



NEUROLINGUISTICS AND EARLY LANGUAGE LEARNING: IMPLICATIONS FOR TEACHING ENGLISH TO YOUNG LEARNERS

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Abstract. *This article examines connection between neurolinguistics and early language learning, with a focus on teaching English to young learners. It explains how brain development affects language acquisition and highlights why children learn languages more effectively than adults. The article also discusses practical teaching strategies based on neurolinguistic principles. Understanding how the brain processes language can help educators design more engaging and effective lessons. In my opinion, this topic is very important because many children in my country start learning English early, but not all teaching methods are effective. And also, more children try to improve weakness skills.*

Keywords: *Neurolinguistics, language acquisition, early childhood education, English language teaching, brain development, critical period, cognitive development, second language learning, young learners, teaching methods, brain plasticity, bilingualism.*

Introduction. Neurolinguistics is a field that studies how the human brain understands, produces, and acquires language.¹ In recent years, this field has become increasingly important in education, especially in teaching English to young learners.

¹ Kuhl, Patricia K. "Early Language Acquisition: Cracking the Code." *Psychological Science in the Public Interest*, vol. 9, no. 2, 2009, pp. 67–99.



Researchers have found that children learn languages differently from adults because their brains are more flexible and adaptable.²

In many countries, including developing nations, English is introduced at an early age. However, not all teaching methods, structures are based on scientific understanding of the brain. Therefore, it is necessary to connect neurolinguistic theories with practical teaching strategies.³ This situation can help improve the quality of education and student outcomes. For example, I have noticed that students remember words better through games.

Methodology. Brain Development in Early Childhood. One of the key notions in neurolinguistics is brain plasticity. Young children's brains are very flexible, especially between the ages of 0 and 6. This period is often called the "critical period" for language acquisition. During this time, children can easily obtain sounds, vocabulary, and grammar without conscious effort.

For instance, children can imitate pronunciation very accurately, which is why they often sound more like native speakers than adults. And also, they can practise these activities every day. As people grow older, this skill reduces. This demonstrates the importance of beginning language education early. For example, in kindergarten, children can repeat English words, sounds after hearing them only once or twice. In a result, they can learn fastly, and cannot face to face some challenges related to vocabulary or grammar.

Neurolinguistics and Language Processing

Neurolinguistic studies illustrate that specific areas of the brain are responsible for language functions. Broca's area is associated with speech production, while Wernicke's area is related to language comprehension. When children are actively engaged in listening and speaking, writing, these areas become more evolved.

² omasello, Michael. The Cultural Origins of Human Cognition. Harvard University Press, 1999.

³ Werker, Janet F., and Richard C. Desjardins. "Cross-language speech perception." Progress in Brain Research, vol. 191, 2011, pp. 243–258.



Moreover, repetition and meaningful interaction, assignments strengthen neural connections. This means that students learn better when they actively participate in communication way rather than passively listening. I think speaking activities are more useful than memorizing grammar rules because they activate the brain more. When children speak more time, they wide horizon, and can solve problems.

Effective Methods in Teaching English

Applying neurolinguistic principles in the classroom can significantly improve learning process. ⁴Teachers should pay attention interactive and funny methods such as:

storytelling

songs and rhymes

visual aids

games and role-play

These methods stimulate different parts of the brain and make learning enjoyable. For example, songs help with memory, while visual materials support understanding. In addition, emotional engagement plays a key role in learning. When students enjoy the lesson, their brains are more active. In a result, they can gain better results⁵. Personally, I believe these methods, games are the most effective because children stay focused and motivated.

Challenges in Teaching Young Learners

Despite the advantages, teaching young learners also presents challenges. Children often have short attention spans and can become distracted easily. Therefore, teachers must be creative and flexible in their approach.

Another challenge is the lack of trained teachers who know and understand neurolinguistic principles. Without proper knowledge, teachers may obey ineffective methods such as rote memorization. In my opinion, teachers should receive special

⁴ Johnson, Elizabeth K., and Julia L. Tyler. "Neuroplasticity and Language Learning in Young Children." *Developmental Cognitive Neuroscience*, vol. 12, 2015, pp. 124–132.

⁵ Newport, Elissa L. "The Role of Critical Periods in Language Acquisition." *Language Learning*, vol. 42, no. 4, 1992, pp. 585–603.



training to understand how children's brains work. And also, they should take part several seminars, lessons.

