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# **Near-Synonym Pedagogical Intervention for Advanced CSL Learners: An Exploratory Study**

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## **Abstract**

Near-synonym discrimination presents a challenge for advanced learners of Chinese as a second language (CSL). The difficulty is often due to subtle semantic, collocational, and pragmatic distinctions that are frequently underrepresented in standard instructional materials. This exploratory study investigated the impact of a structured five-phase pedagogical intervention, comprising semantic explanation, contrastive discrimination, contextualized exemplification, integrated practice, and testing with feedback, on learners' acquisition of near-synonyms. The intervention was grounded in Nation's Lexical Knowledge Framework and the Levels of Processing Hypothesis and was implemented with advanced CSL learners at a UK university. The study employed a mixed-methods design, combining quantitative assessments and questionnaires with qualitative interviews. The results indicate significant improvement in learners' discrimination accuracy, semantic depth, and productive competence. The students also reported enhanced metalinguistic awareness and a positive perception of the instructional approach. The findings underscore the pedagogical value of recursive, theory-informed vocabulary instruction and offer practical advice for designing cognitively engaging lexical curricula in CSL programs.

## **Keywords**

Chinese as a Second Language (CSL), near-synonym discrimination, lexical knowledge framework, semantic depth, collocational patterns

## **1 Introduction**

Lexical competence is a fundamental component of second language (L2) acquisition, underpinning the development of listening, speaking, reading, and writing skills. Among the various challenges in L2 vocabulary learning, near-synonym discrimination is particularly demanding for advanced learners of Chinese as a second language (CSL) (Luo, 1997; Sun, 2006). Near-synonyms typically share core semantic features while diverging in collocational patterns, pragmatic functions, and stylistic nuance (Edmonds & Hirst, 2002; Zhao & Hong, 2009; Hong & Chen, 2013; Lertcharoenwanich, 2022, 2023). These distinctions often receive insufficient attention in pedagogical materials and dictionaries, leading

to persistent confusion among learners and inappropriate usage in authentic contexts (Nesselhauf, 2003; Huang, et al., 2017; Kim, 2020; Wu, 2023; Demana, et al., 2025).

The complexity of Chinese near-synonyms arises from polysemy, overlapping semantic fields, and variation in usage across registers and discourse types (Hong, 2014; Huang & Liou, 2019; Wang & Zhao, 2020). Previous research has shown that learners' grammatical awareness often surpasses their ability to discriminate semantics, and that L1 transfer and insufficient contextual exposure contribute to conceptual misunderstandings and collocational errors (Hong, 2014; Wang & Zhao, 2020; Wu, 2023). While corpus-based studies have provided insights into usage patterns (Qing, 2004; Liu et al., 2005; Zhang et al., 2012; Pang & Yang, 2012; Hong, 2014; Chang, 2015; Wang & Huang, 2017), and multimodal lexical pedagogy has shown promise (Hong et al., 2018; Fu & Li, 2020), there remains a lack of structured, theory-driven pedagogical models specifically targeting near-synonym acquisition in CSL.

Despite increasing attention being given to lexical instruction in CSL, the existing approaches often focus on isolated strategies, such as semantic explanations, collocation training, or output tasks, without integrating these approaches into a coherent pedagogical sequence. Moreover, few studies have examined how structured, multi-phase interventions can support the acquisition of near-synonyms among advanced learners.

This study addresses these gaps by developing and evaluating a five-phase pedagogical intervention grounded in established theories of vocabulary acquisition. The objectives are:

- To assess the effectiveness of the intervention in enhancing near-synonym discrimination;
- To explore learners' cognitive strategies and developmental trajectories during instruction;
- To examine learners' perceptions of the intervention in terms of effectiveness, cognitive load, and applicability.

## 2 Literature Review

Vocabulary acquisition remains a central concern in second language (L2) research, given its foundational role in shaping learners' communicative competence across all four language skills: listening, speaking, reading, and writing. As pedagogical paradigms have shifted from structuralist models to communicative and task-based approaches, researchers have increasingly questioned the efficacy of traditional vocabulary instruction, particularly in contexts that require nuanced lexical precision. Recent theoretical developments have centered on three key frameworks: the Lexical Approach (Lewis, 1993, p.14; 1997, p.60; Ellis, 2001, 2003), the Nation's Lexical Knowledge Framework (Nation, 2001, p.35), and the Levels of Processing Hypothesis ( Craik & Lockhart, 1972; Craik & Tulving, 1975). These perspectives advocate for holistic, context-sensitive, and cognitively engaging instructional designs.

### 2.1 Theoretical framework

The Lexical Approach proposes that language acquisition proceeds primarily through lexical chunks, which are fixed or semi-fixed expressions that facilitate fluent and accurate communication. This view highlights the importance of collocations and formulaic sequences, which reduce cognitive load and improve fluency (Lewis, 1997, p.143; Ellis, 2001). In Chinese L2 instruction, this principle is particularly relevant to the acquisition of near-synonyms, where collocational patterns often determine pragmatic appropriateness.

Nation's Lexical Knowledge Framework conceptualizes vocabulary knowledge as comprising three dimensions: form, meaning, and use. The framework emphasizes the centrality of collocational and pragmatic knowledge in achieving lexical competence (Nation, 1990, p.168; Xing, 2009). This framework supports instructional models that help guide learners from recognition to productive application, aligning with the multi-phase design of this study.

The Levels of Processing Hypothesis suggests that deeper semantic and contextual engagement leads to more durable memory traces and facilitates transfer (Craig & Lockhart, 1972; Craig & Tulving, 1975). In near-synonym instruction, semantic association, contrastive analysis, and contextual exemplification are essential for long-term retention and pragmatic application (Wu et al., 2011; Shao, 2018).

Relevant to the instructional model's later phases, Skill Acquisition Theory (DeKeyser, 2007) stresses the progression from declarative to procedural knowledge through structured practice. Swain's Output Hypothesis (1985) highlights the role of language production in internalizing lexical distinctions, while Roediger and Karpicke's Testing Effect (2006) and Lyster and Saito's corrective feedback model (2010) emphasize the use of formative assessments and feedback in consolidating lexical knowledge.

## 2.2 The distinctiveness of near-synonym acquisition

Near-synonym acquisition presents a unique cognitive challenge, as learners must navigate subtle semantic, collocational, and pragmatic boundaries. Laufer (1990) and Jiang (2000) attribute the persistent confusion concerning near-synonyms to L1 transfer, semantic proximity, and stylistic overlap. Corpus-based studies have refined semantic differentiation through collocational profiling and behavioral clustering (Gries, 2006; Divjak & Gries, 2009).

In the context of Chinese L2, multidimensional approaches—spanning output-driven learning, semantic networking, and collocational stratification—have shed light on the stratified demands of synonym learning (Mou & Wang, 2004; Huang & Hong, 2005; Liu, et al., 2005; Yang & Jia, 2005; Deng, 2009; Zhao & Hong, 2009; Hong, 2014; Chen et al., 2024). However, methods for dynamic progress tracking and integrated instructional models remain underdeveloped.

## 2.3 Near-synonym teaching methods

Pedagogical innovation in near-synonym instruction reflects both theoretical refinement and empirical validation. Contextualized input and collocational training are widely recognized as essential components of learning (Coxhead & Byrd, 2007; Durrant & Schmitt, 2010). Webb and Kagimoto (2011) demonstrate the effectiveness of contrastive analysis in enhancing semantic discrimination.

Chinese L2 researchers have corroborated these findings through empirical studies and corpus analysis. Hong (2011, 2013), Hong and Chen (2013), Yu & Lamarre (2021) advocate for multi-layered interventions that address cognitive load, contextual sensitivity, and L1 interference.

## 2.4 Testing and feedback mechanisms

Formative assessments and feedback have emerged as critical tools in vocabulary instruction. Roediger and Karpicke (2006) demonstrate that retrieval-based testing enhances long-term retention, while Lyster and Saito (2010) emphasize the role of corrective feedback in refining lexical accuracy. Gries (2015) proposes corpus-informed behavioral analysis to trace learner errors and patterns of usage.

Formative and corrective feedback have been successfully implemented in Chinese L2 settings (Li, et al., 2015, 2016; Li, 2019; Li & Vuono, 2019), although standardized frameworks for multi-phase feedback remain limited.

## 2.5 Output-oriented teaching

The role of output in lexical mastery is well established. Swain (1985) argues that language production facilitates internalization and hypothesis testing. Hulstijn and Laufer (2001) involvement load model and Webb's empirical work (2005) confirm that productive tasks enhance semantic depth and retention.

Chinese L2 researchers have increasingly adopted output-driven approaches, integrating multimodal tasks and pragmatic processing into near-synonym instruction (Lei, 2018; Li, 2019).

## 2.6 Synthesis of the five-phase intervention

In response to critiques of fragmented and linear instructional designs, this study proposes a five-phase intervention model that systematically targets the core dimensions of vocabulary acquisition:

- Phase 1: Semantic Explanation develops awareness of meaning and cross-linguistic sensitivity.
- Phase 2: Contrastive Discrimination addresses subtle semantic distinctions and pragmatic appropriateness.
- Phase 3: Contextualized Exemplification engages learners with multi-register sentences and collocational typologies.
- Phase 4: Integrated Practice emphasizes productive use through contextualized and communicative tasks.
- Phase 5: Testing and Feedback reinforce both form and function via formative, cyclical assessment.

