

# Approaches to English Writing Instruction Based on Corpus Technology

Zhang Ying<sup>1\*</sup>

<sup>1</sup>English Department, North China Electric Power University, Baoding, Hebei Province, China

DOI: [10.36348/jaep.2021.v05i08.006](https://doi.org/10.36348/jaep.2021.v05i08.006)

| Received: 06.07.2021 | Accepted: 12.08.2021 | Published: 17.08.2021

\*Corresponding author: Zhang Ying

## Abstract

The development of corpus technology has a profound effect on foreign language teaching. This paper explores application of corpus tools to writing class designing in order to improve the efficiency of College English writing instruction and promote students' writing competence and autonomous learning abilities.

**Keywords:** Foreign language teaching, writing instruction, corpus-assisted method, class designing.

**Copyright © 2021 The Author(s):** This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC 4.0) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.

## 1. INTRODUCTION

### 1.1 English writing instruction in the era of information technology

The development of big data age has a far-reaching impact on foreign language teaching and learning. Due to the popularity of smart devices, learners have access to new information faster, which enables them to update their knowledge more frequently. Accordingly, learners' learning styles, learning behaviors and application of information are different from the past. Guiding students' active learning in the new environment is an essential requirement for educators as well as a general trend for educational reform in the era of rapid development of science and technology.

For English majors, writing plays an important part in their cultivation of communicative competence and the improvement of accuracy in language use. However, the traditional teaching model of 3Ps: present-practice-produce has many shortcomings.

First, it fails to provide sufficient input for students. A large number of high-quality target language input is very important in the writing process, but the resources used in class are not enough to better reflect the features of language use in authentic contexts. Additionally, student writers are tortured by lack of ideas and narrow thinking for the topic. Thus, students can hardly general make full preparations for their writing tasks.

Second, the form and content of writing tasks are relatively boring. Usually the writing task is

assigned by the teacher and then students complete the writing within the specified time. The interaction mode of "students are responsible for writing, and the teacher is responsible for correcting and evaluating" can not enhance students enthusiasm or help students to improve their writing abilities effectively. Students are always reticent in writing class, receiving knowledge in a passive way.

Third, due to the limitations of writing evaluation, teachers need to spend a lot of time and energy correcting and commenting students' writing, but the effect is far from being satisfactory. For example, the huge workload makes teachers mark grammatical errors and non-authentic use of language, but could seldom give detailed explanations and targeted guidance. On the other hand, correction of language forms are still the focus, and coherence of the context and the logical relationship are not given due attention. For students, they could not have a deep understanding of the mistakes in their writings. The lack of reflection and summary makes them hardly avoid making similar mistakes in the latter writing tasks. No obvious improvements contribute to students' loss of confidence and interests in writing.

### 1.2 Corpus and English writing instruction

To effectively improve students' writing abilities, large-scale real and accurate language input should be incorporated in the writing process. Data-driven based language teaching method opens new insights into EFL writing research and instruction. Corpus indexing softwares offer various descriptive information quantitatively. With its huge information

storage and fast computer retrieval, corpus provides foreign language learners with real and rich language learning materials. It changes the traditional way of classroom teaching and enables students to experience and explore the language in use. Corpus-based tasks provide writers with authentic language data in the form of concordance lines (Kenndy, 2000). It's beneficial to apply corpus into language instruction for its authentic characteristics (Teubert & Cermakova, 2009). Sufficient high-quality input is necessary for students to produce the target language through writing. Wen Qiufang (2006) compared the language use of Chinese English majors in output tasks with that by native speakers. The findings show a significant difference between the two groups, the vocabulary breadth and the diversity of words used by Chinese EFL learners, especially the use of three-level words, are far lower than native speakers. Corpora make it convenient for foreign language learner to induce the rules and summarize language features based on a large quantity of target language used by native speakers. Under the guidance of teachers in the retrieval process, students observe and acquire the rules and collocations constantly through corpora tools effectively. In addition to enriching learners' knowledge of language forms, corpora also help them to activate their pre-existing schema knowledge and generate new ideas related to the topic. For example, through KWIC of Antconc software, theme-related words and phrases reflecting the main topic of a particular context are retrieved for students, which is of great help for students to construct meanings and plan for writing content.

