

A Review of Concept-based Language Instruction and Its Application in Foreign Language Teaching-learning Process

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Abstract: Concept-based language instruction (C-BLI) is an emerging foreign language teaching method of this century, which is based on the sociocultural theory proposed by Vygotsky and developed by a team led by Lantolf based on the systemic-theoretical instruction proposed by Gal'perin from Vygotsky school. C-BLI has abundant international research, but it is still in its early stages of development in China, and both theoretical and empirical research are relatively scarce. Based on the research results on C-BLI in the past fifteen years, both domestically and internationally, this paper interprets the development process and theoretical connotation of C-BLI. It reviews the existing empirical research from two aspects: teaching form design and effectiveness testing. Through reflection and summary, this paper points out the directions that need to be explored and deepened in the international research and application of C-BLI. At the same time, this paper hopes to provide theoretical and practical guidance for developing C-BLI research in China and explore the feasibility and future development direction of C-BLI application in foreign language teaching in China.

Keywords: Concept-based language instruction, Sociocultural theory, Foreign language teaching-learning process

1. Introduction

In the past few decades, domestic and foreign scholars have conducted extensive and in-depth research on second language acquisition and have achieved rich results. Concept-based language instruction (C-BLI) is one of its achievements. C-BLI is the latest school of foreign language teaching in this century. It takes language concepts as the basic unit of teaching and advocates that teachers directly teach students the scientific concepts of language in foreign language classes. By turning conceptual meanings into concrete language forms, students can combine scientific concepts with concrete practices to achieve teaching goals [1]. Even in today's foreign language teaching application research field, C-BLI is crucial to current and future foreign language teaching and teaching reform.

Traditional foreign language teaching methods focus on the form and content of language, and the language knowledge taught to students is mostly based on rules of thumb [2]. Although such rules of thumb can guide students in actual foreign language learning and application, they have certain limitations and often fail in special contexts or conditions, leading to students' misjudgment [3]. This

makes it difficult for students to internalize relevant language knowledge, which challenges foreign language teachers' actual teaching and is not conducive to students improving their learning efficiency and level. However, C-BLI focuses on constructing a conceptual system in language learning. The systematic teaching of conceptual knowledge makes up for the flexibility deficiencies of traditional foreign language teaching, helps students abandon fragmented and incompletely correct language knowledge, establishes a systematic conceptual system, and further cultivates students' second language acquisition ability. At the same time, C-BLI can stimulate students' interest in learning, improve students' sense of efficacy in learning foreign languages, and enrich language teaching methods. Moreover, it provides help for foreign language teachers' actual teaching and opens up a new path for developing foreign language teaching systems. The advantages of C-BLI impact the in-depth development of academic research and have important significance for the development of teaching practice.

At present, C-BLI has been extensively and deeply studied internationally. Still, the application and research of C-BLI in China started late, and theoretical and empirical research are relatively scarce. However, with the continuous advancement of China's education system reform in recent years, related academic research and practice have increased to a certain extent. However, there are still gaps in this research field, and therefore, many practical problems that need to be solved have emerged urgently. There are many difficulties in practical application and promotion.

This paper will review the origin and development of C-BLI from a contemporary perspective and summarize the teaching practices and literature research related to C-BLI at home and abroad. Based on this, this paper points out the directions that need to be explored and deepened in the research and application of C-BLI abroad and puts forward corresponding suggestions for improvement. At the same time, this paper also provides theoretical and practical guidance for China's C-BLI research, which is still in its early stages of development. It provides new ideas for developing China's foreign language teaching system and the practical teaching-learning process.

2. Literature Review

2.1. Proposal of C-BLI

Sociocultural theory (SCT) was proposed by Vygotsky, a psychologist from the former Soviet Union [4], emphasizing that language is a social and cultural phenomenon, applied in applied linguistics and second language acquisition and continuously developed and improved by SCT researchers. This includes Gal'perin, the most famous educational theorist of the Vygotsky school [5], who is dedicated to transforming SCT into a teaching model and applying it to practical foreign language teaching processes. Therefore, Gal'perin proposed systemic-theoretical instruction (STI).

