



# A Study on Improving the Quality of Classroom Interaction in Task-Based Teaching in International Chinese Education

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**Abstract.** The trend toward teaching Chinese to younger learners in international Chinese education has made the quality of classroom interaction a critical factor influencing language acquisition and classroom effectiveness. Addressing issues such as teacher-dominated instruction, insufficient language output, and limited peer interaction in children's Chinese language classrooms, this study explores the role of task-based teaching in enhancing the quality of classroom interaction. By establishing an evaluation system for classroom interaction quality, and combining classroom observations, pre- and post-test comparisons, and interviews with teachers and students, the study analyzes interaction frequency, language output, classroom participation, teacher-student interaction, and peer collaboration in both experimental and control classes. The results indicate that task-based teaching significantly increases children's voluntary speaking, duration of effective interaction, use of complete sentences, and levels of peer negotiation, shifting classroom interaction from one-way responses to multi-party participation. The study suggests that task contexts closely aligned with children's life experiences, appropriate teacher scaffolding, and cooperative classroom organization are key pathways to enhancing the quality of interaction in international Chinese language classrooms for children.

**Keywords:** International Chinese education; Task-based teaching; Children's classroom; Classroom interaction; Language output

## 1 Introduction

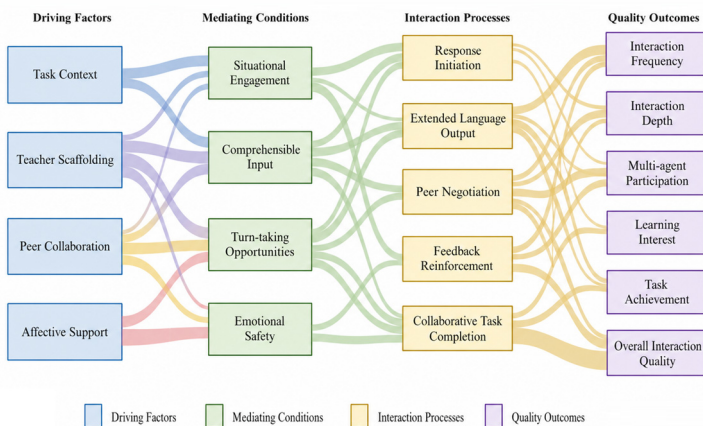
In recent years, international Chinese education has seen a clear trend toward younger learners. Young learners have limited attention spans, rely on contextual support, and prefer imitation and play. Thus, classroom interaction quality critically affects language input, output, and learning outcomes. Traditional teacher-centered, drill-oriented classrooms lead to teacher-dominated discourse, brief responses, and weak peer interaction, failing to activate children's willingness to express or negotiate meaning [1-3]. Task-Based Language Teaching (TBLT) centers on authentic communicative goals, embedding learning into task contexts related to children's life experiences, thereby

promoting language output and collaborative expression [1,4-6]. TBLT has been shown to enhance interaction frequency, linguistic complexity, and motivation among second language learners [7]. However, most research focuses on adults or adolescents, with limited systematic experimental studies on children's Chinese classrooms [8]. Moreover, classroom interaction quality is often evaluated using single-dimensional indicators, lacking a multi-dimensional operational framework [9].

The quality of interaction in children's international Chinese classrooms is jointly shaped by task contexts, teacher scaffolding, peer collaboration, and emotional support. When tasks align with daily experiences, children engage in meaning negotiation through gestures and short utterances. Teachers use scaffolding (modeling, probing, paraphrasing, wait time) to shift responses from repetition to extended expression [10]. Peer collaboration reinforces turn-taking, imitation, correction, and joint completion. Despite theoretical discussions, empirical research on children's Chinese classrooms—especially designs integrating observation, pre-/post-tests, and interviews—remains scarce [11].

To address these gaps, this study conducts an 8-week task-based teaching experiment with 6–10 year-old learners of Chinese. By constructing an interaction quality evaluation system and combining quantitative observation with qualitative interviews, it systematically examines the effects of task-based teaching on interaction patterns, language output, and engagement.

