Implications of the Critical Period Hypothesis for Oral English Instruction in Primary Schools in China

Zekai Zhao^{1,a,*}

¹School of Foreign Languages, Shanghai Jiao Tong University, Shanghai, 200000, China a. zhaozekai0819@sjtu.edu.cn *corresponding author

Abstract: Oral language instruction has long been overlooked in primary school English education in China. However, with the rapid pace of globalization and the growing demand for English proficiency, oral skills have become a crucial part of students' overall language competence. Based on the Critical Period Hypothesis (CPH), investigating the sensitive period for language learning at different ages and its implications for educational practices has become a key approach to improving educational quality. Therefore, this paper seeks to explore how to enhance the quality of oral language teaching in primary school English classrooms in China through the application of the CPH. It specifically focuses on adopting effective teaching strategies to help students overcome challenges in oral language learning, thereby fostering the holistic development of their language skills. In addition, this study reviews and analyzes relevant literature, with a focus on recent research findings. And the results indicate that teaching strategies based on the CPH, such as group role-playing and dubbing activities, can effectively improve students' oral language skills. These methods provide students with more opportunities for language practice, thereby addressing the shortcomings of oral language teaching. However, further experimental research is needed to validate the effectiveness of these teaching strategies.

Keywords: Critical Period Hypothesis, Oral English Instruction, Language Acquisition, Primary School English Education.

1. Introduction

In recent years, the Critical Period Hypothesis (CPH) in second language acquisition has gained widespread attention in the field of linguistics, particularly in research exploring the relationship between age and language learning ability. The Critical Period Hypothesis (CPH), proposed by Eric Lenneberg in 1967, suggests that language ability develops rapidly between the ages of 2 and puberty [1]. Prior studies indicated that brain development during childhood and early adolescence significantly impacts language learning [2]. However, research on applying CPH to primary school English education, particularly in oral language teaching, remains limited. Existing literature mainly addresses language learning difficulties in adults, neglecting the sensitive period in young children. Despite evidence supporting the existence of a critical period, there is limited practical research on how to effectively apply these theories in the classroom. This study aims to explore how to improve the quality of primary school English oral teaching through the application of the CPH. This research will examine how teaching strategies based on the critical period hypothesis can enhance primary

[©] 2025 The Authors. This is an open access article distributed under the terms of the Creative Commons Attribution License 4.0 (https://creativecommons.org/licenses/by/4.0/).

school students' oral English skills. Given that the primary school years are crucial for language learning, it is worth exploring how to design effective oral language teaching strategies based on the characteristics of this sensitive period. This study uses a literature review method, combined with qualitative analysis, to evaluate the effectiveness of current teaching methods. This research may contribute to optimizing primary school English education, especially in oral language teaching practices, providing teaching strategies based on the critical period hypothesis, supporting educational practices, and improving resource allocation and classroom outcomes.

2. Overview of the Critical Period Hypothesis

2.1. The Definition and Structure of the Critical Period Hypothesis

Initially, the critical period was a biological conception, referring to a specific time window during which appropriate experiences can boost the development of certain abilities, and after this period, acquiring these abilities becomes much more difficult. Biologists discovered through experiments on animals such as chickens and geese that newly hatched animals could quickly recognize and follow their parents [3]. In 1959, Wilder Penfield and Lamar Roberts introduced this concept into the field of language learning, suggesting that language acquisition may also be constrained by a biological critical period [4]. In second language acquisition (SLA) research, it is widely believed that children learn a second language more easily and efficiently during this sensitive period, but if this critical period is missed, language learning becomes significantly more difficult, and achieving native-like proficiency is unlikely. A study involving 46 Chinese and Korean participants, aged between 3 and 39, learning English as a second language found a strong correlation between grammatical judgment accuracy and the age of language acquisition. Specifically, those who started learning English before puberty had significantly better grammatical judgment skills, and the results were strongly related to the age at which they started learning. In contrast, those who started learning after puberty demonstrated unstable results, with no correlation to the starting age. The experiment shows that early exposure to a second language improves proficiency. To explain this phenomenon, some studies have proposed the concept of "maturational constraints," which suggests that children rely more on morphological information in language learning, focusing on part of the language rules, whereas adults tend to focus on memorizing complete linguistic structures with an emphasis on vocabulary, phrases, and sentences [5].

2.2. The Academic Controversy about the Critical Period Hypothesis

The Critical Period Hypothesis (CPH) remains one of the most controversial theories in the field of SLA. Supporters argue that the age effect indicates a decline in language acquisition ability with age, making children better language learners, while adults face greater challenges in acquiring a second language [6]. In contrast, opponents contend that the age effect is gradual rather than a sudden drop after puberty, and that this influence is not limited to the post-puberty phase [6]. The debate about the impact of age on SLA revolves around two main issues.