Although the former Soviet Union began conducting second language acquisition research under the guidance of SCT in the 1930s, the impact of these studies on the West was very limited [4]. After the disintegration of the former Soviet Union, scholars outside the former Soviet Union began to have a more comprehensive exposure to the works of Vygotsky and his followers. SCT has gradually gained recognition in the Western academic community and has become a hot topic in psychological research [4]. Second language acquisition researchers have also begun to use SCT for research. During this process, C-BLI, a new foreign language teaching method, is developed by Lantolf and his team based on the STI proposed by Gal'perin.

2.2. Development of C-BLI

Firstly, C-BLI has constructed its own language, acquisition, and teaching perspectives based on SCT. Regarding language and acquisition perspectives, C-BLI believes in the term "mediation" from SCT. Mediation is the process of transitioning from external social and cultural activities to internal

psychological functions, and language is the most important symbolic mediation for individuals to transition from low-level psychological functions to high-level psychological functions; language acquisition begins with communication between individuals and external members of society, obtaining cultural symbols and tools through group interaction, and then turning to internal psychological activities within individuals [2].

In terms of teaching perspective, based on Vygotsky's concept of placing conceptual knowledge in an important position in teaching practice, C-BLI regards scientific concepts of language as the fundamental unit of teaching. Vygotsky divides concepts into scientific concepts and everyday concepts. Daily concepts are based on objects' timely and visible properties, including empirical knowledge. Scientific concepts summarize the essential characteristics of things, which are highly abstract and applicable to any situation. Therefore, for foreign language learners, learning scientific concepts of language is more conducive to mastering and applying the foreign language. Afterwards, C-BLI proposed its specific teaching stages based on STI.

STI divides the teaching process into three phases: (1) Orientation; (2) Verbal Action, which includes two sub-phases: communicative thinking and dialogical thinking; (3) Inner Speech [6,7]. On this basis, C-BLI divides teaching into five phases: (1) explanation, (2) materialization, (3) communicative activities, (4) verbalization, and (5) internalization [8]. The specific content will be explained in section 3.1.

2.3. Research Status of C-BLI

C-BLI has a rich range of international references and empirical research, covering multiple languages such as English, Spanish, Chinese, Japanese, and French and different aspects of foreign language teaching such as grammar, vocabulary, writing, and teacher development. Van Compernelle also proposed a variation of C-BLI, C-BPI, which is based on the transfer of C-BLI in pragmatics and constructed corresponding theories and teaching standards [9]. Currently, empirical research on C-BLI internationally mainly consists of two parts: the design of teaching modes for C-BLI and the effectiveness verification of C-BLI. Among them, the effectiveness testing of C-BLI is the main research direction, and the number of articles specifically focused on the design of teaching modes is relatively low.

Compared with foreign countries, C-BLI literature in China is still rare, especially in empirical research. This paper uses the keyword "concept-based language instruction" to search on the VIP Chinese journal website. Only 6 empirical studies were found, all of which are aimed at English teaching, covering English grammar, past tense writing, verb phrase teaching, the effectiveness of C-BLI in improving students' fluency in foreign language concepts and metaphorical abilities, as well as the mediation research of C-BLI.

3. Empirical research on C-BLI

3.1. Teaching mode design of C-BLI

So far, C-BLI in the foreign language teaching-learning process is mainly carried out in two phases: objectification and verbalization. The specific teaching form and content of communicative activities in this phase are rarely discussed in empirical research. The following text will elaborate on the five phases of C-BLI.

3.1.1. Explanation and Materialization

Explanation is the systematic interpretation of scientific concepts of language [5]. At the same time, materialization is the transformation of abstract concepts taught into concrete and vivid schemas,

presenting conceptual knowledge in a more visual and objectified way [3], providing learners with intermediary support and promoting their understanding of conceptual knowledge.

In practical teaching research, the main implementation method of explanation and materialization is constructing a "Schema of a Complete Orienting Basis of an Action" (SCOBA). SCOBA was first proposed by Gal'perin, which includes the expected outputs, means, and objects of the action [7] and is presented in tangible forms such as graphics and charts. SCOBA provides students with a cognitive and action guide to help them use appropriate concepts to complete language activities in certain situations.

