effectiveness. Prioritizing information, clarifying essential versus optional material, offering choice in assignments, and fostering a respectful, inclusive atmosphere all reduce cognitive overload and stress, enabling students of diverse abilities to participate fully. Pair and group work, relatable lesson topics, humor, and games help form positive emotional associations with learning while activating long-term memory through meaningful connections. Encouraging learners to generate their own associations and linking new content to prior knowledge strengthens retention and deepens understanding.

Finally, reflective tools such as learning diaries and structured questionnaires allow students to monitor their own progress, analyze personal learning strategies, and adapt their approaches to optimize results. This combination of self-reflection, personalized support, and brain-informed pedagogy empowers learners to take control of their educational journey, cultivating autonomy, confidence, and lifelong learning skills. In contexts such as Mukachevo State University, these strategies demonstrate that even amid limited resources, innovation, resilience, and European collaboration can drive meaningful reform. Overall, neurolanguage coaching exemplifies a holistic, learner-centered approach, showing that language education is not only about mastering linguistic structures but also about fostering the cognitive, emotional, and motivational foundations necessary for sustained personal and professional growth in a globalized world.

SUMMARY

This research examines the incorporation of neurocognitive methods into higher education language instruction, specifically within the Ukrainian setting and the experience at Mukachevo State University. Neuroeducation, an emerging interdisciplinary domain that integrates neuroscience, cognitive psychology, and pedagogy, offers unique strategies for improving language learning and

learner engagement. It is emphasised that neurocognitive methods—such as memory consolidation techniques, the influence of emotion on learning, and the effects of attentional control—can enhance conventional language training, making it more individualised and successful. Neuro-language coaching is based on self-regulation, learner’s autonomy, and resilience among students. Utilising contemporary European frameworks in neurodidactics and local advancements at Mukachevo State University, the study delineates pragmatic approaches for integrating brain-based methodologies into curriculum and pedagogical practices. The dilemma of higher education in Ukraine—reconciling swift integration into the European Higher Education Area with the obstacles of socio-political instability and constrained resources—establishes a distinctive framework for testing and adaptation of these methodologies. The results indicate that the application of neurocognitive techniques enhances linguistic proficiency while simultaneously improving students' mental health, motivation, and cognitive adaptability, so better equipping them for international academic and professional discourse.

Bibliography

1. Anderson J. R. Cognitive psychology and its implications. 7th ed. New York: Worth Publishers, 2010.
2. Baddeley A. D., Eysenck M. W., Anderson M. C. Memory. New York: Psychology Press, 2020.
3. Doidge N. The brain that changes itself: Stories of personal triumph from the frontiers of brain science. New York: Viking, 2007.
4. Edelmann D. Neurolanguage coaching: Brain friendly language learning. Munich: Efficient Language Coaching, 2018.
5. European Commission. The European higher education area in 2020: Bologna Process implementation report. Luxembourg: Publications Office of the European Union, 2020.
6. Immordino-Yang M. H., Damasio A. We feel, therefore we learn: The relevance of affective and social neuroscience to education // Mind, Brain, and Education. 2007. Vol. 1, no. 1. P. 3–10. <https://doi.org/10.1111/j.1751-228X.2007.00004.x>
7. Jensen E. Brain-based learning: The new paradigm of teaching. Thousand Oaks, CA: Corwin Press, 2008.
8. Kelly C. H. The Brain Studies Boom: Using Neuroscience in ESL / EFL Teacher Training // Development (Springer). 2017. P. 79–102.
9. Kelly C., Sandy C. Brain-based learning and the active approach. The Language Teacher, 2008. URL: http://www.bbbforlearning.com/uploads/1/0/4/4/10446722/brain_based_learning_is_active_learning.pdf

10. Kuhl P. K. Brain mechanisms in early language acquisition // *Neuron*. 2010. Vol. 67, no. 5. P. 713–727. <https://doi.org/10.1016/j.neuron.2010.08.038>
11. Lieberman M. D. *Social: Why our brains are wired to connect*. Oxford: Oxford University Press, 2013. URL: <https://psycnet.apa.org/record/2013-09689-000>
12. Oxford R. L. *Teaching and researching language learning strategies: Self-regulation in context*. 2nd ed. New York: Routledge, 2017.
13. Paling R. *Neurolanguage Coaching: Brain friendly language learning*. Kindle Edition. The Choir Press, 146 p.
14. Paling R. The Differences between Language Teaching and Language Coaching. *Efficient Language Coaching*. URL: <http://www.languagecoachingcertification.com/differences-language-teaching-and-language-coaching/>
15. Sprenger M. *How to teach so students remember*. 2nd ed. Alexandria, VA: Association for Supervision and Curriculum Development, 2020.
16. Squire L. R., Wixted J. T. The cognitive neuroscience of human memory since H.M. // *Annual Review of Neuroscience*. 2011. Vol. 34. P. 259–288. <https://doi.org/10.1146/annurev-neuro-061010-113720>
17. Sweller J., Ayres P., Kalyuga S. *Cognitive load theory*. New York: Springer, 2011.
18. Zull J. E. *From brain to mind: Using neuroscience to guide change in education*. Sterling, VA: Stylus, 2011.

Information about the author:

Raikhel Anna Mykhailivna,

Assistant at the Department of English language,
Literature and Teaching Methods,
Mukachevo State University
26, Uzhgorodska str., Mukachevo, 89600, Ukraine