## 2 Theoretical Foundations and Characteristics of Interaction



**Fig. 1.** Framework Diagram of the Generative Mechanism

The quality of interaction in international Chinese classrooms for children is jointly influenced by task structure, teacher scaffolding, peer collaboration, and emotional support. The closer the task context aligns with daily experiences, the more it activates children to engage in meaning negotiation through gestures, facial expressions, and short phrases; teachers can adjust the difficulty of input through modeling, probing

questions, paraphrasing, and waiting time, thereby shifting responses from mechanical reproduction to expanded expression; peer collaboration reinforces turn-taking, imitation and correction, and joint completion. These factors dynamically interact within the chain of “task-driven—scaffolding intervention—interaction unfolding—feedback reinforcement,” and their generative mechanism is illustrated in Figure 1.

### 3 Construction of an Evaluation System for Interaction Quality in International Chinese Children’s Classrooms

An evaluation system for the quality of interaction in international Chinese classrooms for children should revolve around the sequence of “interaction initiation—language production—emotional support—task completion,” focusing not only on whether children participate in classroom communication but also on whether their expressions carry authentic meaning. Evaluation indicators can be established across six dimensions: interaction frequency, interaction depth, language production quality, degree of peer collaboration, effectiveness of teacher feedback, and task completion rate. A weighted approach is then used to generate a comprehensive evaluation result:

$$Q = \sum_{i=1}^n w_i x_i \quad (1)$$

where  $Q$  represents the comprehensive score for classroom interaction quality;  $x_i$  represents the score for the  $i$  th evaluation indicator;  $w_i$  represents the weight of that indicator; and  $n$  represents the total number of indicators.

The quality of children’s language output can be measured in terms of the number of utterances, sentence completeness, and semantic validity:

$$L = \alpha V + \beta S + \gamma M \quad (2)$$

In the formula,  $L$  represents the language output quality score;  $V$  represents the number of valid utterances;  $S$  represents sentence completeness;  $M$  represents semantic accuracy; and  $\alpha$ ,  $\beta$ ,  $\gamma$  represents the weights of the three indicator categories, respectively.

The level of peer interaction can be measured by the number of cooperative interactions and the proportion of effective negotiations:

$$P = \frac{C_e}{C_t} \times 100\% \quad (3)$$

In the formula,  $P$  represents the peer interaction effectiveness rate;  $C_e$  represents the number of effective cooperative interactions; and  $C_t$  represents the total number

of cooperative interactions in the classroom. Through these indicators, the quality of children's participation, the quality of their expression, and the outcomes of their interactions in task-based classrooms can be presented in a relatively systematic manner.

## 4 Research Design and Data Collection

### 4.1 Research Design

The study involved 48 child learners (aged 6–10, average 8.1) from an international Chinese institution, with at least six months of Chinese learning experience. They were divided into an experimental class and a control class (24 each), taught by the same teacher. Over 8 consecutive weeks, 16 Chinese lessons (40 minutes each) were conducted, covering topics familiar to children (e.g., family, shopping, animals). The experimental class followed a “pre-task introduction—in-task collaboration—post-task presentation” framework using tasks aligned with children's life experiences, while the control class used conventional lecture-and-practice methods. Data reliability was ensured by double-coder independent coding of videos, observation records, and interviews, with cross-checking for consistency. Validity was supported by designing observation indicators based on task-based instruction characteristics and children's language development patterns.

### 4.2 Data Collection Process and Coding Methods

Data collection was conducted in three phases: pre-experiment, during the experiment, and post-experiment. In the pre-experiment phase, we collected children's basic information, duration of Chinese language learning, and initial classroom interaction performance. During the experiment, we conducted full-process observations of 16 classroom sessions, recording children's contributions, teacher feedback, peer collaboration, task completion, and emotional responses, while simultaneously saving classroom videos, observation scales, and task activity records. In the post-experiment phase, we conducted teacher interviews and brief interviews with children to supplement the motivations behind their classroom behaviors. During coding, classroom interaction behaviors were categorized into seven types: teacher questions, teacher feedback, child responses, child-initiated speech, peer negotiation, task collaboration, and nonverbal participation, with data analyzed in 5-minute intervals. Children's language output was further classified into four levels: word production, short sentence production, complete sentence production, and continuous speech. Interaction density can be expressed as