Explanation and materialization are often carried out simultaneously in teaching practice, manifested using the same SCOBA in two phases. For example, Lai attempted to connect the temporal concept of Chinese with spatial orientation while teaching native English speakers the temporal concept system of Chinese [10]. She constructed a SCOBA, as shown in Figure 1, which succinctly presents the temporal differences between Chinese and English.

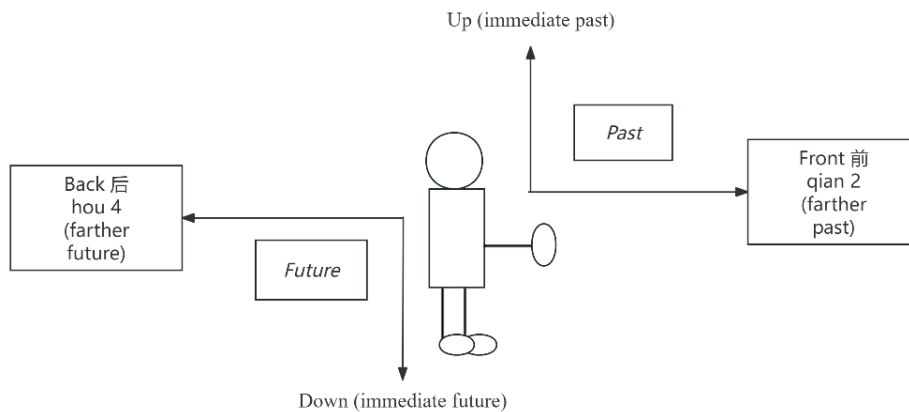


Figure 1: SCOBA of the immediate and distant past/future.

Explanation and materialization are sometimes implemented separately. In Liu and Hsieh's research on teaching metaphorical concepts of monkeys in Chinese to native English students [11], as shown in Figure 2, SCOBA of the explanation phase uses short text to classify and describe monkeys' appearance, personality, and emotions. In contrast, SCOBA of the materialization phase uses different cartoon characters of monkeys to visualize SCOBA of the explanation phase.

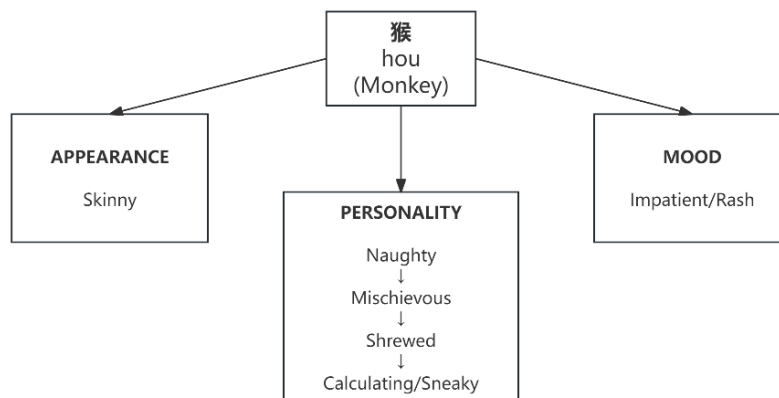


Figure 2: SCOBA of the immediate and distant past/future.

Even for the same research content, the SCOPA constructed by different scholars may not be the same. For example, when teaching verb phrases related to the word "out" in English, in Figure 3 and 4, Lee uses a more abstract chart style SCOPA [12], while White uses a picture style SCOPA depicting the image of stickmen [13].

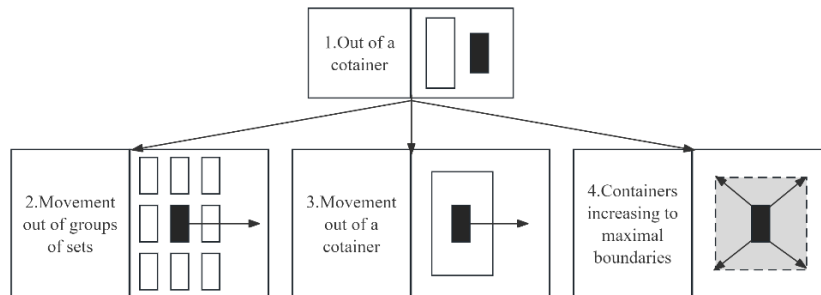


Figure 3: SCOPA of “out”.

