# Research Progress and Trend of Business English Writing Instruction in China (2002-2021): A Bibliometric Analysis

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## Abstract

Using the visual analysis instrument of China National Knowledge Infrastructure (CNKI) and CiteSpace, this study makes a bibliometric analysis and visual presentation of the literatures on Business English Writing Instruction in China during the last two decades (2002-2021). The examination of the number of published articles, authors and institutions, highly referenced papers, and keywords reveals that: (1) the number of published articles increases with the constant development of the business English major. It steadily reduced after reaching its peak but remained at a high level. (2) The distribution characteristics of authors and institutions are similar, which means that no single author or institution has an absolute edge in terms of the quantity of papers. (3) Although majority of the highly cited literatures are from CSSCI, the overall quality of the 433 articles chosen is not very high. (4) The research hotspots are mostly concerned with teaching content and methods, teaching mode and design, and Business English writing education in higher vocational colleges. (5) The research development. Continuing research into Business English Writing Instruction will require that researchers conduct follow-up studies, increase quantitative analysis, and broaden the scope of research samples in order to better serve Business English majors in China as well as improve the quality of business English writing research in China.

Keywords: bibliometric analysis, business English writing, literature review, Citespace

### 1. Introduction

Economic globalization has become an increasingly necessary and significant trend with the development of world economy. Since the beginning of the 21st century, China's global economy has grown at a breakneck pace and changed too. Business English thus, has developed into an indispensable language tool for promoting trade and cross-cultural exchanges between China and other countries in this context (Niu et al, 2021). The Belt and Road Initiative, in particular, has fostered cross-border trade and established higher standards for Business English instruction in colleges and universities (Geng, 2019). At the moment, majority of applied colleges and universities offer programs in business English. Listening, speaking, reading, and writing pertaining to business are fundamental skills that students should master with Business English instruction (He, 2020).

Writing ability is one of the core competencies required of Business English, which is especially critical for practitioners of international trade. As a required course for Business English majors, Business English Writing is critical in developing business English talent (Sun, 2020). According to the Teaching Guide for Undergraduate Business English Majors in Colleges and Universities (2020), the purpose of the Business English Writing course is to develop students' ability to select appropriate writing strategies for effective communication in an international business environment (Yan, 2020).

In terms of Business English Writing instruction, Chinese scholars have mainly utilized the following methods: result-based instruction, process-based instruction, genre-based instruction, case-based instruction, and task-based instruction (Zhang, 2017). However, because teachers and students are at varying levels in colleges and universities, the teaching effect is quite different. Certain colleges and universities, in particular, have issues with Business English writing instruction, including outdated teaching methods, using methods that focus on general English writing courses, low student enthusiasm, and limited improvement in writing ability (Wu, 2019).

Therefore, it is necessary to review pertinent research on the teaching of business English writing and to summarize prior experience and lessons learned in the classroom in order to lay the groundwork for future research. Thus, this study employed a literature visualization tool to visually analyze the literature on business English writing instruction in China, in order to comprehend the progress and trend of business English writing instruction research in China, summarize the experience and limitations of these studies, and provide guidance for raising the standard for future research and more effectively, achieving the goal of global talent training.

## 2. Literature Review

## 2.1 China National Knowledge Infrastructure (CNKI)

As the representative of China's academic resources database, the China National Knowledge Infrastructure (CNKI) strives to facilitate the exchange of knowledge and information resources throughout the country (Li, 2000). After many years of development and growth, and with the close collaboration of Chinese academia, education, and other social circles, and Tsinghua University, CNKI has independently developed the world's leading digital library technology (Li, 2010), and built the world's largest full-text library, the "CNKI Digital Library" (Li, 2010). It enables the sharing and dissemination of China's comprehensive knowledge and information resources, as well as the advancement of China's education and scientific research, to promote institutions at all levels to an advanced international level in their ability to acquire and exchange knowledge and information (Xia, 2005). It offers the most effective dissemination of knowledge and digital learning platform for the exchange of resources among schools and institutions throughout the world (Ma, 2012). The CNKI database contains the world's largest, continuously updated full-text database of Chinese academic journals (Sha, 2011) and China's largest, continuously updated, full-text collection of dynamic Yearbook materials.