$$D = N/T \quad (4)$$

where  $D$  represents the density of interactive behaviors per unit of time;  $N$  represents the total number of valid interactive behaviors coded in the classroom; and  $T$  represents the total duration of classroom observation. The score for language output levels can be expressed as

$$S = \sum_{j=1}^m r_j f_j / \sum_{j=1}^m f_j \tag{5}$$

In the formula,  $S$  represents the child’s language output level score;  $r_j$  represents the language output level score for category  $j$ ;  $f_j$  represents the frequency of occurrence for that category; and  $m$  represents the total number of language output types.

5 Analysis of Experimental Results

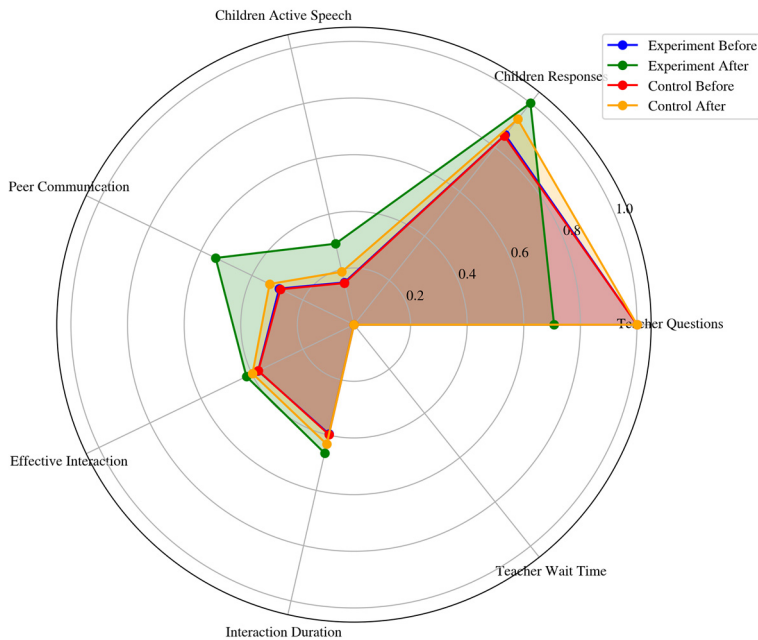
5.1 Comparison of Classroom Interaction Data Before and After the Experiment

To assess the impact of task-based teaching on classroom interaction structures, pre- and post-test statistics were conducted regarding teacher questioning, children’s responses, spontaneous speaking, peer interaction, and duration of effective interaction. Specific data are presented in Table 1.

Table 1. Comparison of Classroom Interaction Data Before and After the Experiment

| Indicator                                              | Pre-test of Experimental Class | Post-test of Experimental Class | Pre-test for Control Class | Post-test for Control Class |
|--------------------------------------------------------|--------------------------------|---------------------------------|----------------------------|-----------------------------|
| Number of Teacher Questions per Class                  | 42.5                           | 39.8                            | 41.7                       | 43.1                        |
| Number of children's responses per class               | 36.8                           | 54.6                            | 35.9                       | 40.2                        |
| Number of times children spoke spontaneously per class | 8.7                            | 18.9                            | 8.4                        | 10.6                        |
| Number of peer interactions per class                  | 14.3                           | 31.5                            | 13.8                       | 16.2                        |
| Duration of effective interaction (min)                | 17.6                           | 25.4                            | 17.2                       | 18.9                        |
| Average duration of a single interaction (seconds)     | 18.4                           | 27.6                            | 18.1                       | 20.3                        |
| Teacher wait time (seconds)                            | 2.6                            | 4.1                             | 2.5                        | 2.9                         |

As shown in Table 1, classroom interaction in the experimental class improved markedly. Children’s responses increased from 36.8 to 54.6, spontaneous comments from 8.7 to 18.9, and peer interactions from 14.3 to 31.5. Effective interaction time rose to 25.4 minutes, while single interaction duration reached 27.6 seconds, reflecting more sustained communication and task negotiation, as shown in Figure 2.