This instructional sequence, while structurally coherent, also invites deeper theoretical analysis and empirical validation, as discussed in the following section.

## 2.7 Placement and pedagogical significance of the five-phase intervention

The following section synthesizes the theoretical and empirical background from the literature review into a pedagogically actionable framework. The material bridges the gap between the limitations of existing research and the rationale for the present study.

The addition of the fifth phase, testing and feedback, transforms the model into a recursive instructional loop (explanation–practice–testing–refinement), enabling dynamic adjustment and exploration of the retesting–retention–transfer mechanism. This system, although widely acknowledged in cognitive psychology (Roediger & Karpicke, 2006), remains underexplored in L2 near-synonym instruction, particularly in the context of Chinese as a L2.

Being grounded in Skill Acquisition Theory (DeKeyser, 2007), the Output Hypothesis (Swain, 1985), and corrective feedback models (Lyster & Saito, 2010), the model supports learners in refining lexical distinctions and consolidating semantic depth. The model also enables instructors to respond adaptively to learner performance, thereby enhancing instructional efficiency and student autonomy.

## 3 Methods

### 3.1 Research design

This study employed a mixed-methods design to examine the effectiveness of a structured pedagogical intervention in enhancing Chinese L2 learners' ability to discriminate near-syllables. A quasi-experimental approach compared two cohorts of advanced learners: one that received the five-phase pedagogical intervention (the 2025 cohort) and one that followed the same curriculum without the intervention (the 2024 cohort). This design enabled both outcome evaluation and process exploration, thereby addressing the limitations of single-method studies (Abbuhl & Mackey, 2015; Mackey & Gass, 2011, 2015).

The intervention was implemented over a semester and aligned with Nation's Lexical Knowledge Framework (2001, p.27) and the Levels of Processing Hypothesis (Craik & Lockhart, 1972). The five

pedagogical intervention phases of semantic explanation, contrastive discrimination, contextualized exemplification, integrated practice, and testing with feedback were designed to guide learners from receptive understanding to productive application.

### 3.2 Research questions

This study addresses the following core research questions:

- RQ1: To what extent does the five-phase pedagogical intervention enhance learners' ability to discriminate near-synonyms?
- RQ2: What cognitive strategies do learners employ during near-synonym discrimination, and how do these evolve through instruction?
- RQ3: How do learners perceive the pedagogical intervention in terms of effectiveness, cognitive load, and applicability?

These questions correspond to the cognitive, performance-based, and affective dimensions of vocabulary acquisition and are supported by both quantitative and qualitative data.

### 3.3 Participants

The study involved 28 advanced Chinese L2 learners from a university in the UK. The experimental group (the 2025 cohort) consisted of 14 students who received the five-phase pedagogical intervention. The control group (the 2024 cohort) also included 14 students who followed the same curriculum without the intervention. Both groups were comparable in terms of entry-level proficiency (HSK 4), one-year study abroad experience in China, and identical instructional conditions, including the same syllabus, teaching materials and teaching hours, the same teacher and assessment paper.

Only the 2025 cohort filled out the questionnaire and participated in the interviews, as they were the recipients of the intervention. Eight participants were selected for interviews based on their scores on the questionnaire. These students were stratified into high- and low-performing subgroups to explore individual differences in learning experiences.

### 3.4 Data collection

Three primary instruments were used:

#### 3.4.1 Classroom assessments

All participants completed a standardized final exam that included near-synonym discrimination tasks in two sections: a fill-in-the-blank section (Section 3) and a multiple-choice section (Section 4). These scores were used to compare the performance of the experimental and control groups.

Additionally, the 2025 cohort completed both pre- and post-intervention assessments using fill-in-the-blank (FITB) tasks (Huang et al., 2017; Zou, 2017), each comprising 10 items targeting near-synonym discrimination. The 10 near-synonym sets were selected from the students' grammar coursework in the second semester, specifically targeting items that had generated persistent errors in previous assignments. This selection ensured practical validity by focusing on authentic areas of difficulty encountered in the participants' actual learning context.

The pre-test was administered prior to the pedagogical intervention and featured items presented in basic grammatical contexts with minimal scaffolding. In contrast, the post-test incorporated enhanced instructional support, including explicit lexical explanations that delineated the semantic boundaries of

each near-synonym, corpus-informed collocation patterns illustrating typical co-occurrence restrictions, and contextualized examples demonstrating appropriate usage in authentic discourse. This design enabled the assessment of both recognition accuracy and depth of understanding regarding usage constraints.

Both assessments were delivered through the Canvas learning management system, which provided immediate automatic feedback upon submission. This feature enabled formative assessment by allowing students to receive timely corrective feedback on their responses, while also facilitating the systematic tracking of individual learning trajectories across the intervention period. The digital platform additionally permitted granular analysis of response patterns, error types, and improvement rates at both the individual and cohort levels.

### 3.4.2 Questionnaire

A 16-item Likert-scale questionnaire was administered to the 2025 cohort, covering four dimensions:

- A. Understanding and Collocation of Near-Synonyms
- B. Depth of Processing and Usage Ability
- C. Vocabulary and Reading Improvement
- D. Learning Method and Experience

The instrument demonstrated high internal consistency (Cronbach's  $\alpha > 0.88$ ).

### 3.4.3 Semi-structured interviews

Eight students from the 2025 Chinese cohort participated in semi-structured interviews exploring their experiences with near-synonym learning. The participants were divided into two groups based on their responses to the questionnaire: four participants (P1, P7, P11, P14) scored below the mean of 3.89, while four participants (P2, P5, P8, P10) scored above this threshold. This grouping enabled the exploration of potential differences in learning experiences across proficiency and attitude levels; however, the qualitative analysis ultimately revealed substantial commonalities between the two groups. All participants had engaged with the instructional materials, which focused on Chinese near-synonym groups, including explanations of semantic and collocational distinctions, example sentences, and practice exercises.

## 3.5 Data analysis

Quantitative data were analyzed using independent-samples t-tests to compare the performance of the experimental and control groups on the final exam. Paired-sample t-tests were used to assess pre- and post-test differences within the 2025 cohort. Cronbach's  $\alpha$  was used to assess the reliability of the questionnaire, and Pearson correlation coefficients were calculated to examine the relationships among perception dimensions.

Qualitative data were analyzed using a thematic content analysis, focusing on the learners' cognitive strategies, metalinguistic awareness, and perceptions of the instruction.

## 3.6 Pedagogical intervention design

The intervention was structured into five progressive phases, as listed in Table 1. Each phase aligned with the theoretical framework and was designed to guide learners' lexical development.

Table 1  
*The Design of the Pedagogical Intervention*

| Phase                             | Focus                                             | Key Strategies                                                                                                     |
|-----------------------------------|---------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| 1. Semantic Explanation           | Build foundational understanding of core meanings | - Core meaning contrast<br>- Morpheme-level analysis<br>- English equivalents                                      |
| 2. Contrastive Discrimination     | Develop fine-grained semantic awareness           | - Minimal pair contexts<br>- Substitutability judgment<br>- Error analysis                                         |
| 3. Contextualized Exemplification | Deepen understanding through authentic usage      | - Multi-genre examples<br>- Collocation patterns<br>- Pragmatic scenarios                                          |
| 4. Integrated Practice            | Reinforce learning through active use             | - Cloze tasks with context<br>- Error correction with explanations<br>- Productive tasks (e.g., writing, speaking) |
| 5. Testing and Feedback           | Evaluate and consolidate learning                 | - Formative assessments<br>- Individualized feedback<br>- Strategy reflection                                      |

Table 1 illustrates how this model ensures that learners engage in both receptive and productive tasks, with each phase building upon the previous to promote deep processing, contextual application, and long-term retention. A selection of an example of a classroom teaching intervention on near-synonyms can be illustrated in the following five phrases.

**Phrase 1: Semantic explanation**

参加： to attend, to participate, to take part in - 教学目标词  
参与： participate in; have a hand in; involve oneself in – formal – 近义词

**Phrase 2: Contrastive discrimination**

参加某种组织或某种活动 Join (a group, or an organization, etc.) ; take part in (an activity) – formal/informal  
e.g. 参加晚会 (go to an evening party)  
我参加了一个旅行团去北京旅游。  
参与其事 (get involved with planning or doing things)  
参与 partake, participate in  
其多种参与群体中，妇女的参与显得尤为突出。  
Female groups are noticeable among the kinds of participants.

**Phrase 3: Contextualized exemplification**

“参加” emphasizes the act of joining or participating in a specific, identifiable activity or organization, such as a meeting, competition, gathering, etc.

Emphasizes **physical presence** or **formal enrolment** in an event, organization, or activity. **Less emphasis** on active involvement or contribution.

**Common collocations:** meetings, competitions, exams, organizations, performances, etc.

I participated in yesterday's meeting.