## 2.2 Bibliometric Analysis

Bibliometric Analysis is a statistical analysis of publications such as journal articles (Ding et al., 2016), conference proceedings (Michels & Fu, 2014), and book chapters (Zuccala & van Leeuwen, 2011). Bibliographic data can be found by searching the Web of Science, Scopus databases, and the China National Knowledge Infrastructure (CNKI) by topic, author, journal, and time period. Quantitative analysis of publication and citation data has been widely employed in educational contexts for the past two decades to evaluate renowned authors, conceptual and intellectual maps, and trends in scientific ecosystems (Aria & Cuccurullo, 2017). Bibliometric mapping encompasses both the development of bibliometric maps (distance-based maps) and the graphical representation of such maps (graph-based maps). In the bibliometric literature, map constructions are more often used and studied than map graphical displays (Van Eck & Waltman, 2010). This could be because simple graphical visualizations for bibliometric literature are generated by computer tools such as SPSS and Pajek, which are only suited for tiny maps of less than 100 items (Skupin, 2004). As a result, a new computer software was created to plot larger maps (Van Eck & Waltman, 2020).

#### 2.3 Citespace

CiteSpace is a Chinese term for "citation space," and it refers to a citation visualization analysis software that has evolved over time in the context of scientometrics and data visualization. The software is primarily concerned with analyzing the potential knowledge contained in scientific publications. CiteSpace's "scientific knowledge map" is a visual representation of the structure, law, and distribution of scientific knowledge. Chen Chaomei, a Drexel University Professor of Computer and Information Science, created this tool in 2004 using the Java programming language (Zhong, 2021). The software function has improved over time, and the operation interface has become more user-friendly. At the moment, the software is widely used in fields such as medicine, demography, sociology, geography, sewage treatment, and related fields (Zhang et al, 2020; Luo et al, 2021; Xie et al, 2020; Yang et al, 2020; Han et al, 2021). Wang Lifei and Li Lin used CiteSpace II to analyze the state of foreign business English research (Wang & Li, 2014). This research not only provided local researchers with an understanding of how business English has developed, but also pointed the way forward for business English research. Additionally, Chinese researchers also used CiteSpace to summarize business English teaching practices (Xu & Dou, 2018) and business English translation research (Zhang & Zhang, 2016), and some researchers used this software to comment on the state of ESP research (MA et al., 2019) and the research trends in ESP teaching in China (Zheng & Wu, 2019). CiteSpace is found to be capable of quantifying and visualizing the results of literature reviews, as well as counting and processing a large number of documents in a short period of time, significantly reducing the workload of researchers.

#### 2.4 Business English Writing Instruction

Business English Writing is a compulsory course for Business English majors, according to the National Standard for Teaching Quality of Undergraduate Majors in Colleges and Universities set by the Ministry of Education's Teaching

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Steering Committee of Colleges and Universities (Tan, 2014). In recent years, an increased number of schools and institutions have established Business English programmes, as well as studies into their instruction. Business English writing has always been a vital and difficult core course of any business English programme. The teaching effect needs to be enhanced in general due to Chinese students' weaknesses in writing, their fear of obstacles, and ineffective teaching techniques (Liu, 2013).

As a result, in order to create a basis for future studies, there is a need to examine relevant research on Business English writing instruction and synthesize previous experience and lessons in teaching. This study uses the literature visualization tool to visually analyze the literature related to Business English writing instruction in China. The purpose of this study is to address the following questions:

- 1) What are the changes and trends of papers on Business English Writing Instruction?
- 2) What are the research hotspots for Business English Writing Instruction?
- 3) What are the research stages of Business English Writing Instruction?