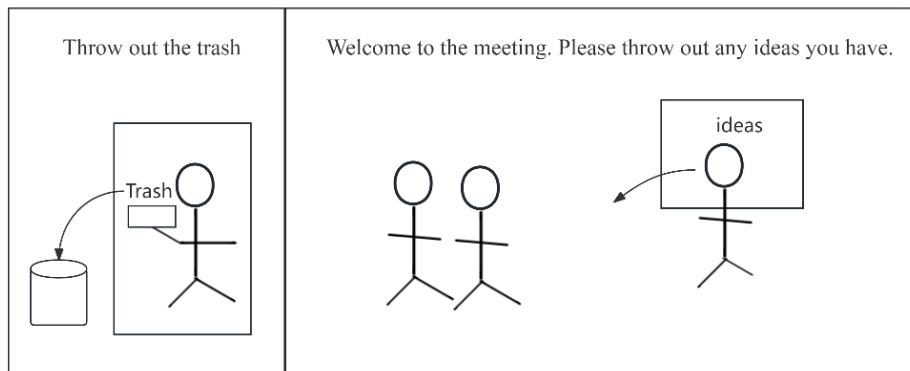


Figure 4: SCOPA of “throw out”.

3.1.2. Communicative Activities

This phase requires teachers to design a series of communicative activities using language as a tool, allowing students to combine theoretical and schematic understanding of conceptual knowledge with practical activities and gain experience using conceptual knowledge. Lantolf pointed out that the explicit teaching advocated by C-BLI requires a lot of communicative activities to support. Otherwise, the scientific concepts learned will remain as declarative knowledge [14] and cannot be learned and applied flexibly.

Compared to other phases, the specific teaching forms and contents of communicative activities have rarely been discussed in empirical research, mainly the following three articles shown in Table 1. Therefore, the communicative activities still need further exploration and enrichment.

Table 1: Forms of communicative activities in research.

Language	Teaching content	Implementing form	Reference
Spanish Heritage Language	Preterite and imperfect	Students work in pairs, playing roles A and B in a scenario. They are provided only with a rough description of the scenario setting without any specific lines, so they need to ad-lib	Garcia [15]

Table 1: (continued)

France	Avoir (to have) and être (to be)	Use specified auxiliary verbs to communicate in an online group chat	Williams [16]
Chinese	Verbal phrases	Discuss the meaning of phrasal verbs in group and use verb phrases for free dialogue and presentation	Wang & Wei [17]

It should be pointed out that although heritage language acquisition differs from foreign language acquisition to some extent, the native language of the heritage language learners in Garcia's research is English, and they are not proficient in using Spanish, which is similar to foreign language acquisition. Therefore, this paper believes that impromptu scenario plays and its "communicative meaning-making improvising quality [15]" still have reference significance for foreign language teaching and learning.

3.1.3. Verbalization

Verbalization requires students to use metalanguage to describe language concepts, including oral and written forms. The research by Ganem Gutierrez and Harun shows that verbalization can help students understand the SCOPA provided by teachers, self-regulate the concepts learned, gradually use their language to explain language concepts [18], and finally produce language expressions that regulate thinking and cognition rather than simple language output.

Currently, most teaching research on verbalization uses oral language activities, and researchers generally record the process of students' language expression in the form of audio or video. Van Compernelle once recorded feedback activities on monologue language expression and dialogue language expression to analyze the verbalization of French personal pronouns in student discourse [9]; Garcia asked students to conduct oral interviews related to Spanish grammar, and she recorded their interviews to analyze students' verbalization status [19]. Written verbalization activities are also mentioned in teaching research. For example, Lee assigns written homework to students and asks them to explain the verb phrases "up" and "out" in their own words [20].

There is also research that uses both oral and written forms. For example, Lavasani and Birjandi first let students give overt speeches about concepts relevant to listening comprehension and record them in audio [21]. Then, the other students listened and commented on their classmates' descriptions. Moreover, students need to complete written listening homework and write down their explanations and reasons for their answers.

