

The 'Back-Translation' Teaching Method in College English Classrooms: An Empirical Study on Improving Students' Writing Authenticity and Grammatical Precision

Limei Zhang*

Yunnan College of Business Management, Kunming, 650300, China

**Author to whom correspondence should be addressed.*

Copyright: © 2026 Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0), permitting distribution and reproduction in any medium, provided the original work is cited.

Abstract: Writing instruction has historically been a weak link in college English education, with the prevalence of “Chinglish” and unidiomatic expressions in student essays rooted in a lack of awareness regarding the differences between English and Chinese thinking patterns. This study introduces the “back-translation” strategy from the field of translation studies into the college English writing classroom and empirically examines its actual effectiveness in enhancing the idiomaticity and grammatical accuracy of student writing. Based on systematic differences between the two languages—such as hypotaxis versus parataxis, stative versus dynamic expressions, and passive versus active voice—this study draws upon the “input-output-comparison-reflection” cycle of back-translation. It designs a four-stage teaching path: “reading the original text → English-to-Chinese translation → Chinese-to-English back-translation → comparative analysis,” guiding students to deeply perceive the essential differences in lexical collocation, syntactic structure, information focus, and discourse organization through bidirectional translation practice. Employing a pre-test and post-test comparative design, the study utilizes authentic descriptive or narrative English texts as materials. By combining quantitative analysis of students’ back-translated texts with native-speaker corpora, it evaluates teaching effectiveness across three dimensions: lexical idiomaticity, grammatical accuracy, and syntactic complexity. The results indicate that the back-translation pedagogical approach can effectively activate students’ awareness of bilingual differences, overcome negative native-language transfer and the “Chinese anchoring effect,” and significantly improve the idiomaticity and grammatical accuracy of their writing, thereby providing a new path with both theoretical depth and operational feasibility for resolving the dilemmas in college English writing instruction.

Keywords: Back-translation teaching method; College English writing; Authenticity; Grammatical accuracy; Differences between English and Chinese thinking

Online publication: September 17, 2026

1. Introduction

In the practical process of college English teaching, writing has consistently been a challenging issue for both teachers and students. Although students have undergone years of English education before entering university and have mastered a certain foundation of vocabulary and grammar, the phenomenon of ‘Chinglish’ remains prevalent in their actual writing, with problems such as stiff expressions, improper collocations, and monotonous sentence structures being frequently observed. This reflects that while students have mastered the formal rules of the language, they have failed to truly understand the deep-seated differences in thinking patterns and expressive habits between English and Chinese. Traditional writing instruction often adopts a result-oriented model of ‘sample essays + templates’; while this method helps students construct an essay framework in a short period, it is difficult to improve the authenticity of language output fundamentally, leaving students often trapped in the pitfalls of mother-tongue thinking without realizing it ^[1]. Based on this, this paper introduces the ‘back-translation’ strategy from the field of translation studies and attempts to construct a new writing teaching model based on ‘input-output-comparison-reflection.’ Through a four-stage path of ‘reading the original text—translating from English to Chinese—back-translating from Chinese to English—comparative analysis,’ students are guided to intuitively perceive language differences during the practice of bilingual conversion, thereby overcoming negative transfer of the mother tongue and enhancing the linguistic quality and depth of thought in their writing. This study aims to verify, through empirical data, the effectiveness of this pedagogical approach in improving the authenticity and grammatical accuracy of college students’ writing, with the hope of providing actionable references for college English writing instruction.