我参加了昨天的会议。

They participated in the school's volunteer activities.

他们参加了学校组织的义工活动。

“参与” emphasizes **actively participating in a process or activity**, highlighting **subjective involvement and initiative**.

Emphasizes **active engagement and contribution** to an event, process, or decision-making. **Not just attending** but actively **playing a role** in it.

**Common collocations:** discussions, planning, decision-making, projects, social activities, etc.

She participated in the planning and execution of this project.

她参与了这个项目的策划和执行工作。

We should all actively participate in community development.

我们每个人都应该积极参与社区建设。

#### Phrase 4: Integrated practice

Practice: Fill in the blank

我在大学期间就 \_\_\_\_\_ 了一个慈善 charitable 组织。

经理亲自 in person \_\_\_\_\_ 这项工程 project 的计划讨论，说明工程非常重要。

哥哥没有读研究生就 \_\_\_\_\_ 工作了。

这次比赛对我来说能 \_\_\_\_\_ 就已经很开心了。

#### Answer keys

我在大学期间就 **参加** 了一个慈善 charitable 组织。 **Organization**

经理亲自 in person **参与** 这项工程 project 的计划讨论，说明工程非常重要。 **Project**

哥哥没有读研究生就 **参加工作** 了。（join an organization/company/to work） **start to work**

这次 **比赛** 对我来说能 **参加** 就已经很开心了。 **competition**

#### Phrase 5: Testing and feedback - online test on Canvas in the last week of Semester 2

10

Multiple choice 1 point

“参加”或“参与”填空：

1)我在大学期间就\_\_\_\_了一个慈善charitable组织。

2)经理亲自in person\_\_\_\_这项工程project的计划讨论，说明工程非常重要。

3)哥哥没有读研究生就\_\_\_\_工作了。

- ☒ A. 参加...参与...参加  
☐ B. 参加...参与...参与  
☐ C. 参与...参加...参加  
☐ D. 参与...参与...参加

Feedback

10 Multiple choice 1 point

"参加" emphasizes the act of joining or participating in a specific, identifiable activity or organization, such as a meeting, competition, gathering, etc. Emphasizes **physical presence** or **formal enrolment** in an event, organization, or activity. **Less emphasis** on active involvement or contribution. **Common collocations:** meetings, competitions, exams, organizations, performances, etc.

我参加了昨天的会议。I participated in yesterday's meeting.

"参与" emphasizes actively participating in a process or activity, highlighting subjective involvement and initiative. Emphasizes **active engagement and contribution** to an event, process, or decision-making. **Not just attending**, but actively **playing a role** in it. **Common collocations:** discussions, planning, decision-making, projects, social activities, etc.

她参与了这个项目的策划和执行工作。She participated in the planning and execution of this project.

用"参加"或"参与"填空:

- 1)我在大学期间就\_\_\_\_了一个慈善charitable组织。
- 2)经理亲自in person\_\_\_\_这项工程project的计划讨论，说明工程非常重要。
- 3)哥哥没有读研究生就\_\_\_\_工作了。

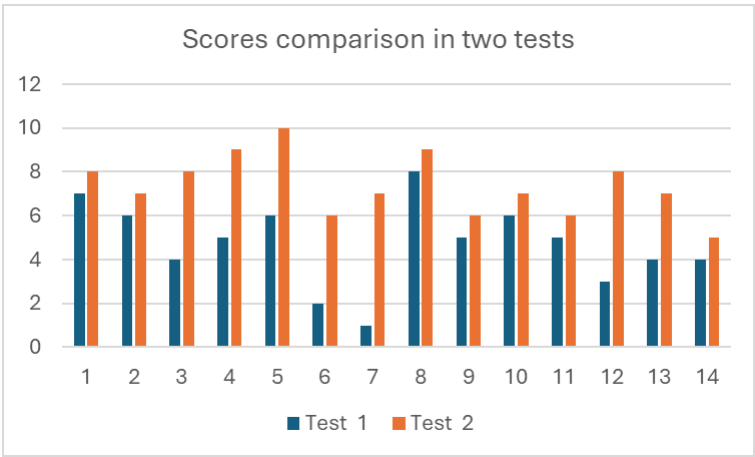
- ☒ A. 参加...参与...参加
- ☐ B. 参加...参与...参与
- ☐ C. 参与...参加...参加
- ☐ D. 参与...参与...参加

4 Results

4.1 Test results

The 2025 experimental group completed both pre-test and post-test assessments using fill-in-the-blank tasks in class, each consisting of 10 near-synonym application items. The pre-test included basic grammatical contexts, while the post-test incorporated lexical explanations, collocation cues, and contextualized examples. The results (Figure 1) demonstrated consistent improvement across participants, all 14 learners scoring higher on the second test. The individual score gains ranged from 1 to 6 between the pre- and post-tests, with an average improvement of 2.6 points, indicating that the intervention had a notable effect on learners' ability to discriminate near-synonyms.

Figure 1  
*Comparison of the Scores from Two Tests*



4.2 Overall performance comparison

To further evaluate the instructional impact, the final exam scores from the 2025 experimental group were compared with those of the 2024 control group. The experimental group outperformed the control group across all three measures in Table 2.

Table 2  
Overall Performance Comparison (Independent Samples, N=28)

| Measure                     | 2024 Control<br>(M±SD) | 2025<br>Experimental<br>(M±SD) | Difference | Improvement | Cohen's d |
|-----------------------------|------------------------|--------------------------------|------------|-------------|-----------|
| Total Score                 | 59.18±20.26            | 63.75±13.16                    | +4.57*     | 7.70%       | 0.27      |
| Section 3 (Fill-in-blank)   | 4.11±2.42              | 5.14±2.73                      | +1.03*     | 25.10%      | 0.4       |
| Section 4 (Multiple-choice) | 5.07±1.98              | 6.43±2.21                      | +1.36**    | 26.80%      | 0.65      |

\**p* < .10, \*\**p* < .05 (one-tailed test)

The experimental group (2025, n=14) outperformed the control group (2024, n=14) across all three measures. The total mean score increased by 4.57 points (7.7%), Section 3 (fill-in-the-blank) by 1.03 points (25.1%), and Section 4 (multiple-choice) by 1.36 points (26.8%).

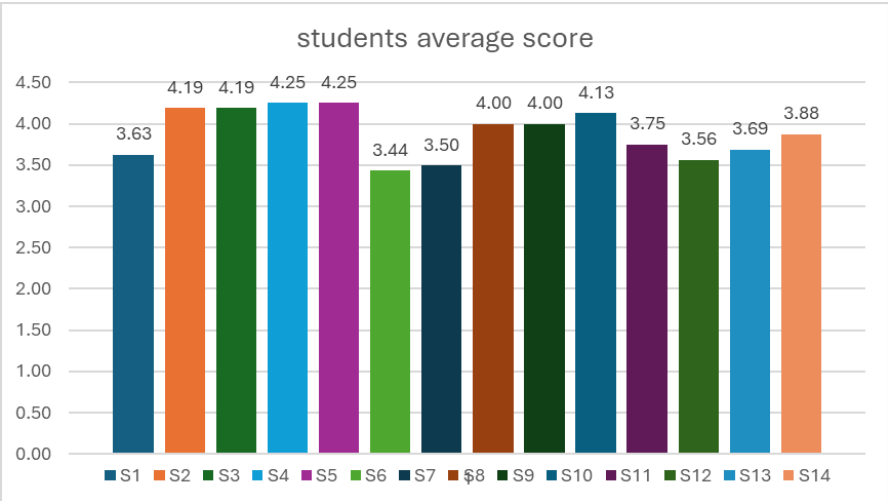
Notably, the experimental group exhibited a significantly lower standard deviation in total scores compared to the control group (13.16 vs 20.26, a 35.0% reduction), indicating that structured instruction not only elevated overall performance but also effectively narrowed the achievement gap among the learners.

4.3 Questionnaire analysis

The questionnaire responses from the 2025 cohort were analyzed across four dimensions:

- a. Understanding and collocation of near-synonyms;
- b. Depth of processing and usage ability;
- c. Vocabulary and reading improvement;
- d. Learning method and experience.

Figure 2  
Students' Average Scores Across Questionnaire Items



Student responses averaged between 3.44 and 4.25 across all items listed in Figure 2, indicating a consistently positive reception of the five-phase pedagogical intervention. Notably, 7 out of 14 students (50%) achieved scores of 4.0 or above on at least half of the questionnaire items, suggesting strong agreement with the perceived effectiveness of the instructional approach.