3.1.4. Internalization

According to SCT, internalization is a necessary step for individuals to transition from social communication platforms ("I-You") to internal psychological activity platforms ("I-Me"). It is a necessary path to achieve higher-level psychological cognitive functions. Gal'perin believes that when learners internalize language concepts, as long as they are given the information, they need to accomplish the learning task, they can quickly and accurately come up with answers [7]. The inner speech of learners will be greatly shortened, as they "just know that's how it is" [22].

Internalization is the final phase of the teaching process of C-BLI and the ideal goal that C-BLI aims to achieve. At present, empirical research related to internalization mainly uses internalization as the effectiveness verification method of the first four phases, comparing it with the effectiveness of traditional teaching methods. It can be divided into three forms, as shown in Table 2.

Table 2: Forms of internalization in research.

Inspection method	Detailed classification	Reference
Integrate internalization into verbalization	Oral form	Gánem-Gutiérrez & Harun [17]
	Written form	Lee [20]
Conduct corresponding written tests	Listening	Lavasani & Birjandi [21]
	Writing	Lu [23]
	Blank Filling	Wang & Wei [17]
Let students create their SCOBAs		Kao [1]

Among these methods, the integration of internalization into verbalization, to some extent, reflects the abstraction of internalization in concept and the difficulty in practice. This paper believes that there are three reasons for that. Firstly, internalization and verbalization are both activities that take place in the spiritual world of learners. Although they are different by definition and can be expressed through certain material activities or behaviours, it's difficult to completely distinguish the difference between their performance in reality, so a lot of teaching research ends immediately after the verbalisation phase and does not carry out internalization separately. Secondly, most foreign language learners do not have such a high pursuit of foreign language proficiency, so achieving verbalization is already sufficient for them. The third is that to have a high level of foreign language ability, one cannot rely solely on classroom teaching but also on learners to delve deeper.

3.2. Effectiveness verification of C-BLI

3.2.1. Grammar

Grammar helps language learners organize their thoughts, convey ideas, and express meanings. It also helps students develop creativity and expression in language learning. Learning grammar is an important part of learning a foreign language. Therefore, improving learners' efficiency in learning foreign language grammar, innovating grammar teaching methods, and making up for the shortcomings of traditional grammar teaching are also the research and experimental goals of the conceptual teaching method. Based on this, in response to the rigid teaching mode of "rote memorization" in traditional grammar teaching, many scholars have tried to apply the conceptual teaching method to grammar teaching, aiming to improve the flexibility and adaptability of grammar teaching. Since C-BLI is applied to the implementation of grammar teaching, it is mostly based on the teaching method of drawing SCOPA diagrams, so it is more operational and feasible and more intuitively displays different grammatical systems. This method is widely used in teaching tense, voice, modality, and sentence structure [3].

Taking English as an example, C-BLI based on cognitive grammar not only needs to analyze the differences between Chinese and English concepts but, more importantly, through conceptual comparison, it enables learners to have a clearer understanding of what is an authentic English expression and to be able to systematically analyze and summarize it [3]. Therefore, by establishing a systematic grammar summary and induction for language learners, it is helpful for learners to establish a connection between their mother tongue and foreign language, deepen their understanding of the language use of foreign language, and form a systematic concept of foreign language learning. It reflects that SCOPA can help students internalize grammatical knowledge, and in contextualized grammar teaching, they can correctly and appropriately use grammar to organize language, form language thinking, and express meaning, which is conducive to grammar teaching.

3.2.2. Words and Phrases

Words and phrases are the basic unit of language and the foundation for language learning. Mastering words and phrases directly determines language learners' reading efficiency and writing ability. In language learning, the degree of word and phrase mastery also reflects the learner's learning stage of a specific language to a certain extent. Based on this, the research on C-BLI is also committed to cultivating students' ability to learn words and phrases. Regarding word and phrase learning, learners initially learn to apply the SCOBA teachers give. After a teaching period, learners construct SCOBA independently to promote their second language vocabulary acquisition, thereby improving their ability to learn words and phrase concepts independently [24].

