

# The Impact of Multilingual Teaching Strategies on Preschool Children's Learning Outcomes

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### Abstract:

In the context of globalization and younger education, the issue of multilingual teaching for preschool children has received widespread attention. However, there are still significant shortcomings in the systematic and scientific practice of multilingual teaching in China. This article aims to explore the impact of multilingual teaching strategies on the learning outcomes of preschool children aged 3-6. Research analysis shows that their learning effectiveness is mainly constrained by three factors: first, the child's own neural plasticity and personality traits; second, the quantity, frequency, and quality of language environment input; and third, the teacher's language proficiency, teaching level, and classroom design. Based on this, this article proposes the following suggestions: first, deepen gamification and situational classroom design to enable language to be naturally acquired in real environments; second, promote differentiated and scaffolding based teaching, respect individual differences and provide precise support; third, advocate multi-sensor coordinated learning, deepen memory and understanding, and systematically improve the multilingual effectiveness of preschool children.

**Keywords:** Multilingual teaching; Preschool children; Learning outcomes; Gamified teaching; Differentiated teaching

## 1. Introduction

Against the backdrop of the deepening globalization wave, multilingual ability is no longer a specialty of a few people, but is gradually becoming an important personal quality. This trend is also constantly affecting multilingual education and presenting a trend towards younger age groups. It also makes preschool

children's early language enlightenment education closely monitored by parents. Research in neuroscience and cognitive neuroscience has shown that the age range of 3-6 years old is the most critical period for children's brain neural plasticity, also known as the "language learning critical period" or "sensitive period" [1]. At this point, exposure to a second language makes it easier to form representations of brain

regions similar to their mother tongue. Children will show high sensitivity to speech recognition, which can enable them to learn other languages as efficiently as their mother tongue, and also make it easier to form representations of brain regions similar to their mother tongue, which helps with long-term memory [2].

However, compared to international trends, as a non-immigrant country, China's preschool education system is still in the early stages of development and exploration in implementing multilingual teaching strategies. At present, only a few private international kindergartens or characteristic key experimental classes can carry out bilingual or even multilingual teaching, while other kindergartens and early education institutions still mainly focus on mother tongue teaching and cannot create an environment suitable for children's multilingual learning. This situation is also contrary to the long-term development goals of education. Therefore, this study aims to provide some theoretical and practical basis for the guidance of multilingual teaching by systematically analyzing the influencing factors of the effectiveness of multilingual teaching for preschool children. This will provide a basis and practical guidance for kindergartens and early education institutions to design and optimize multilingual courses. This study distinguishes itself by proposing to examine the differential impact of teaching strategies on children from monolingual and bilingual family backgrounds — a perspective often overlooked in prior research. Furthermore, it innovatively links quantitatively assessed teacher strategies with directly observed child engagement in natural classroom settings. The findings are expected to offer evidence-based guidance for kindergarten curriculum design and help parents establish a scientific perspective on early multilingual education.

## 2. Factors Influencing the Effectiveness of Multilingual Teaching for Preschool Children

The multilingual learning process of preschool children is complex and related to multiple dimensions such as physiological conditions, cognitive levels, and emotional changes. Their learning outcomes also vary from person to person, influenced and shaped by three factors: the child themselves, the language environment, and the teacher's teaching.

### 2.1 Children's Own Factors

As an irreplaceable subject in learning activities, children's inherent cognitive and emotional characteristics form an important foundation for multilingual learning, which also determines the individual learning character-

istics, methods, and expected learning achievements of different children.

Firstly, brain neural plasticity and critical language periods are fundamental factors. A large number of neuroscience-related studies have confirmed that the brains of preschool children are in a very active and relatively high plasticity period. As Professor Kuhl pointed out in his classic research on infant language perception, early language communication can effectively reshape children's brain nerves, especially in the areas of language processing [3]. Proper bilingual or multilingual communication between the ages of 3 and 6 can make children's pronunciation and intonation closer to that of native speakers, and make it easier to develop a sense of language. This is different from the repetitive memorization and pattern exploration that adults use when learning a second or third foreign language, but rather a language expression that is close to "innate" [1].

Secondly, individual differences in cognitive abilities and learning styles also have a significant impact on learning. In terms of cognitive style, some children belong to the "field dependent type". They are good at listening, learning, and using language through social interaction and real-life scenarios. These children are suitable for immersive scenario teaching. Another type is the "field independent type", who are good at independently exploring the logic and connections behind knowledge [4]. These differences all affect the speed and accuracy of children's foreign language learning.