First, there is considerable disagreement over the precise definition of the critical period. Some scholars, such as Newport and Johnson, provide evidence that language learning ability notably declines around puberty [5]. However, others argue that this decline is a gradual process influenced by various factors, unrelated to CPH. For example, Vanhove reanalyzed data from a 2010 study and found that the specific age patterns predicted by CPH do not exhibit cross-linguistic robustness. They concluded that the relationship between learner age and L2 susceptibility is linear, revealing that age patterns in SLA are not entirely governed by CPH [7].

Second, the question of whether late L2 learners can achieve native-like proficiency remains debated. Abrahamsson and Hyltenstam found that participants who began learning L2 before the age

of 12 were more likely to be perceived as native speakers in a listening test. However, none of these participants passed more complex tasks as native speakers [8]. Other studies suggest that age affects the conditions of L2 learning rather than the ability to learn L2. Marinova-Todd and Snow reviewed several studies on age and language acquisition and concluded that some studies had methodological flaws, such as inconsistencies in evaluator ratings. Moreover, they found that older L2 learners performed better in writing tasks, emphasizing the role of environmental factors in L2 acquisition [9].

Despite ongoing debates, conclusive empirical evidence confirming or refuting the existence of CPH remains lacking. This ambiguity highlights the complexities and controversies associated with its application in language acquisition, as research findings continue to exhibit variability across different languages and contexts.

3. The Condition and Challenge of Oral English Instruction in Primary Schools

In China, while some parents opt for languages such as Japanese, Spanish, or German as their children's second language, learning English remains the mainstream choice, and English continues to be an important subject in the compulsory education system. Primary school students typically begin learning English around the third grade, with some regions starting even earlier. Research highlights the importance of developing oral communication skills in the classroom. In particular, oral communication aids peer interaction, cognitive development, and is closely linked to reading comprehension. Furthermore, poor speaking skills can become a barrier to learning, leading to misunderstandings and/or cognitive overload. In a broader sense, oral communication instruction supports the development of reading and writing skills [10]. However, the design of primary school English education is somewhat imbalanced, with a stronger focus on reading, listening, and writing, while oral skills are often neglected.

3.1. Unqualified Teachers and Struggling Students

The professional competence of teachers and the learning motivation of students are key factors that affect the quality of oral English teaching. Although English has become a compulsory subject in Chinese primary schools, many teachers are not from an English language background but have switched to teaching English after undergoing retraining. This lack of professional background among teachers significantly impacts the quality of teaching. For example, in a 2001 survey in Guangdong Province, 1,076 English teachers took an exam based on the *Full-time Compulsory Education English Curriculum Standards (Trial Draft)*. Only 53% of the teachers passed the exam, while 36% received certificates despite not actually passing [11]. This phenomenon demonstrates the direct connection between teachers professional levels and students' learning outcomes. The survey also revealed that teachers typically teach 3.64 classes, each with about 55 students, meaning that a single teacher can impact a large number of students. Unlike in higher education, where students can switch teachers, primary school students generally have limited ability to change their learning environment. Thus, the quality of teaching, classroom management, and teaching methods directly influence students' interest in learning and their academic performance.

Moreover, over 25% of students reported that English classes are dull and boring, leading to a lack of motivation, which negatively affects their English learning in junior high school and creates a vicious cycle. This further demonstrates that teachers' professional competence and teaching attitude not only determine the effectiveness of classroom instruction but also influence students' learning attitudes and the improvement of their language skills. Therefore, enhancing teachers' professional abilities and teaching methods, while stimulating students' interest in learning, is key to improving the quality of oral English instruction.

3.2. Deficiencies in Curriculum Design

It is equally important to examine the design of the lesson itself. A key issue in curriculum design is the insufficient opportunities for students to practice speaking, which significantly undermines the effectiveness of English speaking instruction. While English speaking classes should provide ample opportunities for language output, in many classrooms, the teacher dominates most of the time, and students primarily participate by listening and taking notes. In some schools, to maintain classroom discipline, students are even prohibited from speaking unless they have a question. This deprives students of the optimal time to build their confidence in speaking English, creating a vicious cycle: the more they lack confidence, the less likely they are to speak.