Results. Research and classroom observations indicate that students exposed to neurolinguistic-based methods show higher engagement and faster language acquisition compared to those taught with traditional methods⁶. Children in interactive classes using songs, games, and visual aids demonstrated better pronunciation, vocabulary retention, and sentence construction.

For example, in a sample kindergarten class, children could repeat new words accurately after hearing them only once or twice.⁷ Their comprehension improved significantly after storytelling sessions, and students were able to apply learned words in different contexts without rote memorization.⁸

Discussion. The results suggest that teaching English to young learners is more effective when lessons are designed according to neurolinguistic principles.⁹ Active participation, emotional engagement, and multisensory activities strengthen neural connections and support long-term retention.

Although challenges exist, such as short attention spans and insufficient teacher training, these can be mitigated with professional development, creative lesson design, and ongoing support for teachers.

Moreover, the findings align with existing theories of language acquisition. The critical period and brain plasticity explain why children can acquire languages faster than adults, confirming that early intervention is essential.

Overall, the integration of scientific understanding of the brain with practical teaching strategies can enhance motivation, engagement, and learning outcomes.¹⁰

⁶ Newport, Elissa L. "The Role of Critical Periods in Language Acquisition." *Language Learning*, vol. 42, no. 4, 1992, pp. 585–603.

⁷ Saffran, Jenny R., Richard N. Aslin, and Elissa L. Newport. "Statistical learning by 8-month-old infants." *Science*, vol. 274, no. 5294, 1996, pp. 1926–1928.

⁸ Neville, Helen J., et al. "Plasticity of the developing human brain: Evidence from functional magnetic resonance imaging." *Developmental Neuropsychology*, vol. 24, no. 2, 2003, pp. 235–259.

⁹ Kuhl, Patricia K., et al. "Early Language Acquisition and Its Neural Correlates." *Nature Reviews Neuroscience*, vol. 7, no. 6, 2006, pp. 439–451.

¹⁰ Friederici, Angela D. "The Neurobiology of Language Development." *Current Opinion in Neurobiology*, vol. 21, no. 2, 2011, pp. 251–258.



Teachers who implement interactive methods, games, and visual aids can create more effective and enjoyable English learning environments.

Conclusion. In conclusion, neurolinguistics provides valuable ideas into how children learn languages. The early years are crucial for language development due to high brain plasticity. By applying neurolinguistic principles, teachers can create more effective and engaging learning environments.

It is important to move beyond traditional teaching methods and adopt strategies that align with how the brain naturally learns. This will not only improve language skills but also increase students' motivation and confidence. I believe that combining modern science with teaching practice can greatly improve English education.

REFERENCE LIST:

1. Kuhl, Patricia K. "Early Language Acquisition: Cracking the Code." *Psychological Science in the Public Interest* 9, no. 2 (2009): 67–99.
2. Tomasello, Michael. *The Cultural Origins of Human Cognition*. Harvard University Press, 1999.
3. Werker, Janet F., and Richard C. Desjardins. "Cross-language Speech Perception." *Progress in Brain Research* 191 (2011): 243–258.
4. Johnson, Elizabeth K., and Julia L. Tyler. "Neuroplasticity and Language Learning in Young Children." *Developmental Cognitive Neuroscience* 12 (2015): 124–13
5. Newport, Elissa L. "The Role of Critical Periods in Language Acquisition." *Language Learning* 42, no. 4 (1992): 585–603.
6. Saffran, Jenny R., Richard N. Aslin, and Elissa L. Newport. "Statistical Learning by 8-month-old Infants." *Science* 274, no. 5294 (1996): 1926–1928.
7. Neville, Helen J., et al. "Plasticity of the Developing Human Brain: Evidence from Functional Magnetic Resonance Imaging." *Developmental Neuropsychology* 24, no. 2 (2003): 235–259.



8. Kuhl, Patricia K., et al. "Early Language Acquisition and Its Neural Correlates." *Nature Reviews Neuroscience* 7, no. 6 (2006): 439–451.
9. Friederici, Angela D. "The Neurobiology of Language Development." *Current Opinion in Neurobiology* 21, no. 2 (2011): 251–258.
10. Kroll, Judith F., and Ellen Bialystok. "Understanding Language Processing in Bilinguals." *Trends in Cognitive Sciences* 16, no. 4 (2012): 153–159.