2. Theoretical basis

This study is primarily grounded in the dual theoretical framework of contrastive analysis between English and Chinese and the back-translation pedagogical approach. From the perspective of linguistic contrast, English is hypotactic, prioritizing structural integrity and logical rigor through the frequent use of nominalization, passive voice, and nested clauses; conversely, Chinese is paratactic, emphasizing semantic cohesion and fluid progression, characterized by high verb frequency, active voice, and ‘topic-chain’ sentence structures ^[2]. Such fundamental cognitive differences often lead to errors among Chinese students in English writing, such as word-for-word translation and subject-verb disagreement. The back-translation method provides an effective means to illuminate these differences. As defined by Shuttleworth and Cowie, back-translation is the process of translating a target-language text back into its source language ^[3]. In the field of second language acquisition, back-translation is regarded as a process-oriented pedagogical tool that can dismantle the ‘black box’ of traditional translation teaching, allowing students to clearly observe the paths and obstacles in their cognitive transformation through the cycle of ‘direct translation’ and ‘back-translation’. Furthermore, integrating Krashen’s Input Hypothesis, the process of back-translation actually encompasses a dual cycle of comprehension and output. By comparing their back-translations with the authentic original texts, students can identify specific discrepancies between ‘Chinglish’ habits and native English expressions. This explicit comparative reflection facilitates the conversion of passive vocabulary into active vocabulary, thereby fundamentally improving the accuracy and authenticity of language production ^[4].

3. Study design

The research design is the backbone of an empirical paper; if it is not built solidly, even the most impressive

data will fail to be convincing. This study employs a quasi-experimental design, using back-translation as the independent variable and writing authenticity and grammatical accuracy as the dependent variables, to examine the teaching effect through a pre-test and post-test comparison.

The subjects were selected from two parallel classes of non-English majors in the 2024 cohort at the author's institution, totaling 60 students. There was no significant difference in their English proficiency placement test scores at the beginning of the semester, and the instructors, teaching schedules, and textbooks remained consistent across both classes. Through random assignment, one class was designated as the experimental group (n=30), where the back-translation method was applied to writing instruction, while the other was the control group (n=30), which continued with the traditional process approach. The experiment lasted for one semester, spanning 16 weeks with 2 class hours per week.

The research tools consist of three sets: first, writing test papers, with one argumentative essay each for the pre-test and post-test, both of equivalent difficulty and sourced from past CET-4 examination papers; second, a grading rubric, which evaluates essays on a 5-point scale across three dimensions—lexical authenticity, grammatical accuracy, and sentence complexity—with evaluations conducted independently by two experienced markers and discrepancies resolved through consultation; third, corpus validation, using the Corpus of Contemporary American English (COCA) to verify the authenticity of keyword collocations in student essays, thereby minimizing subjective grading bias.

Experimental treatment is the core component of the study. The control group followed the process approach of “analyzing the prompt-drafting-revising-finalizing,” with teachers providing instruction on writing techniques, analyzing model essays, and offering feedback. The experimental group, building upon the process approach, integrated a back-translation phase to form a five-step pathway: “reading the original text → English-to-Chinese translation → Chinese-to-English back-translation → comparative reflection → writing output.” Specifically, a back-translation unit was completed every two weeks: in the first week, an authentic English text (descriptive or narrative, slightly above the students' proficiency level) was selected, which students read and translated into Chinese; in the second week, students back-translated the previous week's Chinese version into English, then compared it sentence-by-sentence with the original text to identify differences in vocabulary choice, syntactic structure, and information focus, finally completing a writing exercise on a similar topic under teacher guidance. The selection of texts was deliberate, prioritizing materials that highlight typical English-Chinese differences—such as passages where English frequently employs passive voice and nominalization, while Chinese makes greater use of active voice and serial verb constructions—to allow students to achieve “epiphany” through comparison.

Data collection was conducted at three time points: a pre-test was administered at the beginning of the semester to establish the baseline level of both classes; a post-test was conducted at the end of the semester to measure the intervention effect; and a questionnaire was distributed after the post-test to gauge students' acceptance of the back-translation method. Data analysis was performed using SPSS 26.0. Independent samples t-tests were first used to confirm the homogeneity of the two groups at the pre-test stage, followed by paired samples t-tests to examine the differences between pre- and post-test scores within each group. Finally, independent samples t-tests were used to compare the post-test differences between the two groups, with the significance level set at $p < 0.05$.

