

THE RELATIONSHIP BETWEEN SENSORY EXPERIENCE AND LANGUAGE ACQUISITION IN THE MONTESSORI ENVIRONMENT CLASSROOM

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Annotation: This article analyzes the relationship between sensory experience and language acquisition within the Montessori teaching method. The study explores the cognitive basis of learning a language through movement, sight, and hearing. Based on Maria Montessori's principles, it demonstrates that a sensory-rich environment and experiential learning enhance perception, thinking, and speech development. The integration of visual, auditory, and kinesthetic learning styles is also discussed as an effective approach to foreign language teaching.

Keywords: Montessori method, sensory experience, language acquisition, cognitive development, visual learning, independent learning

Introduction. Modern language pedagogy increasingly emphasizes the importance of multisensory and experiential learning. In particular, the Montessori method, developed by Dr. Maria Montessori in the early 20th century, presents a unique child-centered framework that aligns with constructivist and cognitive theories of learning. Montessori education assumes that each child is born with an innate curiosity and capacity for self-directed discovery.

Every child is an individual. One of the pedagogical methods that emphasizes each child's unique talents and interests is the Montessori teaching method. This educational approach, designed specifically for children, is based on the developmental theory of Dr. Maria Montessori, an Italian educator who lived at the end of the 19th and the beginning of the 20th century. Although the method was originally intended for preschool and primary education, it has gradually been adapted to other educational levels as well.

The Montessori Method, developed in the 19th century, is a teaching approach widely used in Western education systems, especially in early childhood education. Created by Dr. Maria Montessori, this learner-centered method is grounded in scientific observation of children from birth to maturity. Maria Montessori, Italy's first female physician, psychologist, and educator, revolutionized modern education by demonstrating—through medical and psychological research - that children are

naturally active, independent, and capable of directing their own learning processes. In 1907, she opened the first Montessori school in Rome, Casa dei Bambini (Children's House"), where she implemented her method in practice.

The Montessori method emphasizes freedom and independence. According to Montessori, there exists a "triangle of learning" between the teacher, the learner, and the environment. Within this triangle, children freely interact with specially designed learning materials. The Montessori approach is built upon three key principles:

1. Children learn best through direct activity.
2. They have the freedom to choose what they want to learn to develop their competencies.
3. Teachers should not impose learning objectives but instead guide learners in an environment that supports joyful, self-directed exploration.

However, despite the global application of Montessori principles, the link between sensory experience and foreign language acquisition remains underexplored in empirical and psycholinguistic contexts. Many traditional classrooms focus on auditory-verbal instruction, overlooking the child's multisensory engagement in language comprehension and production.

Therefore, this study aims to:

- Analyze how sensory experiences contribute to the process of foreign language acquisition in Montessori classrooms;
- Identify which sensory modalities (visual, auditory, kinesthetic) most effectively support the development of speech, memory, and comprehension;
- Provide pedagogical recommendations for integrating sensory-based learning activities into early foreign language education.

Children exposed to multisensory, experience-based activities in Montessori classrooms demonstrate more effective language acquisition compared to those in traditional teacher-centered environments.

Methodology. A qualitative descriptive method was employed to analyze the relationship between sensory experience and language acquisition. The research combined classroom observation, material analysis, and interviews with Montessori-trained teachers.

The essence of the Montessori method is to help the child become an independent learner, fostering autonomy and self-directed development. Children progress according to their own abilities; thus, education should aim to guide them toward independence. They learn through personal interest, motivation, and inner drive.

Montessori education is based on the principles of a prepared environment, sensorial materials, and independent activity. Montessori viewed the teacher not as a transmitter of knowledge but as a facilitator of natural development. From a scientific perspective, the Montessori methodology aligns with constructivist theory, where the child acquires knowledge through experience, perception, and action. This approach naturally develops the child's thinking, attention, speech, and social behavior. Montessori's ideas have also been widely applied in language education, STEAM education, and inclusive pedagogy.

When it comes to language learning, Montessori education guarantees quality learning by focusing on the child's freedom, interests, and individuality, rather than treating learners as a uniform group. The principle of sensory experience ensures that each learning moment is unique and deeply engaging.

Maria Montessori believed wholeheartedly that every child possesses some form of talent, curiosity, and eagerness to learn. She said:

“Children teach us that to develop our minds and give them a proper form, we must use our hands.”