Table 3  
*Questionnaire Item Mean and Standard Deviation*

| Questions | Item Mean | Standard Deviation |
|-----------|-----------|--------------------|
| A1        | 3.43      | 0.94               |
| A2        | 3.5       | 0.76               |
| A3        | 3.71      | 0.83               |
| A4        | 4.79      | 0.43               |
| B5        | 3.86      | 0.95               |
| B6        | 4.43      | 0.76               |
| B7        | 3.29      | 1.1                |
| B8        | 3.57      | 0.94               |
| C9        | 3.5       | 1.16               |
| C10       | 3.43      | 0.76               |
| C11       | 3.57      | 0.65               |
| C12       | 3.14      | 0.66               |
| D13       | 4.07      | 0.83               |
| D14       | 4.79      | 0.43               |
| D15       | 4.5       | 0.65               |
| D16       | 4.64      | 0.63               |

Table 3 presents detailed descriptive statistics for each questionnaire item. All items scored above the neutral threshold of 3.0, confirming overall positive learner perceptions. The highest-rated items were A4 “Example sentences and word positions helped me understand their usage” (M = 4.79, SD = 0.43) and D14 “The combination of explanation, examples, and exercises helped me learn better” (M = 4.79, SD = 0.43). These findings underscore the critical role of contextualized exemplification and integrated instructional design in facilitating near-synonym acquisition. The strong endorsement of these items aligns with theoretical predictions from the Lexical Approach (Lewis, 1997) and Nation’s framework (Nation, 2001, p.27), which emphasize the importance of encountering vocabulary in meaningful, multi-layered contexts.

Conversely, lower-rated items included C12 “I can judge how formal or emotional a word is when reading” (M = 3.14, SD = 0.66) and B7 “I can not only understand these words but also explain their differences” (M = 3.29, SD = 1.10). These results suggest that while learners developed functional competence in near-synonym discrimination, their metalinguistic awareness and pragmatic sensitivity, particularly regarding register and formality distinctions, remained areas requiring further development. The higher standard deviation for B7 (SD = 1.10) indicates substantial individual variation in learners’ ability to articulate explicit knowledge about near-synonym distinctions.

## 4.4 Interview results

This section presents the qualitative findings organized according to four theoretical dimensions: lexical chunks, breadth versus depth of vocabulary knowledge, depth of processing, and learning motivation. The analysis draws on interview data from eight participants to identify common patterns and individual variation in their experiences learning Chinese near-synonyms.

### 4.4.1 Dimension 1: Lexical chunks

All eight participants demonstrated awareness that near-synonyms frequently occur with specific collocations and unanimously recognized the instruction as beneficial for their learning. The participants articulated that those collocations served multiple pedagogical functions beyond simple memorization. Participant 1 (P1) explained that “the collocations are quite helpful; they make that clear” when distinguishing between near-synonyms with similar core meanings. This sentiment was echoed across both performance groups, with P7 noting that recognizing patterns such as the shared “Yu” ( 于 ) component in 至于, 关于, and 对于 facilitated semantic grouping and recall.

The participants emphasized that collocational knowledge was essential for achieving linguistic competence rather than mere recognition. P2 articulated this distinction, stating that “if you don’t have those collocations, then you still can’t necessarily use the word. If you use it incorrectly with the wrong elements, then you may as well not use it.” This perspective reflects an understanding that lexical items function as part of larger formulaic sequences rather than as isolated units. P8 provided particularly nuanced commentary on this issue, arguing that “learning the collocations is kind of the only way to do it” when dealing with Chinese near-synonyms, given their subtle semantic distinctions that often lack direct English equivalents.

Example sentences containing target collocations received universal endorsement as learning tools. All eight participants confirmed that example sentences enhanced their understanding of appropriate word usage, with P7 describing the grammar booklet containing example sentences as “a lifesaver” and noting that “just looking at the word and then seeing the definition does not help at all until I get an example.” The participants valued example sentences for their ability to contextualize abstract definitions and provide concrete usage models. P1 noted, however, that example sentences were only helpful when learners already possessed some foundational understanding of the distinctions; without this baseline knowledge, examples alone are insufficient.

### 4.4.2 Dimension 2: Breadth vs. depth of vocabulary knowledge

The participants’ responses revealed a clear developmental trajectory from surface-level recognition to deep, productive knowledge. This progression was articulated most explicitly by P11, who distinguished between “knowing the meaning,” which “enabled me to translate words and phrases from Chinese to English,” and “knowing how to use it,” which “enabled me to translate given text from English to Chinese and create my own sentences.” This distinction captures the fundamental difference between receptive vocabulary breadth and productive vocabulary depth.

All participants described an initial learning stage, characterized by memorization of definitions, followed by a subsequent stage involving contextual understanding and productive capacity. P5 explained that “at first, I just memorized the definitions, but seeing the words in context showed me how they actually fit into sentences, making it easier to use them naturally.” This shift from decontextualized knowledge to contextualized competence emerged as a consistent theme across all interviews. P8 characterized this transformation as a “process” whereby learning “starts as memorizing and then turns into understanding,” suggesting that declarative knowledge gradually becomes proceduralized through exposure and practice.

The participants identified several mechanisms that facilitated the development of understanding. Contextual exposure through authentic input was mentioned by P1, P7, and P8, who emphasized the importance of encountering target words in natural discourse. P1 explained that “understanding comes from using the word and hearing others use it,” and described actively monitoring how others employed newly learned vocabulary. Practice activities, particularly translation exercises and fill-in-the-blank tasks, were cited by P2, P7, and P10 as crucial for consolidating productive knowledge. Notably, P7 mentioned that “getting it wrong especially helps me remember,” indicating that error correction served as a powerful learning mechanism.

A particularly significant finding was the unanimous preference for learning near-synonyms as coherent groups rather than as isolated items. P2 articulated this most clearly: “Learning them as a group definitely made them easier to remember. If I had learned them all separately, I think I would have just confused them. But I had to learn from the beginning to differentiate them and understand the nuances.” This approach appeared to prevent the confusion that might arise from encountering similar items separately, while simultaneously promoting deeper understanding through constant comparison and contrast.

#### *4.4.3 Dimension 3: Depth of processing*

Evidence of active cognitive processing was apparent throughout all eight interviews, although participants employed varying strategies to engage with the material. The participants consistently described moving beyond surface-level memorization to engage in comparative analysis, pattern recognition, and contextual reasoning when learning near-synonym groups.

Comparative analysis emerged as a universal strategy. All participants reported actively considering why one near-synonym was more appropriate than another in specific contexts. P1 described attempting to “find some kind of way to compare these two near-synonyms with the two English near-synonyms,” while P5 related engaging in deliberate consideration of “the tone, context, and collocations in the sentence.” P11 similarly reported working to “understand which word works best in which context and with which grammatical rules.” These descriptions suggest that the learners were not merely memorizing form-meaning pairings but rather engaging in more in-depth semantic and pragmatic analysis.

Pattern recognition was explicitly mentioned by several participants as a cognitive strategy for organizing near-synonym knowledge. P1 noted that “you start to notice patterns” through repeated exposure to words in context, while P7 described developing personalized “memorizing strategies” such as associating 历经 with temporal duration. P8 reported “looking back at the examples we’ve been given and being like, okay, that follows this pattern,” suggesting active schema formation and application. These strategies reflect learners’ attempts to systematically organize complex lexical relationships.

Contextual reasoning was particularly evident in the participants’ descriptions of the exercises. P2 explained a recursive process of referring “back to the meanings of the words and thinking about the example sentences. Apply that knowledge to the translation until it became more instinctive.” P10 described visualizing scenarios mentally: “You’re given a description of what scenario to use it in, and you try to fit it into that scenario... You need to visualize the scenario in your head.” This mental simulation suggests deep processing whereby learners mentally rehearse potential usage contexts.

A notable finding was participants’ awareness of the progression from controlled to automatic processing. Multiple participants described how initially difficult cognitive processes gradually became more intuitive. P2 noted that “at the beginning, it’s a lot of going back and trying to remember which word refers to which situation. The more you do it, the more you get a sense of how to do it.” P14 observed that “for advanced learners, this awareness becomes subconscious,” indicating metacognitive awareness of their own learning trajectories. P8’s characterization of learning as starting with “memorizing” and then turning “into understanding” encapsulates this developmental pattern.

#### 4.4.4 Dimension 4: Learning motivation

The motivational landscape revealed by the interviews was complex, with six participants expressing predominantly positive motivational outcomes and two participants articulating significant challenges along with recognition of learning value.

Six participants (P1, P2, P5, P7, P11, P14) reported enhanced confidence and increased interest in vocabulary learning as a result of studying near-synonym groups. P11 stated, “I feel more confident using a wide range of words in my own sentences and I have a greater vocabulary set with which to do so,” while P5 reported feeling “more confident and motivated, because I feel I can not only recognize the words but also use them correctly.” P14 noted increased confidence specifically in examination contexts, explaining that studying near-synonyms made it possible to “feel more confident explaining why certain near-synonyms are more appropriate.” These participants framed the challenge of learning nuanced distinctions as intellectually rewarding rather than discouraging.

P1 and P7 explicitly mentioned enhanced intrinsic interest in vocabulary learning. P1 expressed finding “the differences between words very interesting” and appreciating the availability of “an alternative word I could use.” P7 reported that near-synonym study “makes me want to learn more,” noting that encountering unfamiliar words in example sentences naturally prompted additional vocabulary acquisition. These responses suggest that near-synonym instruction can foster autonomous motivation by highlighting linguistic complexity as inherently interesting.