Besides, corpus-assisted learning is conducive to fostering learners' autonomous learning abilities. With the assistance of corpus tools, students are guided to explore the writing process independently. Leech (1994) claims that corpus-based language teaching method is student-centered to encourage students' autonomous learning. Compared with the traditional passive learning activities, corpus-based teaching tasks attach great importance to students' inquiry process and learning experiences. Under the situation designed by teachers, students are guided to cooperate with each other to collect, observe and analyze data, and finally they summarize these to solve the problem in real communicative contexts. Previous studies suggest that data-driven learning is effective in stimulating learners' subjective initiative (Boulton, 2010). The process of learning has become a process of self exploration and self discovery (Zhen Fengchao, 2005). All these help students establish a new cognitive structure and improve their initiative and interests in writing. In this

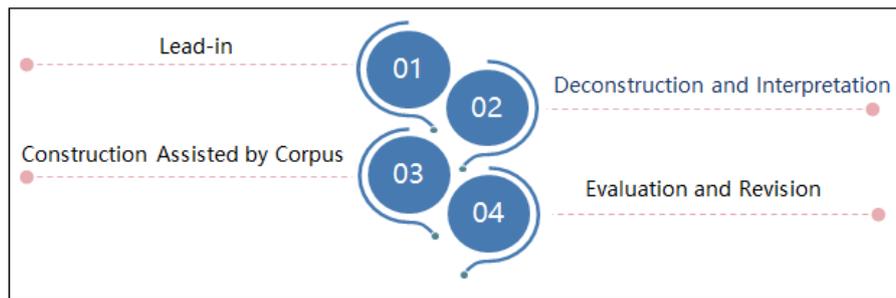
process, students are no longer passive recipients of knowledge, but active explorers and autonomous learners.

Incorporation of corpus resources in the writing evaluation process compensates for the limitations of traditional mode of evaluating students' writing. Corpus-based evaluation enables students to see their language use problems by exploring abundant authentic examples. It makes the evaluation more interactive, objective and comprehensive, especially compared with traditional error-correction-focused one-time composition feedback. Corpus concordance tools provide students with various means, such as collocation, cluster, semantic preference, semantic prosody, KWIC, etc., to understand the features of language use and comment on their own writing practice. The use of corpus not only directly helps students solve the problems in writing, but also improves their language awareness (Yoon, 2008). Rich corpus resources address students' needs in lots of aspects of language use in writing. For example, it can help students to find answers in their vocabulary collocation, discrimination of synonyms, vocabulary selection, etc.. Actually, the evaluating process via corpus is the process of exploring language use in a broader context. Under the guidance of teachers, students examine the variety of sentence patterns, the logical relationship between sentences and the coherence of texts. This makes the evaluation process more meaningful and beneficial for each individual student. Moreover, corpus-based reviewing creates a more flexible evaluation manner, blending online and offline experiences, which helps improve students' writing revision efficiency. Many scholars claim that corpus-based writing feedback opens up new direction for future development in writing instruction and writing feedback (Chambers & O'Sullivan, 2004; Gui Shichun *et al.*, 2010).

In view of this, this paper aims to construct a new writing teaching model assisted by corpus which emphasizes student-centered autonomous learning to guide college English writing instruction and improve students' writing efficiency.

## **2. Application of corpus-assisted teaching method in classroom writing instruction**

The design of writing instruction assisted by corpus resources generally includes four parts: lead-in, deconstruction and interpretation, construction based on corpus and self-construction and evaluation (see Fig-1).



**Fig-1: Design of classroom teaching**

Before class, students are trained to have a good command of the basic functions of corpus tools Antconc software and the corpus website COCA through online resources provided by the teacher. These resources are employed to assist students to conduct further exploration and analysis in the writing process. Also, students are required to preview the sample writing and draw a mind map to analyze the structures of the sample text.

### 1. Lead-in

The topic of this unit is introduced to students. Through the search path and discussion questions designed by teachers in advance, students are guided to use corpus tools to retrieve collocations of keywords and calculate the frequency of keywords automatically. Teachers will help learners to explore and select relevant data in both language forms and content to make preparations for the writing tasks.

### 2. Deconstruction and interpretation

#### • Overall structure

Students cooperate with group members to present their mind map to represent the organization of ideas in the sample writing text. Through peer discussions and the interaction between the teacher and students, the features of the structure and the discourse are deconstructed, and writing skills are explored and interpreted.

#### • Linguistic patterns

Students are guided to use corpus tools to explore relevant information from corpus resources. Through language learning tasks and corpus retrieval, such as key words in sample writing, frequency, collocation and semantic prosody, students are motivated to actively input the language materials to discover linguistic patterns and generalize the rules of language use in authentic contexts.