Nowadays, many successful examples in English teaching have also confirmed the feasibility of C-BLI in word and phrase teaching. In one study, researchers selected 47 students from Class 34 and 46 students from Class 36 of Grade 2 in a middle school in Heyuan, China, as the research subjects [25]. They conducted a ten-week teaching practice and evaluated the teaching effect of C-BLI from the perspective of understanding through tests and questionnaires. The study found that conceptual teaching methods under the perspective of understanding promoted students' acquisition of deep vocabulary knowledge in two aspects. First, by conceptualizing the meaning of words, the different meanings of vocabulary are easier for students to understand. Second, by guiding students to verbalize language concepts, the transformation of deep vocabulary knowledge from acceptance to production is promoted, thereby promoting students' acquisition of deep vocabulary knowledge. In addition, the study also found that this teaching method enables students to consciously use the deep vocabulary knowledge learned in class to complete English reading comprehension and writing [25].

3.2.3. Writing

In terms of writing, the application research of C-BLI is mostly combined with grammatical concept knowledge. Taking the C-BLI teaching experiment as an example, the experimenter taught two tenses to 40 eighth-grade students in a middle school in a three-week teaching experiment. Through the teaching design of the experimental and control classes, after quantitative and qualitative analysis, it was found that whether in simple or complex situations, the SCOBA can effectively help students complete learning tasks [3]. The study found that writing SCOBA helped them understand complex contexts and reminded them where to use the target tense in the narrative structure. At the same time, according to their feedback, students taught through C-BI had a stronger sense of efficacy after learning and were, therefore, more willing to use the newly learned grammatical items [26]. This positive sense of efficacy is valuable for further learning to better master writing. Therefore, C-BLI also plays an important role in the writing aspect of language learning.

Table 3: Teaching design for experimental and control classes.

Subject	Teaching Procedures		Main Focus	
	Concepts in the experiment class	Teaching materials for the control class	The main focus of the experiment class	The main focus of the control class

Table 3: (continued)

Writing session	Principles of narrating; basic narrative structure	Reportability and credibility; narrative structure	Example text	Generating a full-fledged narrative structure to develop a personalized SCOPA for their coming writing task	Brainstorming; drafting; free writing; editing
	Self-directed writing	/	/	Elaborating a personal story	Elaborating a personal story

3.2.4. Pragmatics

The representative researcher of the C-BLI in pragmatics is Van Compernelle. A study of Van Compernelle traced the learning system of L2 learners in developing the concept understanding of French second-person pronouns [27]. Learners participated in a one-hour C-BPI tutorial, which introduced the concepts of self-expression, social distance and power based on vocabulary order (Silverstein) [28]. Students' pre-class and post-class reflection results were analyzed, and their understanding of pronouns changed. They realized that pronoun selection depends on the speaker's intention rather than the rules. This reflects the positive role of the C-BLI in students' pragmatic learning.

This study uses SCOBAs and language activities to teach French personal pronouns to improve students' pragmatic ability to use pronouns in different contexts. The study affirmed the positive effect of the C-BLI on improving students' ability to understand pragmatic context concepts and confirmed that the teaching method can improve students' pragmatic ability [24].

3.2.5. Teacher development

C-BLI place high demands on improving teachers' abilities while providing guidance and ideas for teachers' development. Van Compernelle and Henery conducted a case study to track the development of a teacher who tried to teach pragmatic knowledge using the C-BLI [29]. The study found that through communication with collaborators and classroom practice, the teacher internalized the concept of French person pronouns and gradually became able to transfer the concept to other language features, thus achieving the development of the teacher's conceptual knowledge [3].

The following is a summary of recent research on teachers' development of their own conceptual knowledge and conceptual teaching ability.

Table 4: Research on C-BLI in Teacher Development.

Reference	Research result
Van Compernelle, R.A., & Henery, A. [29]	The development of content knowledge of C-BPI teaching among university teachers was explored. According to the conclusion of this study, teachers felt more comfortable teaching C-BPI.