In addition, children's personality traits also affect their foreign language learning. Outgoing children are brave enough to express themselves in public, which appears to result in lower learning outcomes. Even when using relatively unfamiliar foreign languages, they dare to speak and are not afraid of making mistakes. This positive "output" effectively promotes the internalization of language [5]. On the contrary, introverted and sensitive children tend to be more silent in the early stages of language, afraid of making mistakes, and unwilling to express themselves, resulting in lower learning outcomes. Studies have shown that providing a relaxed learning environment for introverted and sensitive children has a significant impact on their foreign language learning and helps reduce their learning anxiety [6].

The level of native language proficiency also has a crucial impact on the learning of other foreign languages. People with one or more language backgrounds are more likely to have an advantage when learning a foreign language [7]. The ability to express oneself fluently and reasonably in one's native language lies in the improvement of language cognition, which is suitable for learning multiple languages.

## 2.2 Language Environment Factors

Language learning is essentially a social activity that cannot be separated from the nourishment of the language environment. The quality of the language environment directly affects the effectiveness of language learning.

The quantity and frequency of language input are the foundation, and sufficient and high-frequency input helps the brain remember; Short and intermittent learning is difficult to form long-term memory. Only prolonged immersion has the opportunity to transform language from written to proficient use [8]. The duration and frequency of children's exposure to a second language are positively correlated with their comprehension level, reaction speed, and fluency in expression.

Based on the input quantity, input quality is also very important. The accuracy of the expression heard for the first time affects the standardization and authenticity of language use. The famous "Interaction Hypothesis" emphasizes that the key to language acquisition lies not in "hearing," but in "understanding. When children try to use a new language and receive feedback from their interlocutors' answers, the efficiency of language internalization is highest, which is a prerequisite and courageous step for using language correctly [9]. Therefore, a teaching environment with proper interaction and response can greatly encourage children to output correctly, thereby improving the effectiveness of language learning.

In addition to schools, families also play a crucial role in language learning. The attitude of parents towards multilingual learning and the language environment that families can provide together constitute the environment for children's language learning. Schools and families complement each other and jointly influence each other.

## 2.3 Factors of Teacher Teaching Practice

Teachers are the bridge between children and language, and their professional competence and teaching strategies directly affect children's learning outcomes. At the same time, this factor is relatively mature and controllable, and has a significant impact on children's foreign language learning.

Firstly, the language proficiency and language literacy of teachers themselves are the foundation. Factors such as non-standard spoken language standards, the presence or absence of accents, and authentic vocabulary used by teachers can all have an impact on children's language acquisition. The language learning process of children in early childhood is mainly based on imitation, and a teacher with pure pronunciation and authentic vocabulary can provide good language input for children.

In addition, teaching strategies and curriculum design are

the core. The cognitive characteristics of preschool children indicate that they mainly learn new things through specific operations, games, and perceptions. Therefore, when facing young children, the teaching environment should use gamified and situational methods to enhance their learning interest and engagement, and continuously stimulate their learning drive. For example, interesting scene settings: By setting up scenes such as shopping in supermarkets and playing in zoos, combined with pictures or on-site courses, children's memory can be strengthened, vocabulary and common expressions can be expanded, not only learning language but also exercising their socialization ability [10].

The classroom atmosphere and personalized education of teachers are the guarantee for achieving it. Facing many sensitive and hesitant children, encouraging them to express themselves boldly and not afraid of making mistakes is also a test of the teacher's ability and teaching guidance methods. Teachers should use personalized education, such as asking questions based on students' abilities, to create a sense of security and trust in highly sensitive children, so that introverted children can bravely answer questions and express their opinions, transforming from passive to active [6].

## 3. Teaching Suggestions

Based on the analysis of the influencing factors above, this article proposes suggestions from the following three parts, aiming to effectively improve the multilingual learning effectiveness of preschool children.

### 3.1 Gamification and Situational Classroom Design

The gamified learning theory emphasizes the organic combination of game mechanisms and learning objectives, which can effectively stimulate the intrinsic motivation of preschool children and enable them to construct knowledge in a state of autonomy and pleasure. In multilingual teaching, this means that teachers should consciously embed language knowledge points into rule-based and goal-oriented game contexts, rather than conducting isolated vocabulary or sentence pattern exercises. Based on this, teachers can design themed role-playing games. For example, in the theme of "weekend picnic", food, natural scenery, and related verbs are first introduced through physical objects, pictures, and actions; Subsequently, guide children to play the roles of "preparers" and "participants" respectively, and use the target language to complete communication sequences such as "preparing food", "issuing invitations", "sharing feelings", etc. Research has shown that such highly realistic social games can provide

children with ample opportunities to negotiate meaning in interactions, thereby significantly promoting the development of their narrative coherence and social pragmatic abilities [11].