## 3. Research Method

## 3.1 Data Source

Data for this study were extracted from the China National Knowledge Infrastructure (CNKI) database on April 27, 2022. The data collection and processing steps are as follows: To begin, we conducted a literature search using the subject keyword "Business English Writing Teaching." The period covered by this publication is from January 1, 2002, to December 31, 2021. The focus was on journal articles (excluding periodicals, dissertations, and conference papers), and the search results yielded 450 articles. Second, we eliminated irrelevant or less relevant literature, that is, literature that does not meet the research requirements, by reading the article's title, keywords, and main content, and finally, obtained 433 papers. Third, we converted and renamed the file format, and exported the file in the format of Refworks after selecting the literature. We then used the data processing utilities tool in the CiteSpace software to convert the file from the format supported by CNKI to a format that CiteSpace could process, and finally renamed the file "download 2002-2021" after conversion for subsequent data processing.

## 3.2 Research Design and Instruments

The mapping of scientific knowledge is accomplished through the use of a database, an Excel spreadsheet, and an analysis software. To convey pertinent information about Business English Writing Teaching in China in a succinct manner, this paper provides a visual analysis of the research progress and trend in business English Writing Teaching in China. CiteSpace (version 5.8) and CNKI's own document visualization analysis tool were used in the study.

This article uses a time slice of one year to divide the period from 2002 to 2021 into 20 time slices. Literature was exported via the CNKI's Refworks and then loaded into CiteSpace 5.8. The data then, were converted using CiteSpace's data function. After developing a new project, the node types of keywords, authors, and institutions were selected, and CiteSpace was used to build a knowledge map of keyword co-occurrences, a time zone view, and an author and institutional cooperation map.

## 4. Results

## 4.1 Analysis of the Quantity and Trend of Publications

The sample size for this analysis is 433 pieces of literature. As illustrated in Figure 1, the number of papers published on business English writing teaching in China increased steadily from 2002 to 2012, with only one paper published each year between 2000 and 2006, and the most papers published in 2012, reaching 46. Between 2013 and 2021, the total number of articles published decreased slightly, but all remained greater than ten. It should be noted that, although Business English became a Bachelor's programme in 2007 and not just a core or elective course for other programmes, its origins in Chinese universities dated all the way back to the 1950s (Wang, 2010). As a result of China's Reform and Opening Up, the rapid development of international trade, and the growing demand for foreign trade talent, Business English schools have shifted from offering three traditional foreign trade courses to focusing exclusively on Business English as a distinct Bachelor's programme (2002–2006), few advances were made in the teaching of Business English writing.

However, since 2008, the number of colleges and universities offering Bachelor in Business English programme has grown. Correspondingly, research on Business English writing instruction has increased, which explains the upward trend in the number of documents recorded since 2007. Another critical juncture in the development of the Business

English programme occurred in 2012, when it was officially listed in the catalogue of undergraduate programmes at colleges and universities, a significant milestone in the evolution of the programme. As a result, Chinese scholars were extremely interested in the research of business English writing instruction in 2012, and the number of research results reached a record high in the last two decades. After more than a decade of development, Business English experts, scholars, and teachers have reached an agreement on numerous aspects of talent development. In particular, the Ministry of Education of China issued the National Standard for the Teaching Quality of Undergraduate Majors in Colleges and Universities (Foreign Language and Literature) (hereinafter referred to as the "National Standard") in January 2018, which establishes corresponding requirements for the teaching of foreign language majors, including Business English writing courses. Under the guidelines of the National Standard, colleges and universities are consistent in the teaching of Business English, and research of a curriculum system within the framework of the National Standard. The adoption of the National Standard indicates that Business English writing instruction is maturing, and colleges and universities make fewer and fewer adjustments to the Business English writing syllabus and plan. As a result, the maturity of professional development and the adoption of national standards may be significant factors in the recent decline in the number of relevant research findings.

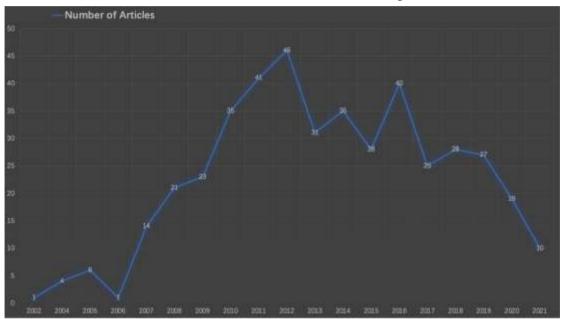


Figure 1. Publishing Trend of Business English Writing Instruction papers in China from 2002 to 2021

#### 4.2 Analysis of Authors and Institutions

Statistics on the authors of the publications can be used to track the most active researchers in Business English writing education and research. Data show the trend in not only colleges and universities with extensive experience in teaching Business English writing, but also the fundamental state of business English talent training in colleges and universities at various school levels, allowing scholars to gain a better understanding of the status of Business English education in China as a whole.