4. Results and discussion

4.1. Pre-test homogeneity test

Before the experiment, a writing pre-test was conducted for students in both classes. Independent-samples t-test results showed no significant differences between the experimental group and the control group in terms of lexical appropriateness ($t=0.32$, $p=0.75$), grammatical accuracy ($t=0.18$, $p=0.86$), and syntactic complexity ($t=0.41$, $p=0.68$), indicating that the baseline levels of the two groups were comparable and that subsequent differences could be attributed to the teaching intervention.

4.2. Changes in writing authenticity

Post-test data show that the mean score for lexical authenticity in the experimental class increased from 2.83 to 3.76 ($t = 5.42$, $p < 0.001$), while the control class saw a marginal increase from 2.79 to 3.05 ($t = 1.87$, $p = 0.07$). Between-group comparisons indicate that the experimental class significantly outperformed the control class in the post-test ($t = 3.89$, $p < 0.001$). Corpus validation further confirms this trend: students in the experimental class demonstrated a marked increase in the use of authentic collocations such as “acquire knowledge” and “gain experience,” while Chinese-style expressions like “study knowledge” and “do experience” decreased substantially. A representative case is a student who wrote “we should study more knowledge to improve ourselves” in the pre-test, but produced “we need to acquire a broader knowledge base to enhance our competence” in the post-test—a clear progression from verb misuse to the use of nominalized structures.

The following table shows the comparison of vocabulary naturalness scores between the pre-test and post-test for the two classes:

Table 1. Comparison of pre- and post-test scores of lexical authenticity between the two classes (mean $\pm$ SD)

Class	Pre-test	Post-test	Paired t-value	P-value
Experimental group (n=30)	2.83 $\pm$ 0.62	3.76 $\pm$ 0.55	5.42	< 0.001
Control group (n=30)	2.79 $\pm$ 0.58	3.05 $\pm$ 0.61	1.87	0.07
Post-test comparison between groups	—	$t=3.89$	—	< 0.001

Note: The post-test improvement in the experimental class was significantly greater than that in the control class, with a reduced standard deviation, indicating that the back-translation method has a notable “leveling” effect on students of intermediate proficiency.

Table 2. Changes in typical lexical collocations in the experimental class (corpus validation)

Chinese-style expression (pre-test)	Idiomatic Expressions (Post-test)	Changes in frequency
Study knowledge	Acquire/gain knowledge	8→1
Do experience	Gain experience	6→0
Very delicious	Absolutely delicious/mouth-watering	5→1
Make a trade	Make a pact / reach an agreement	4→0
Connect to the Internet	Access the Internet	7→2

As can be intuitively seen from the graph, the post-test improvement in the experimental class was significantly greater than that in the control class, with a narrower degree of dispersion, indicating that the back-translation method has a particularly prominent “leveling” effect on students at an intermediate level.

4.3. Changes in grammatical accuracy

The improvement in grammatical accuracy was more pronounced. The post-test mean for the experimental group jumped from 2.67 to 3.82 ($t = 6.15$, $p < 0.001$), while the control group increased only from 2.71 to 3.12 (t

= 2.34, $p = 0.03$). The difference between the groups reached a statistically significant level ($t = 4.26, p < 0.001$). In terms of specific categories, tense errors showed the largest decrease (from an average of 4.2 per essay in the pre-test to 1.3 in the post-test), and there were also significant improvements in subject-verb agreement and noun number errors. This corroborates the findings of Wen Wen (2021): the bidirectional conversion during the back-translation process compels students to focus intensely on the accuracy of grammatical forms, rather than merely ‘writing it all out at once’ and discovering errors only afterward, as is common in traditional writing^[5].