However, two participants (P8, P10) articulated motivational challenges alongside their engagement with the material. P8 expressed ambivalence about learning additional near-synonyms, explaining: “You don’t really want to learn more for the fear of using the wrong one. If I only know one and use it wrong, that’s fine. But the more things you introduce, the more room there is for error. But also, you’re not developing or improving. So, it’s a bit of a catch-22.” This response reveals anxiety about error multiplication and a tension between avoiding mistakes and achieving proficiency. P10 described affective consequences of uncertainty: “If you feel like you’ve got it right but don’t fully understand it, it can be saddening for your confidence.” However, P10 immediately qualified this by asserting that “if you’re passionate about learning languages, you’ll work hard to understand it. In the end, it’s OK,” suggesting that autonomous motivation can buffer against threats to competence.

Despite these challenges, all eight participants demonstrated sustained engagement with near-synonym learning, as evidenced by their responses regarding continued attention to usage patterns outside instructional contexts. All participants reported heightened awareness of near-synonym usage in authentic input following instruction. P1 explained, “I definitely pay attention in listening to how people use certain words I’m learning or studying. It helps me understand what’s correct and what isn’t.” P2 noted that “going through the words helps me recognize them when I hear them. I start to think about the specific meaning or context.” P8 described an attentive phenomenon whereby learning a near-synonym made the previously overlooked word “start to appear more, and you notice it.” These responses indicate that near-synonym instruction successfully promoted continued, self-directed attention to target vocabulary beyond formal study.

An interesting pattern emerged regarding reading confidence. P7 reported that learning near-synonyms “helps me read more fluently, especially outside class materials. I feel more confident to keep reading.” Similarly, P10 noted that “over time, using certain words during reading makes it easier to distinguish them” and emphasized that “knowing how to use them properly builds confidence and improves language skills.” These responses suggest that depth of vocabulary knowledge, particularly regarding near-synonyms, may have positive transfer effects to reading comprehension and willingness to engage with texts.

## 5 Discussion

This study investigated the effectiveness of a five-phase pedagogical intervention designed to enhance advanced Chinese L2 learners' ability for near-synonym discrimination. The intervention integrated theoretical principles from the Lexical Approach, the Nation's Lexical Knowledge Framework, and the Levels of Processing Hypothesis, while incorporating pedagogical mechanisms drawn from Skill Acquisition Theory, the Output Hypothesis, and corrective feedback research. The findings provide evidence for the intervention's positive impact on both learning outcomes and the learning experience.

### 5.1 Effectiveness of the five-phase intervention

The quantitative results demonstrated measurable improvements in near-synonym discrimination following the intervention. The 2025 experimental cohort showed significant gains from pre-test to post-test ( $M = 4.93$  to  $M = 7.57$ ,  $p < 0.001$ ), all 14 learners improving their scores. Compared to the 2024 control group on the final exam, the experimental group outperformed the control group across all measures, with particularly notable gains in Section 3 (fill-in-the-blank, +25.1%) and Section 4 (multiple-choice, +26.8%). In response to RQ1, the quantitative results demonstrated significant improvements in the learners' ability to discriminate near-synonyms. The experimental group outperformed the control group across all test measures, with a mean gain of 2.64 points in pre- and post-test scores and notable improvements in final exam performance. The intervention's recursive structure, moving from semantic explanation to testing and feedback, supported deeper lexical processing and retention.

The differential improvements across exam sections reveal the intervention's alignment with specific instructional phases. The fill-in-the-blank tasks (Section 3) required productive retrieval and contextual application, directly corresponding to Phase 4 (Integrated Practice) and Phase 5 (Testing and Feedback). The 25.1% improvement in this section validates the testing effect documented by Roediger and Karpicke (2006): repeated retrieval practice embedded in the intervention enhances long-term retention and transfer. The multiple-choice tasks (Section 4), which emphasized semantic discrimination, directly assessed the outcomes of Phase 2's minimal pair contrasts and error analysis. The 26.8% improvement confirms that explicit contrastive instruction, as advocated by Webb and Kagimoto (2011), effectively sharpens learners' metalinguistic awareness of near-synonym boundaries.

Beyond absolute performance gains, the intervention appeared to reduce the variation in achievement. The experimental group exhibited a 35% reduction in the standard deviation compared to the control group ( $SD = 13.16$  vs.  $20.26$ ), indicating that the intervention benefited learners across proficiency levels rather than only the high-achieving students. This finding has important pedagogical implications, suggesting that systematic, stratified instruction can narrow the achievement gap while raising overall performance, a pattern consistent with research on explicit vocabulary instruction (Schmitt, 2008; Nation, 2013).

The effectiveness of the intervention can be attributed to several design features consistent with established learning principles. First, the progression from semantic explanation through contrastive discrimination to contextualized exemplification mirrors the Levels of Processing Hypothesis ( Craik & Lockhart, 1972), which posits that deeper, more elaborate encoding leads to more durable memory traces. By requiring learners to engage with near-synonym distinctions at progressively deeper levels, from basic meaning recognition to nuanced pragmatic differentiation, the intervention promoted elaborative processing rather than superficial memorization.

Second, the integration of collocation training throughout the intervention aligns with the Lexical Approach's emphasis on chunking and formulaic sequences (Lewis, 1997). The interview data revealed that the participants recognized collocations as essential for achieving productive competence, echoing P8's observation that "learning the collocations is the only way to do it" given the subtle

semantic distinctions among Chinese near-synonyms. This finding corroborates corpus-based research demonstrating that near-synonyms are often distinguished primarily through collocational preferences rather than core semantic features (Gries, 2006; Divjak & Gries, 2009).

Third, the inclusion of integrated practice and testing with feedback phases applied principles from Skill Acquisition Theory and the Testing Effect. The progression from declarative to procedural knowledge was evident in the learners' descriptions of their development, with P8 characterizing the process as starting with "memorizing" and then turning this "into understanding." The recursive nature of the intervention, particularly the formative assessment and individualized feedback in Phase 5, enabled continuous refinement of lexical knowledge, consistent with research on retrieval-based learning and corrective feedback (Roediger & Karpicke, 2006; Lyster & Saito, 2010).

## 5.2 Cognitive strategies and developmental trajectories

The qualitative data shed light on the cognitive strategies learners employed during near-synonym acquisition and the developmental trajectories they followed. Analysis of the interview transcripts revealed four key dimensions of learners' experiences: engagement with lexical chunks, progression from breadth to depth of vocabulary knowledge, depth of processing, and motivational dynamics. These findings provide answers to RQ2 by documenting both the specific strategies learners used and how these strategies developed over the course of instruction.

Regarding lexical chunks, the universal recognition of the importance of collocation suggests that advanced learners possess metalinguistic awareness of the relationship between form and function in Chinese. The participants' descriptions indicated that collocations served not merely as memorization aids but as conceptual frameworks for understanding pragmatic appropriateness. P2's assertion that using a word "incorrectly with the wrong elements" renders it essentially unusable reflects a sophisticated understanding of the interdependence between lexical choice and collocational constraints. This finding extends previous research on collocation instruction (Durrant & Schmitt, 2010) by demonstrating that explicit attention to collocational patterns can enhance learners' pragmatic competence in addition to their semantic knowledge.

The developmental trajectory from breadth to depth of vocabulary was consistent across all participants. P11's distinction between "knowing the meaning" (enabling a Chinese-to-English translation) and "knowing how to use it" (enabling English-to-Chinese production) captures the essence of Nation's form-meaning-use framework (Nation, 2001, p.27). This progression was facilitated by multiple pathways: contextual exposure through authentic input, deliberate practice via exercises, and error correction. Notably, P7's comment that "getting it wrong especially helps me remember" highlights the productive role of errors in learning, a phenomenon well-documented in error correction research (Lyster & Saito, 2010) but particularly salient in near-synonym acquisition, where fine-grained distinctions must be internalized through hypothesis testing and feedback.

The preference for learning near-synonyms as coherent groups rather than isolated items represents a significant pedagogical insight. P2's observation that group learning prevented confusion while promoting differentiation suggests that contrastive analysis creates stronger memory traces through distinctive encoding, a principle consistent with both the Levels of Processing Hypothesis and cognitive theories of memory. This finding challenges traditional vocabulary instruction that introduces lexical items sequentially without explicit comparison, suggesting that instructional efficiency may be enhanced by organizing curricula around semantic fields or near-synonym sets.

Evidence of deep processing was apparent throughout the interviews, with participants describing comparative analysis, pattern recognition, and contextual reasoning as their primary cognitive strategies. The progression from controlled to automatic processing, noted by multiple participants, reflects the transition from cognitive engagement to fluent, intuitive usage, a hallmark of skill acquisition (DeKeyser,

2007). P14's observation that "for advanced learners, this awareness becomes subconscious" indicates metacognitive awareness of their developmental trajectories, suggesting that explicit instruction can foster not only linguistic competence but also learner autonomy and self-regulation.