CiteSpace developed a map of authors (Figure 2), and it can be seen that authors are presented either huge or small depending on the number of papers they published. The more the number of papers, the larger the name. In general, the number of articles published by the majority of scholars is quite consistent. The visual statistical results of CiteSpace show that the researchers with more than two articles are Zhang Ying and Xiong Yousheng (5 articles), Zhou Xiang (4 articles), Liang Jun (3 articles), Zhang Fenghua (3 articles), and Liu Jingrong (3 articles), followed by other researchers who have published two articles, indicating that most authors' research on Business English writing teaching was not extended nor expanded throughout the years.



Figure 2. Authors Map of Business English Writing Instruction Research Papers in China from 2002 to 2021

The institutions map corresponds to the authors' distribution map (See Figure 3). It is worth noting that the distribution characteristics of institutions are largely consistent with those of authors, that is, there is no single university that has a clear edge in terms of the quantity of papers published.

Shenzhen Vocational and Technical College has the highest number of articles published (five articles), followed by four articles for Guangdong Engineering Vocational and Technical College, and three articles each for Shanghai University of Technology, Hunan Foreign Vocational College, Wuxi Business Vocational and Technical College, Wuhan Transportation Vocational College, Tianjin Binhai Vocational College, Hunan Business College, and Hunan Business College. Figure 3 also provides an insight into the different types of institutions which include undergraduate colleges such as Shanghai University of Technology, Zhejiang Industrial and Commercial University, and Fuyang Normal University, as well as higher vocational colleges such as Shenzhen Vocational and Technical College, Guangdong Engineering Vocational and Technical College, and Hunan Foreign Vocational College, among others. The above data show that the Business English Writing course has a broad scope and is aligned with the university's positioning of nurturing applied foreign language talents. With regard to educational institutions, the course is not only offered by comprehensive universities, but also colleges and universities in finance and economics, foreign languages, teacher education, and other industries and types of educational establishments. The fact that the bulk of Business English writing courses is taught in finance and economics colleges and universities, reflects the qualities of Business English writing as a composite subject that combines English and business.

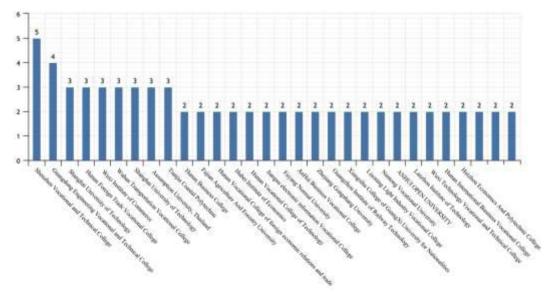


Figure 3. Institutions Map of Business English Writing Instruction Research Papers in China from 2002 to 2021Published by Sciedu Press245ISSN 1925-0703E-ISSN 1925-0711

## 4.3 Analysis of Citation Frequency of Literature

The more frequently the literature is cited, the greater the influence of the paper. By examining the citation rate of a particular piece of literature, we do not only gain a better understanding of the researchers who wield a significant influence in the relevant field, but also determine whose academic accomplishments are more acknowledged by peers in the field. By selecting the Top 20 cited literature from the CNKI database's samples (Table 1), we gain a general understanding of the scholars who have a significant influence on the field of Business English writing instruction in China, as well as the high-quality journals in which the articles are primarily published.