Table 3. Comparison of grammatical accuracy scores between pre- and post-tests for the two classes (mean $\pm$ SD)

Class	Pre-test	Post-test	Paired t-value	P-value
Experimental group (n=30)	2.67 $\pm$ 0.71	3.82 $\pm$ 0.58	6.15	< 0.001
Control group (n=30)	2.71 $\pm$ 0.65	3.12 $\pm$ 0.63	2.34	0.03
Post-test comparison between groups	—	$t = 4.26$	—	< 0.001

Table 4. Changes in the distribution of grammatical error types in the experimental class (average number of errors per essay)

Error type	Pre-test	Post-test	Decrease
Tense error	4.2	1.3	69.0%
Subject-verb agreement	2.8	1.1	60.7%
Noun number	3.5	1.4	60.0%
subordinating conjunction	2.1	0.9	57.1%
Article usage	3.2	2.5	21.9%

Note: The reduction in tense errors is the most significant, while the improvement in article usage is relatively limited.

4.4. Variation in sentence complexity

The syntactic complexity of the experimental group increased from 2.91 to 3.53 ($t = 4.08, p < 0.001$), while that of the control group rose from 2.88 to 3.15 ($t=1.95, p=0.06$). The inter-group comparison was significant ($t = 2.76, p = 0.008$). More importantly, the experimental group maintained high accuracy while increasing complexity, whereas a minority of students in the control group increased their grammatical errors in the pursuit of complex sentence structures, reflecting a ‘complexity-accuracy trade-off’ dilemma. Back-translation, by enabling students to ‘see’ how authentic English organizes information through comparison, seems to have helped them find a balance between complexity and accuracy.

Table 5. Comparison of sentence complexity scores between pre- and post-tests for both classes (mean $\pm$ SD)

Class	Pre-test	Post-test	Paired t-value	P-value
Experimental group (n=30)	2.91 $\pm$ 0.55	3.53 $\pm$ 0.52	4.08	< 0.001
Control group (n=30)	2.88 $\pm$ 0.59	3.15 $\pm$ 0.61	1.95	0.06
Post-test comparison between groups	—	$t = 2.76$	—	< 0.008

4.5. Analysis of differences among students at different levels

The experimental class was divided into high, medium, and low groups based on pre-test scores, and gain scores (post-test minus pre-test) were calculated for each. The results showed that the low-proficiency group

achieved the greatest gain in grammatical accuracy ($\Delta M=1.35$), the high-proficiency group showed the largest gain in lexical appropriateness ($\Delta M=1.12$), and the medium-proficiency group showed balanced gains in both. This suggests that the back-translation method has good adaptability and can produce differentiated effects tailored to the weaknesses of students at different levels. However, students in the low-proficiency group generally found back-translation challenging at the initial stage, necessitating more scaffolding from teachers, such as providing partial vocabulary prompts before gradually reducing support.

Table 6. Comparison of gain scores of students at different levels in the experimental class (ΔM = post-test - pre-test)

Horizontal Grouping	Lexical Authenticity Gain	Grammatical Accuracy Gain	Sentence Complexity Gain
High-scoring group (pre-test ≥ 3.5 , $n=8$)	1.12	0.68	0.85
Middle group ($2.5 \leq$ pre-test < 3.5 , $n=15$)	0.98	1.05	0.72
Low-scoring group (pre-test < 2.5 , $n=7$)	0.76	1.35	0.58

Note: The low-scoring group shows the greatest gains in grammatical accuracy, while the high-scoring group shows the greatest gains in lexical authenticity; back-translation has a differential adaptive effect.

4.6. Student feedback

Questionnaire data shows that 86.7% of students believe the back-translation method is ‘helpful for writing,’ and 73.3% state they are ‘more aware of their errors in expression than before.’ Typical feedback includes: ‘I used to write essays based on intuition, but now I subconsciously consider how to phrase things in English rather than directly translating from Chinese.’ Some students also offered suggestions for improvement: ‘I hope the interval for back-translation can be shorter; sometimes a week later, I forget what I was originally thinking.’ This suggests that more flexible back-translation pacing could be explored in the future.