### 5.3 Learner perceptions and affective dimensions

The questionnaire data indicated overwhelmingly positive perception of the intervention, with all items scoring above the neutral threshold and two items (A4 and D14) receiving particularly strong endorsement ( $M = 4.79$ ). These items highlighted the value of example sentences and integrated instructional design, findings that align with research emphasizing contextualized vocabulary instruction (Coxhead & Byrd, 2007; Webb & Kagimoto, 2011). The strong inter-dimensional correlations ( $r > 0.99$ ) suggest that learners' perceptions of effectiveness, cognitive engagement, and learning outcomes are highly interconnected, supporting holistic approaches to vocabulary instruction that address multiple dimensions simultaneously. The results addressed RQ3 by demonstrating that the learners perceived the intervention as being highly effective, while also revealing nuanced challenges in cognitive load and metalinguistic awareness.

However, the lower ratings for items C12 (register sensitivity) and B7 (metalinguistic explanation ability) indicate areas where learners felt less confident. This gap between functional competence and metalinguistic awareness has been documented in L2 acquisition research, which distinguishes between implicit knowledge (manifested in performance) and explicit knowledge (accessible for conscious reflection and verbalization). The intervention may have successfully developed implicit knowledge, as evidenced by improved test performance, but metalinguistic awareness may require additional instructional support, such as explicit consciousness-raising tasks or reflective writing about linguistic choices. This suggests that while the five-phase model promoted productive competence, supplementary activities targeting register awareness and explicit rule articulation could further enhance learners' metalinguistic development.

The motivational landscape revealed by the interviews was complex but predominantly positive. Six of the eight participants reported enhanced confidence and increased interest in vocabulary learning, with several explicitly framing near-synonym study as intellectually rewarding. P1's enthusiasm for discovering "the differences between words" and P7's comment that near-synonym instruction "makes me want to learn more" suggest that the intervention motivated the students by highlighting linguistic complexity as inherently interesting rather than merely instrumental. By providing learners with tools to make principled lexical choices, the intervention may have enhanced their sense of competence in language use.

Nevertheless, two participants (P8 and P10) expressed motivational challenges, particularly anxiety about error multiplication and performance uncertainty. P8's description of a "catch-22" between avoiding errors and developing proficiency reveals the potential costs of heightened metalinguistic awareness. However, both P8 and P10 engaged with the material, suggesting that clear instructions and feedback can mitigate anxiety. P10's assertion that "if you're passionate about learning languages, you'll work hard to understand it" indicates that autonomous motivation can buffer anxieties concerning competence.

An encouraging finding was that all participants reported sustained attention to near-synonym usage in authentic input following instruction. This heightened awareness suggests that the intervention successfully created a virtuous cycle whereby explicit instruction enhanced attention, which in turn facilitated further learning through incidental exposure. P8's description of previously overlooked words beginning to "appear more" exemplifies this phenomenon. The increased reading confidence reported by several participants (P7, P10) suggest that near-synonym instruction may have additional benefits beyond discrete lexical knowledge, potentially enhancing learners' willingness to engage with challenging texts and their overall L2 self-efficacy.

## 5.4 Pedagogical implications

The findings yielded several concrete pedagogical recommendations. First, near-synonym instruction should be organized around contrastive analysis, with learners encountering near-synonyms in sets rather than in isolation. This approach leverages relational processing and distinctive encoding while preventing the confusion that can arise from serial presentation.

Second, collocation instruction should be emphasized throughout near-synonym learning. Example sentences should be carefully selected to highlight prototypical collocations, and exercises should require learners to recognize collocational constraints. Corpus data can inform the selection of high-frequency, pedagogically relevant collocations.

Third, instructional sequences should be structured to promote progressive deepening of processing. The five-phase model evaluated in this study, moving from semantic explanation through contrastive discrimination and contextualized exemplification to integrated practice and formative assessment, provides a template that can be adapted to various educational contexts. The key principle is that each phase should build systematically on prior knowledge while introducing new dimensions of complexity.

Fourth, formative assessments and individualized feedback should be integrated throughout instruction rather than reserved for summative evaluation. The recursive structure of Phase 5 in this study enabled the learners to refine their understanding through multiple cycles of testing, feedback, and revision. Digital platforms such as Canvas can facilitate this process by providing immediate feedback while also enabling instructors to track learning trajectories and identify persistent difficulties.

Fifth, instructors should consider the affective dimensions of vocabulary learning, particularly when introducing complex, high-stakes lexical distinctions. Strategies for managing cognitive load and performance anxiety could include explicit discussion of learning processes, normalization of errors as necessary for acquisition, peer collaboration that helps distribute the cognitive burden, and celebration of incremental progress. Creating a classroom culture that values exploration and hypothesis testing over flawless performance may help learners approach near-synonym learning with curiosity rather than apprehension.

Finally, near-synonym instruction should be positioned as intellectually enriching rather than merely instrumental. The participants who expressed the greatest enthusiasm for vocabulary learning were those who found linguistic variation inherently interesting. Instructors can cultivate this perspective by highlighting how near-synonym choices reflect subtle differences in a speaker's stance, register, and rhetorical purpose, framing vocabulary learning as developing sensitivity to linguistic artistry rather than memorizing arbitrary distinctions.

## 5.5 Limitations

While the present study offers promising results, its generalizability is limited by the small sample size and the single-institution context. Future research could expand the participant pool, explore longitudinal effects, and investigate the model's applicability across different proficiency levels and linguistic backgrounds. Additionally, integrating AI-assisted tools for near-synonym instruction may offer new avenues for personalized learning.

## 6 Conclusion

This study developed and evaluated a five-phase pedagogical intervention designed to address the challenges of near-synonym acquisition in Chinese L2 instruction. The intervention demonstrated measurable improvements in learners' discrimination accuracy, semantic depth, and productive usage, as supported by both quantitative and qualitative data.

The research contributes to the field by offering a theory-informed, empirically validated instructional model that integrates semantic explanation, contrastive analysis, contextual exemplification, productive practice, and formative feedback. The results highlight the importance of recursive, cognitively engaging instruction in fostering deep lexical competence.

Pedagogically, the findings suggest that near-synonym instruction should move beyond isolated strategies toward integrated, multi-phase designs that guide learners from recognition to production. The model's success underscores the value of aligning instructional practices with established theories of vocabulary acquisition.

In conclusion, this study provides a foundation for future research and curriculum development in CSL instruction. By addressing both cognitive and affective dimensions of learning, the five-phase model offers a promising framework for enhancing lexical precision and learner autonomy in advanced L2 instruction.

## Appendixes

### Appendixes 1

10 near-synonym sets

1. 享有, 享受, 想用; 2. 反而, 相反; 3. 关于, 对于, 至于; 4. 表现, 体现;
5. 猛然, 突然, 忽然; 6. 抚养, 赡养, 培养; 7. 许可, 认可; 权力, 权利;
8. 成果, 结果, 后果; 9. 经历, 历经; 10. 参加, 参与

### Appendixes 2

Near-Synonym Discrimination, 1-5 scale (1 = Strongly disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; 5 = Strongly agree).

#### Questionnaire

##### A. Understanding and Collocation of Near-Synonyms

- 1) I understand the subtle differences between these near-synonym.
- 2) I have learnt common collocations for these words.
- 3) Learning collocations helped me remember the word meanings more easily.
- 4) Example sentences and word positions helped me understand their usage.

##### B. Depth of Processing and Usage Ability

- 5) Comparing near-synonym helped me form a deeper impression of them.
- 6) The gap-fill and multiple-choice questions made me analyze the context carefully.
- 7) I can not only understand these words but also explain their differences.
- 8) I can now use these words more accurately in writing.

##### C. Vocabulary and Reading Improvement

- 9) This activity introduced me to many new words I hadn't seen before.
- 10) I can recognize the correct usage of these words in reading.
- 11) I now pay more attention to how similar words are used in context.
- 12) I can judge how formal or emotional a word is when reading.

## D. Learning Method and Experience

- 13) This near-synonym learning method is more effective than rote memorization.
- 14) The combination of explanation, examples, and exercises helped me learn better.
- 15) I think this method is suitable for vocabulary learning.
- 16) I would like to participate in similar exercises in the future.

## Appendix 3

### Interview questions

#### Dimension 1: Lexical Chunks

1. While learning these near-synonym groups, did you notice that certain words often appear with specific collocations?  
Did the example sentences help you understand these collocations or common usages? Did they make the words easier to remember?

#### Dimension 2: Breadth vs. Depth of Vocabulary Knowledge

2. Were the explanations and example sentences helpful for your learning? Which aspects were most useful (e.g., distinctions, usage scenarios, example sentences)?
3. Can you describe how your understanding of a word changed from simply “knowing the meaning” to “knowing how to use it”?

#### Dimension 3: Depth of Processing Hypothesis

4. While doing the exercises and reading the explanations, did you actively think about why one word was more appropriate than another? How did you make that decision?
5. Did comparing near-synonyms help you remember them more deeply? Why?
6. Have you started paying more attention to how these words are used in reading or listening? If so, what changes have you noticed?