Table 4: (continued)

<p>Fogal, G.G. [30]</p>	<p>Fogal reviews how he developed C-BLI knowledge and applied it to enhance ESL instruction. After analyzing his research, the author concludes and emphasizes the need to focus explicitly on the process of creating SCOBA and provide guidelines for L2 teachers.</p>
<p>Lantolf, JP, & Esteve, O. [31]</p>	<p>In the Barcelona Formative Model (BMF), teachers gain a deeper understanding of the target language through the scientific concepts of SCOBA, including text types and genres, tense aspects, and instructional sequencing. This paper provides examples of BMF classroom activities and draws on empirical research to illustrate how the BMF influences in-service teachers of various world languages.</p>

4. Conclusion

In recent years, based on SCT, many domestic and foreign scholars have demonstrated and studied the theoretical framework of C-BLI and conducted empirical research on the design of actual teaching steps for the five phases of C-BLI teaching, namely explanation, materialization, communicative activities, verbalization, and internalization. At the same time, through relevant experiments, it has also confirmed its good effects in grammar teaching, word and phrase teaching, writing teaching, pragmatics teaching and teacher development. It has achieved extremely groundbreaking research results, making important contributions to the development of C-BLI. At the same time, foreign scholars' empirical research on C-BLI has provided a rich theoretical basis for the development of teaching practice. It has also provided many case study references in the practice of industries such as education and teachers, which has played an important role in promoting the theoretical and practical development of C-BLI. However, with the continuous development of the field of education in the new era, many new challenges in foreign language teaching have emerged. Therefore, researchers must broaden their horizons and continue conducting research and experiments on C-BLI and second language acquisition.

As an emerging foreign language teaching method, C-BLI will also be one of the hot topics in second language teaching research in the future. However, few empirical studies and teaching practices are still related to C-BLI in China compared with foreign countries. Given this phenomenon, promoting C-BLI in China requires a deep understanding of its educational value and internalization role in language teaching. In addition, creating conditions for the feasibility of developing C-BLI in China through many empirical studies and theoretical practices is also a crucial step. Given this, this paper summarizes the development of relevant theories and practices, comprehensively evaluates the important influence of C-BLI in language teaching, and puts forward relevant suggestions. In the future development of foreign language teaching and second language acquisition in China, relevant measures should be taken in combination with reality, such as training teachers on C-BLI teaching ability, improving their foreign language literacy and teaching confidence, and further cultivating their language teaching abilities such as constructing SCOBA and explaining concepts, researching and promoting new language teaching methods that integrate C-BLI through experiments. What's more, based on the theoretical framework and foundation of C-BLI, updated teaching materials, etc.

In terms of international application research, C-BLI has achieved fruitful results, but some areas have not been touched upon or need to be further explored, such as the application of C-BLI in

listening and speech and the specific teaching form design of the "communicative activities" phase. There is still room for further exploration and research in the future. The sorting and summary of this paper aim to provide new ideas for researchers in related fields. It is hoped that future C-BLI theoretical research will have all-round and multi-field breakthroughs and further practical applications in second language acquisition-related education.

Authors Contribution

All the authors contributed equally, and their names were listed alphabetically.