Situational teaching involves creating authentic multilingual communication scenarios (such as “supermarket shopping”) and integrating target vocabulary and sentence structures into meaningful interactions. Infuse the purpose of language learning into game and activity scenarios, allowing children to repeatedly input and gradually use language in a relaxed environment. This strategy is based on constructivist learning theory, which suggests that children actively construct knowledge through interaction with their environment [12]. This approach not only follows the principle of “learning by doing”, making language input more understandable and interesting, but also effectively reduces children’s expression anxiety and encourages students to bravely try and output language in natural situations. When language knowledge is closely linked to specific usage contexts, its memory traces are deepened, making it easier to be activated and extracted in real cross-cultural communication, significantly improving the effectiveness of learning transfer.

### 3.2 Differentiated Teaching

Respecting and responding to individual differences of children is the core of effective teaching in preschool multilingual education. Due to the varying ways in which each child perceives, understands, and expresses language, teachers should design learning tasks that are open-ended and hierarchical, allowing each student to experience success within their ‘zone of proximal development’. Personalized teaching intervention has been proven to be an effective way to support bilingual learners. Teachers can adjust teaching strategies based on their understanding of students, which can significantly promote their vocabulary acquisition [5]. For example, after picture book teaching, teachers can encourage students to choose their own expression methods based on their own characteristics: some children may be good at organizing the plot and trying to retell the story; Other children are better at observing the details of pictures, establishing connections between vocabulary and meaning through identification and description. During this process, teachers need to observe keenly and provide timely “scaffolding style” guidance - this “micro adaptive teaching” that focuses on individual learning trajectories in collective teaching is crucial for meeting students’ diverse needs [13]. Teachers should not only provide key prompts when students encounter difficulties to protect their language security, but also leave sufficient space for their thinking to avoid excessive inter-

vention, gradually cultivating their ability and confidence to independently use language.

### 3.3 Multi-Sensory Coordinated Learning

Children constantly improve their worldview by perceiving the world through multiple senses. Multiple sensory aids help establish more connections within the brain, thereby forming long-term memory. Foreign language teachers should systematically design teaching strategies and prepare learning aids in appropriate situations, not limited to the visual and auditory aspects of traditional courses, but actively incorporating other senses such as touch and smell to help children focus on the classroom and efficiently memorize.

Children possess various internal intelligences, including language, music, bodily movements, and space. When learning abstract adjectives, teachers can bring objects with different textures for children to touch with their own hands. When learning verbs, students can deepen their memory by standing up and standing still, jogging, jumping in place, and other actions. In addition, teachers can play some children’s songs to make foreign languages simpler and more interesting through lively rhythms and catchy phrases.

## 4. Conclusion

To sum up, improving the effectiveness of multilingual learning for preschool children is a long-term, complex, and systematic task that relies on the analysis and research of children’s own characteristics, language acquisition mechanisms, and appropriate teaching strategies. This study systematically analyzed three key influencing factors: children’s own factors, language environment factors, and teacher teaching practice factors, and proposed three teaching strategies based on their characteristics: gamification of teaching, situational design, differentiated teaching, and multisensory coordinated learning. These strategies aim to provide a better multilingual learning environment for preschool children and improve their multilingual learning outcomes.

Nevertheless, this study has certain limitations that should be acknowledged. Firstly, the proposed teaching strategies and influencing factors are primarily derived from literature synthesis and theoretical analysis, lacking empirical validation through classroom-based experimental or longitudinal studies. Secondly, the discussion on contextual factors—such as regional educational policy disparities, varying levels of family involvement, and socioeconomic backgrounds—remains relatively general, without delving into how these variables interact with teaching strategies in shaping learning outcomes. Future research could adopt

mixed-methods approaches to collect quantitative and qualitative data from diverse kindergarten settings, further examining the applicability and boundary conditions of these strategies across different contexts.

With the advancement of globalization, parents and society should also realize the importance of multilingual learning as early as possible, and jointly build a good multilingual learning environment for children. Teachers should also design appropriate and suitable teaching strategies for students and continuously optimize the education methods for preschool children in China.

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