Moreover, the misunderstanding of the teaching objectives is another issue in curriculum design. Many educators, parents, and students perceive English classes as part of a test-oriented education system, focusing primarily on exam preparation. In primary schools, students' learning abilities are primarily assessed through test papers and scores, with listening, reading, and writing skills in English being directly evaluated through exams. However, oral skills are frequently overlooked in assessments. Many teachers are hesitant to conduct oral exams because they require extra time and resources, and fluent pronunciation is not deemed as crucial for progressing to higher school levels compared to other skills. Therefore, many schools focus more on grammar, vocabulary, and reading comprehension, while neglecting oral practice. Finally, large class sizes pose a significant challenge for speaking instruction. Due to large student numbers and limited educational resources, many classes have 30 or more students, with some even reaching 50-60, making it difficult for teachers to provide each student with sufficient opportunities for speaking practice. Although the government mandates at least three English lessons per week in primary schools, many schools, especially in economically disadvantaged areas, still struggle to provide sufficient instructional time [12]. How to ensure that every student has enough time and a comfortable environment to practice speaking English remains an urgent challenge in primary school English education.

4. The Redesign of Oral English Instruction Based on the Critical Period Hypothesis

4.1. Insights from the Critical Period Hypothesis for Extracurricular Education

The CPH offers valuable insights for extracurricular education practices. While there are varying opinions regarding the exact time frame of CPH, it is generally agreed that the elementary school stage is a crucial period for language learning. The Exercise Hypothesis, as proposed by Johnson and Newport, posits that children have a marked advantage in language acquisition. If this capacity is engaged during the critical period, it is likely to be sustained into adulthood [5]. This hypothesis emphasizes the importance of providing students with ample opportunities for language practice in the classroom. However, the realization of this goal is often constrained in large-class settings due to limitations in class size and time. This theory also helps explain why many students choose extracurricular tutoring classes to improve their English skills: smaller class sizes provide more opportunities for interaction and more targeted guidance. Besides, extracurricular education institutions are often able to hire more experienced teachers, hence offering students higher-quality teaching resources. To enhance the quality of English education, particularly in oral training, it is essential to identify effective and universally applicable teaching methods. However, due to large class sizes and limited teacher resources in most schools, some teaching strategies successfully implemented abroad or in extracurricular institutions may not be directly applicable to elementary school classrooms in China. In this context, the increasingly popular small-group discussion model, as an effective classroom organization strategy, not only facilitates students' language practice but also aligns with the core principles of the Exercise Hypothesis. This approach provides a practical and meaningful enhancement to elementary school English oral instruction.

4.2. Scenario Creation and Group Collaboration for Oral Practice

Based on the CPH and insights from extracurricular education, English curriculum design can be optimized in two ways to enhance the effectiveness of oral teaching. First, teachers should increase students' opportunities for oral practice through scenario creation and group collaboration. Within this framework, teachers can assign specific topics, divide students into small groups, and have each student play different roles in scenario-based dialogues. This interactive learning not only provides ample speaking opportunities for students but also encourages active participation, hence improving their fluency and confidence in oral expression. For example, under the theme of "family," teachers can divide students into groups of three to five, with each student playing roles such as "brother," "mother," or "neighbor." The task is to design a plot and present 8 to 10 sentences of dialogue. Through repeated practice, teachers can use these group discussions as an assessment tool for oral proficiency, focusing particularly on pronunciation accuracy and fluency. This method not only effectively addresses the lack of speaking practice in large class settings but also motivates students to engage more actively in the classroom, thus improving the overall language learning outcomes.

Second, video dubbing, as a supplementary teaching method, can effectively enhance students' oral skills, especially in elementary school English education. Recent studies have demonstrated that video-based teaching, especially role dubbing activities, can greatly enhance students' ability to imitate language [13]. And teachers can select appropriate cartoons or short films and organize group-based dubbing exercises. These activities not only spark students' interest but also provide more opportunities for language input and output. In practice, teachers can allocate two lessons to complete the task: in the first lesson, students watch the video and take necessary notes, then practice independently outside of class; in the second lesson, students are given a short preparation time followed by a dubbing performance, with the teacher grading based on fluency, pronunciation accuracy, and the resemblance to the original characters. In addition to assessing language skills, teachers can also evaluate students' performance in group collaboration, fostering teamwork and communication skills.

The core of these two teaching methods is to maximize students' speaking practice opportunities via group collaboration, scenario creation, and diverse language input-output methods, overcoming the limitations of large class teaching. This approach provides students with more speaking chances in a more interactive and autonomous environment, thus enhancing their language proficiency and motivation to learn. This teaching model not only aligns with the concept of the "golden period" of language learning in the CPH Theory but effectively promotes the overall development of students' language skills, particularly in oral expression.