#### Dimension 4: Learning Motivation

7. Has it affected your interest or confidence in learning vocabulary? How?

## References

- Abbuhl, R., & Mackey, A. (2015). Second language acquisition research methods. In K. King & Y. Lai (Eds.), *Encyclopedia of language and education: Vol. 10. Research methods in language and education* (3rd ed.). Springer.
- Chang, Zhe-Wei (张哲玮). (2015). *A corpus-based lexical semantic study of Mandarin verbs of hanging: On the near synonym set: guà, xuán, diào* 以语料库为本指中文动词近义词「挂、悬、吊」之词汇语义研究 [Unpublished MA Dissertation, National Chiao Tung University].
- Chen, P. H., Hulme, R. C., Blott, L. M., & Rodd, J. M. (2024). The Web-based Open-access Reliable Decision on Synonyms (WORDS) English Vocabulary Test. *Journal of Cognition*, 7(1), 1–14. <https://doi.org/10.5334/joc.391>
- Coxhead, A., & Byrd, P. (2007). Preparing writing teachers to teach the vocabulary and grammar of academic prose. *Journal of Second Language Writing*, 16(3), 129–147. <https://doi.org/10.1016/j.jslw.2007.07.002>

- Craik, F. I. M., & Lockhart, R. S. (1972). Levels of processing: A framework for memory research. *Journal of Verbal Learning and Verbal Behaviour*, 11, 671-684. [https://doi.org/10.1016/S0022-5371\(72\)80001-X](https://doi.org/10.1016/S0022-5371(72)80001-X)
- Craik, F. I. M., & Tulving, E. (1975). Depth of processing and the retention of words in episodic memory. *Journal of Experimental Psychology: General*, 104, 268-294. <https://doi.org/10.1037/0096-3445.104.3.268>
- Dekeyser, R. (2007). Skill acquisition theory. In B. VanPatten & J. Williams (Eds.), *Theories in second language acquisition: An introduction* (pp. 97-113). Lawrence Erlbaum Associates, Inc.
- Demana, N. V., Klu, E. K., & Maluleke, M. J. (2025). Collocation Errors in the Written Essays of English Second/Foreign Language Learners: A Scoping Review. *Journal of Education and Learning Technology*, 6(9), 800-808. <https://doi.org/10.38159/jelt.2025697>
- Deng, Shouxin (邓守信). (2009). 汉语近义词用法词典 [Dictionary of Chinese near-synonym usage]. 书林出版有限公司 [Bookman Books].
- Divjak, D., & Gries, S. (2009). Behavioral profiles: A corpus-based approach to cognitive semantic analysis. In V. Evans & S. Pourcel (Eds.), *New directions in Cognitive Linguistics* (pp. 57-75). John Benjamins Publishing Company. <https://doi.org/10.1075/hcp.24.07gri>
- Durrant, P., & Schmitt, N. (2010). Adult learners' retention of collocations from exposure. *Second Language Research*, 28, 163-188. <https://doi.org/10.1177/0267658309349431>
- Edmonds, P., & Hirst, G. (2002). Near-synonymy and lexical choice. *Computational Linguistics*, 28(2), 105-144. <https://doi.org/10.1162/089120102760173625>
- Ellis, N. C. (2001). Memory for language. In P. Robinson (Ed.), *Cognition and second language instruction* (pp. 33-68). Cambridge University Press. <https://doi.org/10.1017/CBO9781139524780.004>
- Ellis, R. (2003). The processes of second language acquisition. In B. VanPatten, J. Williams, S. Rott, & M. Overstreet (Eds.), *Form-meaning connections in second language acquisition* (pp. 49-76). Routledge.
- Fu, Xiaoli (傅晓莉), & Li, Aiping (李爱萍). (2020). 二语视听多模态输入研究述评 [A review of studies on multimodal audiovisual input in second language acquisition]. 云南师范大学学报 [Journal of Yunnan Normal University], 18(1), 7-16.
- Gries, St. Th. (2006). Corpus-based methods and cognitive semantics: The many meanings of to run. In St. Th. Gries & A. Stefanowitsch (Eds.), *Corpora in cognitive linguistics: Corpus-based approaches to syntax and lexis* (pp. 57-99). Mouton de Gruyter.
- Gries, St. Th. (2015). The most under-used statistical method in corpus linguistics: Multi-level (and mixed-effects) models. *Corpora*, 10(1), 95-125. <https://doi.org/10.3366/cor.2015.0068>
- Hong, J. F. (2014). Chinese near-synonym study based on the Chinese gigaword corpus and the Chinese learner corpus. In X. Su & T. He (Eds.), *CLSW 2014, LNAI 8922* (pp. 329-340). Springer. [https://doi.org/10.1007/978-3-319-14331-6\\_33](https://doi.org/10.1007/978-3-319-14331-6_33)
- Hong, Wei (洪伟). (2011). 语素因素对留学生近义词学习影响的实证研究 [An experimental research on the morphemic effect on synonyms learning by CSL learners]. 语言教学与研究 [Language Teaching and Linguistic Studies], 3, 424-432.
- Hong, Wei (洪伟). (2013). 汉语作为第二语言的近义词教学实验研究 [An empirical study on the teaching of near-synonyms to learners of Chinese as a second language]. 世界汉语教学 [Chinese Teaching in the World], 3, 424-432. <https://doi.org/10.13724/j.cnki.ctiw.2013.03.011>
- Hong, Wei (洪伟). (2014). *A study on L2 acquisition of Chinese near-synonyms* [Unpublished Doctoral Dissertation, City University of Hong Kong].
- Hong, Wei (洪伟), & Chen, Nan (陈楠). (2013). 汉语二语者近义词差异的习得考察 [An

- investigation of L2 Chinese learners' acquisition of near-synonym distinctions]. 语言文字应用 [Applied Linguistics], 2, 99-106. <https://doi.org/10.16499/j.cnki.1003-5397.2013.02.015>
- Hong, Wei (洪伟), & Zhao, Xin (赵新). (2014). 不同类型汉语近义词习得难度考察 [An investigation of acquisition difficulty of different types of Chinese near-synonyms]. 汉语学习 [Chinese Language Learning], 1, 100-106.
- Hong, Wei (洪伟), Wu, Anting (吴安婷), & Wu, Qiuping (伍秋萍). (2018). 任务的模态配置对汉语二语文本理解、词汇和句法学习的影响 [Effects of task modality configuration on L2 Chinese text comprehension, vocabulary and syntax learning]. 世界汉语教学 [Chinese Teaching in the World], 32(3), 401-416.
- Huang, C. R., & Hong, J. F. (2005). Deriving Conceptual Structures from Sense: A Study of Near Synonymous Sensation Verbs. *Journal of Chinese Language and Computing*, 15, 125-136.
- Huang, C.-Y., Chen, M. H., & Ku, L. W. (2017). Towards a Better Learning of Near-Synonyms: Automatically Suggesting Example Sentences via Fill in the Blank. In *Proceedings of the 26th International Conference on World Wide Web Companion* (pp. 293-302). IW3C2. <https://doi.org/10.1145/3041021.3054163>
- Huang, S. Y., & Liou, Y. C. (2019). Chinese as a second language. *Chinese as a Second Language*, 54(1), 31-50. <https://doi.org/10.1075/csl.17028.hua>
- Hulstijn, J., & Laufer, B. (2001). Some Empirical Evidence for the Involvement Load Hypothesis in Vocabulary Acquisition. *Language Learning*, 51, 539-558. <http://dx.doi.org/10.1111/0023-8333.00164>
- Jiang, N. (2000). Lexical Representation and Development in a Second Language. *Applied Linguistics*, 21, 47-77. <https://doi.org/10.1093/applin/21.1.47>
- Kim, M. (2020). A Qualitative Analysis of EFL Learners' Discrimination of Near-Synonyms in a Data-Driven Learning Task. *English Teaching*, 75(3), 25-47. <https://doi.org/10.15858/engtea.75.3.202009.25>
- Laufer, B. (1990). Words you know: How they affect the words you learn. In J. Fisiak (Ed.), *Further Insights into Contrastive Linguistics* (pp. 573-593). John Benjamins.
- Lei, Ling (雷菱). (2018). 2001~2016年对外汉语词汇习得研究方法运用情况及趋势分析 [Analysis of the application and trends of research methods in vocabulary acquisition for teaching Chinese as a foreign language from 2001 to 2016]. 云南师范大学学报(对外汉语教学与研究版) [Journal of Yunnan Normal University (Teaching and Research of Chinese as a Foreign Language)], 16(3), 29-39.
- Lertcharoenwanich, P. (2022). A Corpus-based Study of the Near-synonyms Purpose, Goal and Objective across Genres. *rEFlections*, 29(1), 148-168.
- Lertcharoenwanich, P. (2023). Analysis of Collocations and Semantic Preference of the Near-synonyms. *LEARN Journal*, 16(1), 365-383.
- Lewis, M. (1993). *The lexical approach*. Language Teaching Publications.
- Lewis, M. (1997). *Implementing the lexical approach: Putting theory into practice*. Language Teaching Publications.
- Li, G. (2019). Research on the Influence of Multiple Feedback on English Composition Revision Based on Automatic Evaluation System. *Foreign Language Education*, 40(4), 72-76.
- Li, J., Link, S., & Hegelheimer, V. (2015). Rethinking the Role of Automated Writing Evaluation (AWE) Feedback in ESL Writing Instruction. *Journal of Second Language Writing*, 27, 1-18. <https://doi.org/10.1016/j.jslw.2014.10.004>
- Li, S., & Vuono, A. (2019). Twenty-Five Years of Research on Oral and Written Corrective Feedback in