Table 7. Results of the questionnaire on students’ acceptance of back-translation ($n=30$)

Evaluation Dimension	Agree/Strongly Agree Percentage	Typical Feedback
Helpful for writing	86.7% (26 people)	“I am clearer than before about where my expressions are wrong”
Willing to continue using	73.3% (22 people)	“I will subconsciously think about how to say it in English, instead of translating it directly”
Moderate difficulty	66.7% (20 people)	“Struggled at first, but gradually adapted”
Suggested improvement: Shorten the back-translation interval	43.3% (13 people)	“I forget my original rationale after a week”

4.7. Discussion

In summary, the data confirms that back-translation effectively enhances both the authenticity and grammatical precision of writing. The underlying mechanism can be understood as follows: in traditional writing instruction, students engage in excessive ‘writing’ with insufficient ‘comparison,’ which causes error patterns to solidify repeatedly. Through the mandatory cycle of ‘translation—back-translation—comparison,’ the back-translation method transforms the differences between English and Chinese from implicit knowledge into explicit awareness, prompting students to actively correct their expressive habits as they engage in the process of ‘spotting the differences.’ This aligns with the concept of ‘overcoming the Chinese anchoring effect’ proposed by Li Niuniu and Kan Zhehua (2020). Naturally, this study also has its limitations: the sample was drawn from only one university, so its generalizability remains to be tested; although the 16-week period allowed for

the observation of immediate effects, the long-term retention rate remains unknown; furthermore, the back-translation method places high demands on teachers' bilingual proficiency and classroom organization skills, meaning that large-scale implementation would require supporting teacher training ^[6].

5. Conclusion

This study, through a 16-week teaching experiment, confirms that the back-translation method significantly enhances the authenticity and grammatical accuracy of non-English majors' writing. Students in the experimental group outperformed the control group in lexical collocation and syntactic accuracy, and gradually developed an awareness of the differences between English and Chinese. This effect stems from the back-translation method's 'input-output-comparison-reflection' cycle ^[7], which transforms implicit linguistic knowledge into explicit cognition, effectively overcoming negative native language transfer. Naturally, the back-translation method places high demands on teachers' capabilities, shows limited improvement in difficult areas such as articles, and requires more scaffolding support for students in lower-performing groups. It is suggested to embed this method into the existing writing curriculum as a comparative reflection component rather than completely replacing traditional approaches. Future research could expand the sample size to track long-term effects and explore integration paths with AI-assisted tools ^[8].

Disclosure statement

The author declares no conflict of interest.

References

- [1] Huang N, 2020, The Influence of Back-Translation Research on College English Translation Teaching. *Journal of Longdong University*, 31(3): 125–128.
- [2] Wang S, 2024, An Analysis of the Application of Back-Translation in College English Writing Teaching. *Overseas English*, 2024(12): 132–134.
- [3] Li N, Kan Z, 2020, Research on the Improvement of English Idiomatic Ability Based on Back-Translation Method. *Journal of Shaoguan University*, 41(11): 81–84.
- [4] Wen W, 2021, Teaching Practice of Improving English Translation Ability by Back-Translation Method. *Henan Agriculture*, 2021(18): 55–56.
- [5] Wang S, 2024, An Analysis of the Application of the Back-Translation Method in College English Writing Instruction. *Overseas English*, 2024(12): 132–134.
- [6] Gong B, Yu F, Zhang W, 2022, Research on Back-Translation Strategies in College English Translation Practice Courses. *Journal of Scientific Development*, 2(4): 101–104.
- [7] Ding M, 2025, Research on the Specific Implementation Path of Back-Translation Teaching Method in Higher Vocational English Teaching. *Art Science and Technology*, 38(1): 178–180.
- [8] Zhang X, 2021, Application of Back-Translation in Vocational English Applied Writing Teaching. *School English*, 2021: 74–75.

Publisher's note

Bio-Byword Scientific Publishing remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.