#### • Semantic schema

Based on designed tasks by the teacher, students are required to further explore the topic content related to retrieved key words. For example, KWIC is helpful for students to observe language used in broader contexts, and it also reflects semantic relationship of

keywords. Therefore, students are expected to gain a deeper insights into the topic and its semantic scope.

### 3. Construction assisted by corpus tools

Teachers design writing tasks based on the topic of this unit to guide students to essay writing with the assistance of AntConc and COCA.

- Focus on the key words and construct a network of key words based on COCA corpus. Students are required to observe, discuss and summarize these descriptive data, such as collocation, word frequency list, which helps them to understand and master the specific meaning, form and function of relevant key words. At the same time, it enables students to construct linguistic patterns and structures used in authentic ways in their writing.
- Convert the retrieved information by key words into a semantic construction. Though Word List and KWIC concordance tool in AntCont software, students are guided to pay more attention to key words in semantic scope. These words are closely related to the topic and can often provide abundant background information to make the writing content more specific. This process supports teachers to scaffold students' building up the semantic relationships and construction of content schema of the writing task.
- Use the COCA resources to retrieve example sentences of key words to help students construct paragraphs and coherence in discourse. On one hand, students are guided to search for and analyze paragraph structures and cohesive devices in the corpus data. On the other hand, writing strategies are explicitly presented by teachers, such as how to organize a paragraph of topic sentence and supporting sentences, how to add cohesive devices to make ideas flow, etc..

On the basis of the above three steps of construction, students are motivated to produce written text with logical structure, rich content and authentic language.

### 4. Evaluation and revision

Corpus-assisted writing evaluation is more effective for students to improve their writing proficiency. Corpus method establishes more specific

language analysis system, and students can correct their error in writing draft with the help of corpus tools (Tono Y, *et al.*, 2014). With concordance tools, students have more opportunities to make a comparison between their use of language and those of native speakers to induce correct grammatical rules of practical language use. With corpus analysis of good sample writings, paragraph organization and coherence in discourse are highlighted, so students are guided to develop sensitivity to the use of cohesive devices between sentences and between paragraphs to develop clear and logical ideas. Besides, incorporating online automatic scoring system into the evaluation process, such as Write, pigai.org, can greatly relieve teachers' burden and provide real-time feedback for students. Research shows that the automatic feedback system based on corpus technology, combined with traditional feedback, has a significant positive effect on the improvement of students' English writing competence (Li Yihua, 2015).

### 3. Challenges in corpus-assisted writing instruction

The integration of corpus resources into English writing instruction is a general trend with the development of foreign language education in the new era. However, The application of corpus-assisted method in class teaching is confronted with a series of problems and challenges.

#### 3.1 Challenges in the operation of corpus tools

Actually, many college English teachers in China have not received professional trainings about corpus software and operation skills. Even when they hold a positive attitude towards using corpus in their teaching, they don't have enough experiences about integrating the advanced technology into their classroom to design teaching activities. Under the new teaching mode, teachers' roles are undergoing a radical change. They are no longer providers of information but explorers of information based on corpus and facilitators of students' use of corpus. In fact, they are not ready for it. This may prevent them from applying this method to their daily instruction. For example, in addition to mastery of basis skills and knowledge about corpus technology, corpus is only a tool and the efficient application of it in language teaching depends on many aspects which require the teachers to have comprehensive knowledge of linguistics, foreign language teaching, corpus-assisted pedagogy and so on.

On the hand, students are not familiar with corpus tools, nor do they have any particular classes teaching them how to use corpus. In the new learning environment, students are not passive recipients but active contributors to their learning. They need to cooperate with their peers to explore to construct meanings. While in corpus-assisted writing process, both teachers and students need to deal with massive information retrieved from corpus resources, and the lack of scientific literacy and skills will make the students unable to interpret the actual meaning behind

the raw data. In face of difficulties, they are likely to lose confidence and interests in using corpus tools and the corpus-assisted exploration may not actually happen.