- System. *System*, 84, 93–109. <https://doi.org/10.1016/j.system.2019.05.006>
- Li, S., Zhu, Y., & Ellis, R. (2016). The Effects of the Timing of Corrective Feedback on the Acquisition of a New Linguistic Structure. *The Modern Language Journal*, 100(1), 276–295. <https://doi.org/10.1111/modl.12315>
- Li, Shaolin (李少林). (2010). 对外汉语教学词义辨析的对象和原则 [Objects and principles of semantic discrimination in teaching Chinese as a foreign language]. 世界汉语教学 [Chinese Teaching in the World], 24(3), 406–414.
- Liu, M., Chiang, T., & Chou, M. (2005). A frame-based approach to polysemous near-synonymy: The case with mandarin verbs of expression. *Journal of Chinese Language and Computing*, 15(3), 137–148.
- Luo, Q. (1997). 英国国家学生高级汉语词汇学习过程的心理特征与教学策略 [The psychological features of the vocabulary learning process of and the teaching strategies for students from English-speaking countries at the advanced level]. In M. Hu (Ed.), *Proceedings of the 5th international conference on Chinese language teaching* (pp. 526–536). Peking University Press.
- Lyster, R., & Saito, K. (2010). Oral feedback in classroom SLA: A meta-analysis. *Studies in Second Language Acquisition*, 32(2), 265–302. <https://doi.org/10.1017/S0272263109990520>
- Mackey, A., & Gass, S. M. (2011). *Research methods in second language acquisition: A practical guide*. Wiley Blackwell. <https://doi.org/10.1002/9781444347340>
- Mackey, A., & Gass, S.M. (2015). *Second Language Research: Methodology and Design* (2nd ed.). Routledge. <https://doi.org/10.4324/9781315750606>
- Mou, Shuyuan (牟淑媛), & Wang, Shuo (王硕). (2004). 汉语近义词学习手册 [Handbook of Chinese near-synonym learning]. 北京大学出版社 [Peking University Press].
- Nation, I. S. P. (1990). *Teaching and Learning Vocabulary*. Newbury House.
- Nation, I. S. P. (2001). *Learning Vocabulary in Another Language* (2nd ed.). Cambridge University Press.
- Nation, I. S. P. (2013). Knowing a word. In *Learning Vocabulary in Another Language* (pp. 44–91). Cambridge University Press. <https://doi.org/10.1017/CBO9781139858656.004>
- Nesselhauf, N. (2003). The use of collocations by advanced learners of English and some implications for teaching. *Applied Linguistics*, 24(2), 223–242. <https://doi.org/10.1093/applin/24.2.223>
- Pang, Yang (庞杨), & Yang, Yuchen (杨玉晨). (2012). 语料库对同义词触发模式的解释：以 begin、start 和 commence 为例 [Corpus-based explanation of synonym trigger patterns: A case study of begin, start and commence]. 外语与外语教学 [Foreign Languages and Their Teaching], 6, 21–25.
- Qing, X. H. (2004). 留学生汉语习得近义词偏误研究——以泰国学生为例 [A study on near-synonym errors in Chinese acquisition by international students: A case study of Thai students] [Unpublished Master's Thesis, Yunnan Normal University].
- Roediger, H. L., & Karpicke, J. D. (2006). Test-enhanced learning: Taking memory tests improves long-term retention. *Psychological Science*, 17(3), 249–255. <https://doi.org/10.1111/j.1467-9280.2006.01693.x>
- Schmitt, N. (2008). Instructed Second Language Vocabulary Learning. *Language Teaching Research* 12, 3: 329–363. <https://doi.org/10.1177/1362168808089921>
- Shao, J. (2018). *Synonymy and Lexical Priming: A Cross-Linguistic Investigation of Synonymy from Corpus and Psycholinguistic Perspectives*. Doctoral Dissertation, University of Liverpool. [https://livrepository.liverpool.ac.uk/3021737/1/200886438\\_March2018.pdf](https://livrepository.liverpool.ac.uk/3021737/1/200886438_March2018.pdf)
- Sun, D. J. (2006). 对外汉语词汇及词汇教学研究 [Research on Vocabulary and Vocabulary Teaching in Chinese as a Foreign Language]. 商务印书馆 [Commercial Press].

- Swain, M. (1985). Communicative competence: Some roles of comprehensible input and comprehensible output in its development. In S. Gass & C. Madden (Eds.), *Input in second language acquisition* (pp. 235-253). Newbury House.
- Wang, Pengpeng (王芃芃), & Zhao, Xuede (赵学德). (2020). 外国留学生近义词习得偏误分析与教学策略 [Error analysis and teaching strategies of near-synonym acquisition by foreign students]. 教育进展 [Advances in Education], 10(1), 76-83. <https://doi.org/10.12677/AE.2020.101013>
- Wang, S., & Huang, C. R. (2017). Word sketch lexicography: New perspectives on lexicographic studies of Chinese near synonyms. *Lingua Sinica*, 3(11). <https://doi.org/10.1186/s40655-017-0025-4>
- Webb, S. (2005). Receptive and productive vocabulary learning: The effects of reading and writing on word knowledge. *Studies in Second Language Acquisition*, 27, 33-52. <https://doi.org/10.1017/S0272263105050023>
- Webb, S., & Kagimoto, E. (2011). Learning collocation: Do the number of collocates, position of the node word, and synonymy affect learning? *Applied Linguistics*, 32, 259-276. <https://doi.org/10.1093/applin/amq051>
- Wu, C. (2023). Comparison Study of Synonyms in the Perspective of International Chinese Education. *Lecture Notes on Language and Literature*, 6, 17-26. <http://doi.org/10.23977/langl.2023.060804>
- Wu, P. Y., Chen, P. H. and Gong, Sh. P. (2011). 'Collocation, Semantic Prosody and Near Synonymy: Verbs of "Help" and "Aid" in Mandarin Chinese', 12th Chinese Lexical Semantics Workshop.
- Xing, Hongbing (邢红兵). (2009). 基于联结主义理论的第二语言词汇习得研究框架 [A connectionism-based research framework for second language vocabulary acquisition]. 语言教学与研究 [Language Teaching and Linguistic Studies], 5.
- Yang, Jizhou (杨寄洲), & Jia, Yongfen (贾永芬). (2005). 1700对近义词语用法对比 [Contrastive usage of 1700 pairs of near-synonyms]. 北京语言文化大学出版社 [Beijing Language and Culture University Press].
- Yu, Xinyue Cécilia, & Lamarre, Christine. (2021). An empirical study on acquisition of near-synonyms in Mandarin Chinese as L2. *32nd International Conference on Foreign/Second Language Acquisition*, University of Silesia in Katowice.
- Zhang, Beizhen, & Dowuona, Petrina Naa Narkie. (2024). The Impact of L1 Interference on Second Language Learning: A Case Study of Fante Second Language Learners of English. *International Journal of Trend in Scientific Research and Development*, 8(1), 284-292.
- Zhang, Wenxian (张文贤), Qiu, Likun (邱立坤), Song, Zuoyan (宋作艳), & Chen, Baoya (陈保亚). (2012). 基于语料库的汉语同义词语体差异定量分析 [Corpus-based quantitative analysis of stylistic differences among Chinese synonyms]. 汉语学习 [Chinese Language Learning], 3, 72-80.
- Zhao, Xin (赵新), & Hong, Wei (洪伟). (2009). 外国留学生汉语近义词偏误的考察与分析 [Investigation and analysis of Chinese near-synonym errors by foreign students]. 韩中言语文化研究 [Studies of Korean-Chinese Language and Culture], 21, 23-38.
- Zou, D. (2017). Vocabulary acquisition through cloze exercises, sentence-writing and composition-writing: Extending the evaluation component of the involvement load hypothesis. *Language Teaching Research*, 21(1), 54-75. <https://doi.org/10.1177/1362168816652418>

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# 高阶中文二语近义词教学干预研究

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## 摘要

近义词辨析是中文二语高阶学习者面临的主要挑战之一，其难点源于语义、搭配及语用上的细微差异，而且常规教材对此也呈现不足。本研究基于 Nation 的词汇知识框架和加工层次假说，设计并实施近义词的五步教学干预（语义解释、对比辨析、语境例证、综合练习、测试反馈），以探讨其对词汇习得的影响。研究采用混合方法设计，结合量化测评、问卷调查与质性访谈。结果显示，学习者在近义词的辨析准确性、语义深度和产出能力方面均有显著提升，其元语言意识得到了增强，并对该教学法持积极态度。研究验证了理论驱动的递归词汇教学的有效性，并为中文二语词汇的教学方案提供了实践参考。

## 关键词

中文二语，近义词辨析，词汇知识框架，语义深度，搭配模式

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