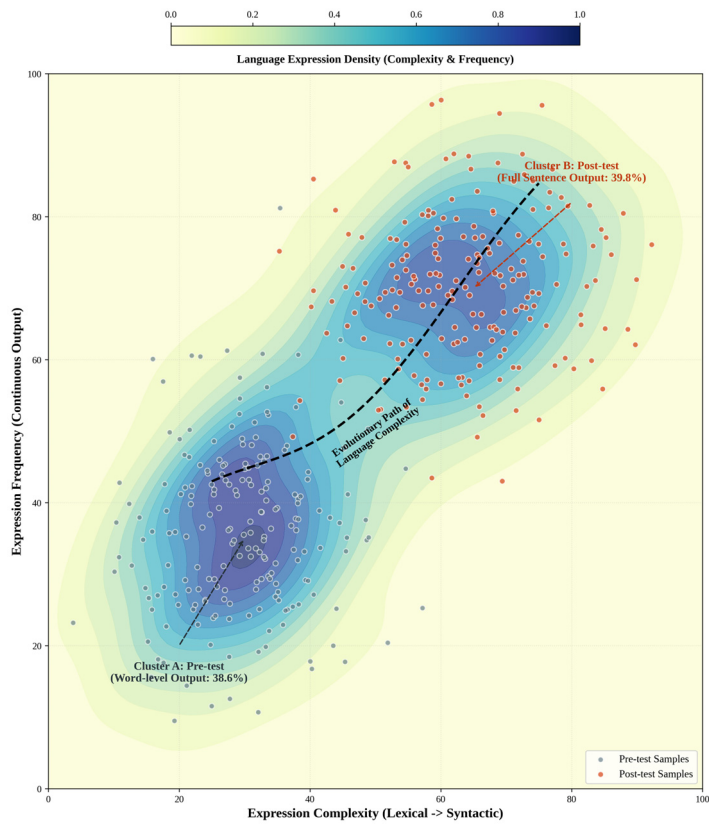


**Fig. 2.** Comparison of Classroom Interaction

## 5.2 Analysis of Improvements in Children's Language Output Abilities

Task-based teaching improved children's language output in expression form, length, and initiative. Before the experiment, classroom responses were mainly word repetition or short prompted answers, such as "apple," "like," and "this is a cat," showing weak sentence awareness. After the experiment, tasks such as supermarket shopping, family introduction, animal-location description, and group presentation encouraged children to express around clear communicative goals. Their output shifted from isolated words to complete sentences, such as "I want to buy two apples and a bottle of water." As shown in Figure 3, word-based output decreased from 38.6% to 24.1%, complete sentences increased from 27.4% to 39.8%, and continuous utterances rose from 3.8 to 8.6 per class.

To further optimize interaction, teaching strategies should focus on the four elements mentioned in Section 6: (1) Contextual tasks should mirror daily life to trigger spontaneous speech. (2) Teacher scaffolding should prioritize "wait time" and prompts over direct correction. (3) Peer collaboration must integrate "information gap" or "jigsaw reading" mechanisms (e.g., sharing different parts of a story) to force language negotiation like clarification requests. (4) Emotional support should create a "low-anxiety" environment that encourages multi-party participation.



**Fig. 3.** Analysis of Improvements in Children's Language Output Abilities

## 6 Conclusions

This study validates that task-based teaching significantly enhances the quality of interaction in international Chinese education for children. The results indicate that high-quality interaction stems from the synergy of authentic task contexts that mirror children's daily lives, and teacher scaffolding that shifts from control to guidance. Crucially, to foster language negotiation, teachers should integrate peer collaboration mechanisms such as "jigsaw reading" or "information gap" tasks, where the necessity of information exchange forces children to use clarification requests and confirmation checks. Combined with affective support that reduces language anxiety, these strategies transform classroom interaction from one-way responses to multi-party participation. Although limited by sample size and observation duration, this research provides a practical evaluation framework and pedagogical strategies for improving children's language acquisition through structured interaction.

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