References

- [1] Kao, Y. T. (2017). *Develop Chinese rhetorical awareness through concept-based instruction: A case study on second language learners*. *Language & Sociocultural Theory*, 4(2), 156-186.
- [2] Lantolf, J. P., & Thorne, S. L. (2006). *Sociocultural theory and genesis of second language development*. Oxford: Oxford University Press, 2006.
- [3] Lili, Q., Xibei, Ouyang., & Yanhua, H. (2019). *Studies of Concept-based Instruction from the Perspective of Sociocultural Theory*. *Language Education*, 7(4), 57-62.
- [4] Wen, W., & Yong, G. (2011). *25 Years of Second Language Acquisition Research from Sociocultural Perspective*. *Journal Beijing International Studies University*, 33(6), 75-83.
- [5] Qiufang, Wen. (2013). *A Critical Evaluation of the Theory and Practice of Concept-based Instruction*. *Foreign Language Teaching*, (2), 1-6.
- [6] Negrete Cetina, M. (2019). *Enhancing EFL teacher trainees' cognition through Systemic Theoretical Instruction (STI)* (Doctoral dissertation, University of Essex).
- [7] Haenen, J. (2001). *Outlining the teaching-learning process: Piotr Gal'perin's contribution*. *Learning and instruction*, 11(2), 157-170.
- [8] Lantolf, J. P. (2011). *The sociocultural approach to second language acquisition: Sociocultural theory, second language acquisition, and artificial L2 development*. In *Alternative approaches to second language acquisition*, 24-47. Routledge.
- [9] Van Compernelle, R. A. (2014). *Sociocultural theory and L2 instructional pragmatics*, 74. *Multilingual Matters*.
- [10] Lai, W. (2012). *Concept-based foreign language pedagogy: Teaching the Chinese temporal system*. The Pennsylvania State University.
- [11] Liu, S., & Hsieh, C. Y. C. (2020). *Develop metaphorical awareness and competence in Chinese as a foreign language through concept-based instruction*. *Foreign Language Annals*, 53(3), 478-504.
- [12] Lee, H. (2012). *Concept-based approach to second language teaching and learning: Cognitive linguistics-inspired instruction of English phrasal verbs*. The Pennsylvania State University.
- [13] White, B. J. (2012). *A conceptual approach to the instruction of phrasal verbs*. *The Modern Language Journal*, 96(3), 419-438.
- [14] Lantolf, J. P. (2008). *Praxis and classroom L2 development*. *ELIA*, 8, 13-44.
- [15] García, P. N. (2017). *Implementing concept-based instruction in the heritage language classroom: A pedagogical proposal*. *EuroAmerican Journal of Applied Linguistics and Languages*, 4(1), 1-19.
- [16] Williams, L. (2017). *6 Task-Based Language Teaching and Concept-Based Instruction*. *Recent Perspectives on Task-Based Language Learning and Teaching*, 27, 121-142.
- [17] Wenbing, W., & Yufeng, W. (2024). *Investigation into the construction of language laboratories at world-class universities*. *Foreign Language Education in China*, 7(1), 25-36.
- [18] Gánem-Gutiérrez, G. A., & Harun, H. (2011). *Verbalization as a mediational tool for understanding tense-aspect marking in English: an application of Concept-Based Instruction*. *Language awareness*, 20(2), 99-119.
- [19] García, P. N. (2012). *Verbalizing in the second language classroom: The development of the grammatical concept of aspect*. University of Massachusetts Amherst.
- [20] Lee, H. (2016). *Concept-based instruction: Imagistic and metaphorical understanding of phrasal verbs*. *English Teaching*, 71(4), 167-191.
- [21] Birjandi, P., & Lavasani, M. (2015). *The role of verbalization in listening conceptual formation among Iranian EFL learners: A STI perspective*. *Iranian Journal of Applied Linguistics*, 18(1), 95-126.
- [22] Gal'perin, P. I. (2012). *An experimental study in the formation of mental actions*. In *Readings in educational psychology*, 142-154. Routledge.
- [23] Ting, L. (2020) *The Effect of Concept-based Instruction on English Majors' Development of Metaphoric Competence*. *Modern Foreign Languages*, 43(1): 106-118.

- [24] Guangmao, J. (2021). *C-BLI in English on Cognitive Grammar: Theory and Practice*. *Foreign Language Teaching*, (2), 76-85.
- [25] Lintao, L. (2023). *An Empirical Study of the Effects of C-BLI from the Perspective of Construal on Senior High School Students' Acquisition of English Deep Vocabulary Knowledge* (Master dissertation, Guangzhou University).
- [26] Xinhui, X. & Hongwei, Z. (2022). *Narrating the Past in Different Contexts: C-BI Approach to the Present Perfect and Past Simple*. *Chinese Journal of Applied Linguistics*, 45(4), 566-582.
- [27] Van Compernelle, R. A. (2011). *Develop second language sociopragmatic knowledge through concept-based instruction: A microgenetic case study*. *Journal of pragmatics*, 43(13), 3267-3283.
- [28] Silverstein, M. (2003). *Indexical order and the dialectics of sociolinguistic life*. *Language & communication*, 23(3-4), 193-229.
- [29] Van Compernelle, R. A., & Henery, A. (2015). *Learning to do concept-based pragmatics instruction: Teacher development and L2 pedagogical content knowledge*. *Language Teaching Research*, 19(3), 351-372.
- [30] Fogal, G. (2017). *Develop concept-based instruction, pedagogical content knowledge: Implications for teacher educators and L2 instructors*. *Language & Sociocultural Theory*, 4(1), 53-57.
- [31] Lantolf, J. P., & Esteve, O. (2019). *Concept-based instruction for concept-based instruction: A model for language teacher education*. In *Evidence-based second language pedagogy*, 27-51. Routledge.