4.3. Practical Considerations for Implementing These Methods in the Classroom

To explore the potential effects of these two methods, it is important to consider their advantages and challenges in practical teaching contexts. First, role-playing games place students in everyday situations, allowing them to use the learned sentence structures both in and out of the classroom. For instance, simulating greetings to parents enables students to not only improve their speaking skills but also enhance their ability to apply language in real-life contexts. Teachers can also gather indirect feedback from parents to assess the progress of students' speaking practice, ensuring the practical relevance of the oral training.

Video dubbing is a highly engaging teaching method that effectively stimulates students' interest in learning. By mimicking characters from videos, students enhance their oral expression while gaining exposure to a richer variety of language and cultural elements. The widespread availability of video resources also provides teachers with convenient access to standard and authentic English pronunciation. However, this method presents some potential challenges. Teachers must carefully select appropriate video materials that match students' language proficiency levels and may need to adjust or edit videos as necessary. Moreover, while the storyline of the video can capture students' attention, it may also distract them from focusing on the core task of speaking practice. Therefore, teachers need to remain attentive to students and ensure they stay focused on actual language output. Both methods theoretically offer students different learning experiences, and the combination of scenario creation and video assistance holds promise for enhancing students' oral proficiency. While lacking empirical data, these methods show practical potential in classrooms.

5. Conclusion

The Critical Period Hypothesis (CPH) remains one of the most debated theories in second language acquisition, highlighting the significant relationship between age and language learning. This paper explores how the CPH offers valuable insights for enhancing oral English instruction in primary schools in China. In particular, it identifies two practical methods, role-playing games and video dubbing, as effective ways to address the challenges of large class sizes and the lack of oral practice opportunities. Furthermore, these strategies, inspired by the Exercise Hypothesis, encourage active student participation and provide more opportunities for language practice. However, it is important to acknowledge the limitations of this paper. The discussion is entirely theoretical, drawing heavily from the CPH framework, which remains contentious. Many scholars argue that there is insufficient empirical evidence to conclusively support CPH, yet it continues to offer useful guidance for instructional strategies. Though this paper proposes theoretical methods to improve oral English instruction, future research could test their effectiveness through empirical studies in real classroom settings. However, it imperative to underscore that these strategies are complementary in nature. The primary objective must be to elevate the overall quality of English education in primary schools, with a particular focus on enhancing the professional standards of teachers.

References

- [1] Lenneberg, E.H. (1967) Biological Foundations of Language. Wiley, New York.
- [2] Norrman, G. (2024) Reconceptualizing the critical period hypothesis for second language acquisition: An appraisal of Lenneberg's work on the epigenesis of language. Language Sciences, 105: 101645.
- [3] Liu, Y. (2020) A Study of Age in Second Language Acquisition -- Based on the Critical Period Hypothesis. Overseas English, 16.
- [4] Penfield, W. and Roberts, L. (1959) Speech and Brain Mechanisms. Princeton: Princeton University Press
- [5] Johnson, J.S. and Newport E.L. (1989) Critical period effects in second language learning: the influence of maturational state on the acquisition of English as a second language. Cognitive Psychology, 21: 60-99.
- [6] Jiang, C.H. (2021) Critical Period Hypothesis in Language Acquisition. In: 2021 International Conference on Educational Innovation and Philosophical Inquiries.
- [7] Vanhove, J. (2013) The critical period hypothesis in second language acquisition: a statistical critique and a reanalysis. PloS One, 8: e69172.
- [8] Abrahamsson, N. and Hyltenstam, K. (2009) Age of onset and nativelikeness in a second language: Listener perception versus linguistic scrutiny. Language Learning, 59: 249-306.
- [9] Marinova-Todd, S.H., Marshall, D.B. and Snow, C.E. (2000) Three misconceptions about age and L2 learning. TESOL Quarterly, 34: 9-34.
- [10] Colognesi, S., Coppe, T. and Lucchini, S. (2023) Improving the oral language skills of elementary school students through video-recorded performances. Teaching and Teacher Education, 128,: 104141.
- [11] Dong, Y.P. (2003) Are We Ready for "an Early Start in Foreign Language Learning"? -- A Survey of Primary School English Education in Guangdong Province. Modern Foreign Languages, 01.
- [12] Zhou, R.R. (2011) Investigation on the Current Situation of Oral English Learning of Primary School Students and Strategy Research. Nanjing Normal University.

Proceedings of the 4th International Conference on Literature, Language, and Culture Development DOI: 10.54254/2753-7064/62/2025.18985

[13] Colognesi, S., et al. (2020) Formative peer assessment to enhance primary school pupils' oral skills: Comparison of written feedback without discussion or oral feedback during a discussion. Studies in Educational Evaluation. 67: 100917.