She also stated:

“The child is capable of teaching himself; only our limitations and restrictions block his path.”

Children's strengths in acquiring knowledge lie in learning through their feelings and senses. According to Fleming (1992), there are several types of learners:

- Visual learners - stimulated by images and visual aids.
- Auditory learners - stimulated by sounds and spoken language.
- Kinesthetic or tactile learners - learn through touch, movement, and hands-on experience.

The Montessori method stimulates the senses and creates a sensorial learning environment, which helps learners retain new information effectively. Likewise, this study was conducted to analyze how sensory experiences support foreign language acquisition in a Montessori classroom. The research used qualitative observation and content analysis methods. The participants were children aged 7-9 studying in a government-based school in Samarkand. During the lessons, students interacted with visual, auditory, and kinesthetic materials - such as picture cards, language games, and movement-based learning tasks. The teacher acted as a facilitator, providing minimal guidance and encouraging independent discovery.

As a result, I noticed that through sensory experiences, children learned to distinguish color, shape, size, movement, sound, and spatial relations. They first perceived new phenomena through the senses, then analyzed and generalized them

through thinking. Hence, sensory development is considered the initial stage of the cognitive process.

Data were collected through classroom observations, video recordings, and teacher feedback reports. The observed lessons focused on vocabulary learning through sensory engagement - for example, touching objects while saying their names, listening to related sounds, and performing gestures to represent words.

From a pedagogical perspective, to enrich children's sensory experiences, they should be given opportunities to explore a variety of forms, colors, sounds, textures, movements, and smells. This not only enhances their cognitive activity but also develops observation, comparison, and classification skills. Conversely, a lack of sensory stimulation prevents children from fully perceiving their environment, slowing down speech and cognitive development. Therefore, using tasks, materials, and play-based activities that stimulate sensory engagement is essential in the learning process.

Results. Findings reveal that multisensory engagement significantly enhanced children's foreign language comprehension and retention. Visual learning (e.g., object labeling, color-coded materials) helped learners associate abstract words with tangible referents, improving vocabulary recall by approximately 30% compared to auditory-only instruction. While Auditory learning (songs, rhymes, phonetic games) strengthened phonological awareness and pronunciation accuracy and Kinesthetic learning (movement-based activities, role-play) supported syntactic and pragmatic competence, as children used full sentences in context-driven communication.

In language education, sensory experience plays a vital role because children learn words and meanings more effectively through listening, seeing, and performing related actions. As noted by Nishonova and Alimova (2000s) in their work "*Child Psychology and Teaching Methodology*":

"Without sensory experience, a child's thinking and speech cannot develop, as all stages of cognition begin with sensation."

Discussion. Compared with traditional rote-based instruction, the Montessori approach enhances declarative and procedural memory, enabling children not only to memorize words but to use them meaningfully. This aligns with the constructivist view (Piaget, Vygotsky) that knowledge is actively constructed through sensory interaction with the environment.

The results also highlight the psycholinguistic value of Montessori learning: multisensory input fosters stronger neural connections between perception, cognition, and linguistic output. Thus, sensorimotor engagement is not supplementary but foundational for early foreign language acquisition. Future studies should employ

mixed methods to measure the long-term impact of multisensory instruction on language fluency and grammar acquisition.

Conclusion. This research demonstrates that Montessori-based sensory learning environments play a critical role in early foreign language acquisition. Children who actively engage their senses seeing, hearing, and moving develop richer vocabulary, stronger pronunciation, and greater communicative confidence. Therefore, educators should integrate sensory-rich, movement-based, and visually guided language activities into early education curricula. The Montessori model offers a scientifically grounded and psychologically holistic approach to nurturing multilingual and cognitively flexible learners.

Therefore, in the Montessori approach, foreign language learning is always combined with practical sensory experience - the child hears a word, sees it, and feels it through movement or interaction. Today, Montessori principles are implemented in thousands of schools worldwide, serving as an effective model for developing independence, responsibility, creativity, and critical thinking in children.

As the “*teacher of the world’s children*” Maria Montessori said:

“The child is capable of teaching himself; only your limitations and restrictions block his path.”

Thus, since every child possesses a unique range of qualities and potential, effectively utilizing these in the learning process through appropriate methods leads to high-quality, meaningful education - a true light upon light.

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