#### 3.2 Challenges in selection and analysis of data

Due to a large body of information retrieved from corpus, if the information used in class are not purposefully collected and carefully sorted, their function on foreign language teaching will be greatly weakened. In order to improve the efficiency of corpus application in writing class, the raw data need to be selected and labelled by teachers with the help of professional software. It is time-consuming and laborious work, thus teachers have to spend more time preparing the lesson than before. In addition, the number of corpora designed for foreign language writing is still too limited. An alternative way is that teachers build a smaller corpus suitable for classroom teaching, and then label the target content according to different teaching objectives so as to facilitate the efficiency of in-class interaction. In new class mode assisted by corpus tools, teachers have to shoulder more workload to carefully design teaching activities and tasks. To retrieve and interpret information from corpus also requires high digital processing and coding abilities. Usually, it needs the cooperation and support of team members to make lesson preparations. Therefore, how to co-construct and share teaching resources on the basis of corpora and how to fully utilize the function of corpus data in teaching writing are important issues to be studied.

#### 3.3 Challenges in corpus-assisted writing evaluation

Corpus-assisted evaluation makes the feedback on students' writings more flexible, and to some extent, it also meets students' needs for personalized comments on writing. However, it does have some limitations. For example, automated writing scoring systems focus more on the level of language use, such as students' errors in spelling, collocation, grammar and vocabulary, but they are not very helpful to give accurate feedback on content and structure. Besides, the comments are usually mechanical or too general. For complicated grammar rules, teachers' explicit and detailed interpretations are still an indispensable part in class teaching. Therefore, it's necessary to include both the part of teachers' feedback and the part of evaluation based on corpus to provide comprehensive information to guide students to improve their writing efficiency. In practice, how to apply corpus-assisted evaluation to concrete teaching procedures in class and how to bring advantages of different manners of feedback into full play to improve the efficiency of writing evaluation all put forward new requirements and challenges for teachers under the new learning and teaching situation.

## 4. CONCLUSION

In the new era of big data technology, corpus-assisted writing instruction opens up a new direction to

solve the problems in College English writing instruction and improve students' writing efficiency. This paper explores the integration of corpus technology into writing class to design in-class interacting activities and provides useful insights into the reform of College English writing instruction. The application of corpus resources to writing has many benefits. It presents abundant language input in authentic contexts; student-centered interactions are more likely to engage students in exploring further information related to the writing tasks which promote learners' development of autonomous learning abilities; corpus-based evaluation is more flexible and effective to motivate students to discover their problems and make improvements. Through designing corpus-based learning activities, teachers can help students select and utilize corpus technology to guide students in writing process. For example, with the assistance of retrieved data from corpora, teachers can help students to construct linguistic patterns, form features and semantic relationships related to the given topic. To facilitate the development of this new instruction mode, teachers need to change their original roles in classrooms and improve their competence in scientific literacy.

## REFERENCES

- Boulton, A. (2010). Language awareness and medium-term benefits of corpus consultation. In A. Gimeno Sanz (Ed.), *New Trends in Computer-Assisted language learning: Working Together*. Madrid: Macmillan ELT.
- Chambers, A., & O'Sullivan, I. (2004). Corpus Consultation and Advanced Learners' Writing Skills in French [J]. *ReCALL*, 16(1), 158-172.
- Gui Shichun, F. Z., Yang, H., He, A., Wei, N., Li, W., & Liang M. (2010). Corpus linguistics and foreign language teaching in China [J]. *Modern Foreign Languages*, 33(4), 419-426.
- Kennedy G. (2000). *An Introduction to Corpus Linguistics*. Beijing: Foreign Language Education and Research Press.
- Leech, G. (1994). Text corpora in education: The grand design [M] *Handbook of Teaching of the 1<sup>st</sup> International Conference on Teaching and Language Corpora (TALC94)*. Lancaster: Lancaster University.
- Li, Y. (2015). A comparative study of English writing evaluation based on dynamic assessment [J]. *Foreign Language World*, 168 (3), 59-67.
- Teubert, W., & Cermakova, A. (2009). *Corpus Linguistics: A short Introduction*. Beijing: Word Book Publishing Company.
- Tono, Y., Satake, Y., & Miura, A. (2014). *The Effects of Using Corpora on Revision Tasks in L2 Writing with Coded Error Feedback [J]*. *ReCALL*, 26(2), 147-162.
- Wen Qiufang. 2006. A longitudinal study on the changes in speaking vocabulary by English majors in China [J]. *Foreign Language Teaching and Research*, 38(3): 189-195.
- Yoon, H. (2008). More than a Linguistic Reference: The influence of Corpus Technology on L2 Academic Writing [J]. *Language Learning and Technology*, 12(2), 31-48.
- Zhen, F. (2005). Corpus-based approach to foreign language learning and teaching: ideas, methods and techniques [J]. *Foreign Language World*, 108(4), 19-27.