As listed in Table 1, only Ruan Jizhi (2005, 2006) had two papers selected, indicating a diverse distribution of highly cited academics, but also revealing the absence of notable leading scholars in the field of Business English writing instruction and research. Li Taizhi's discussion of the benefits of lexical chunks in Business English writing instruction has the highest citation frequency, up to 128 times, and outlines the effective training strategy. He postulated that structures that are larger than words, have a higher frequency, and have a definite shape and meaning that can be categorized as lexical chunks. Lexical chunks, as the smallest unit of vocabulary instruction, have practical and effective advantages in English instruction, particularly in ESP writing instruction such as foreign trade. The implementation of a method of teaching productive question types based on lexical chunks contributes to the reform and development of business English education (Li, 2006).

Ruan Jizhi's research on business English writing course design and teaching model, has the lowest citation frequency, 9 times (Ruan, 2006). The first 20 literature were published over a 17-year period (from 2002 to 2018), with the majority of them appearing before 2012. On the one hand, it is possible that the longer the time period, the higher the citation accumulation frequency. On the other hand, it is possible that because the quality of early relevant articles is good and most of them are published in core journals, they have become the literature mentioned more frequently in subsequent studies.

From the standpoint of published journals, the categories of journals exhibit a wide range of distribution characteristics. The highest number of publications is published in university journals, followed by independent educational journals. Others have also been published in foreign language journals and business journals. The distribution of journal categories is consistent with the field of Business English writing instruction research, which is primarily reflected in two aspects: first, Business English writing instruction research is part of education reform research; second, Business English writing instruction research is part of a composite discipline that combines foreign language and business research. It is worth mentioning that the Chinese Social Sciences Citation Index (CSSCI), a Chinese Core Journal Index, accounts for more than half of the top 20 widely cited papers. Only 11 of the 433 documents in the CNKI database came from CSSCI publications, from the screening findings of the source categories. Although the quality of papers published in general journals is not always substandard, the quantity of papers published in core journals is modest, indicating that the overall level of articles on Business English curriculum study is not particularly high. Researchers examined a sample of papers and discovered that majority of them are only two to three pages in length, with some being as short as one page. Furthermore, most of these articles are qualitative and case study experience summaries, indicating that the general quality of such research articles needs to be expanded.

Most scholars' research directions, based on the 20 highly cited papers, primarily focus on the application of inquiry teaching methods in Business English writing instruction, such as Lexical Chunk Teaching Method (Li, 2006; Zhou & Liao, 2008), Flipped Classroom (Chen, 2013; Zhang, 2018; Chen, 2014), Case Teaching Method (Peng, 2009), Task-based Language Teaching Method (Liu & Ruan, 2011), Achievement-oriented Approach (Chen, 2017; Sun, 2021), and Computer-aided Language Teaching (Wang & Huang, 2011). Several academics have examined Multimodal Design (Xu & Xia, 2013), Pragmatic Principles (Zhou, 2007), Output-Driven Hypothesis (Wang, 2010), and Metacognitive Theory (Xu, 2012) via the perspective of Business English writing curriculum design and instructional mode. A few scholars have also focused their efforts on the peculiarities of Business English Writing Instruction (Ruan, 2005, 2006; Luo, 2002; Cheng, 2007).

Ranking	Author	Title	Frequency	Year	Journal
1	Li Taizhi	Advantages of lexical chunks in English writing for foreign trade and their productivity training methods	128	2006	Foreign Language World
2	Chen Xiaoping	The clue of the reversal of the traditional education model - the event and experience of "flipped classroom" in Business English writing in adult colleges and Universities	53	2013	China Adult Education
3	Xu Jun & Xia Rong	An empirical study on multimodal design of business English Writing	45	2013	Foreign Language World
4	Zhou Ruiqi	Application of pragmatic principles in Business English letter writing	37	2007	Journal of Guangdong University of Foreign Studies
5	Luo Jian	On the teaching of business English Writing	28	2002	Foreign Language World
6	Ruan Jizhi	On the curriculum design and teaching implementation mode of business English Writing	27	2005	Shandong Foreign Languages Teaching Journal
7	Wang Lifei & Huang Xiangqi	Research and development of computer aided business English writing teaching system in Colleges and Universities	24	2011	Technology Enhanced Foreign Languages
8	Wang Juanping	Reform and practice of business English Writing Teaching in Higher Vocational Colleges from the perspective of "output driven"	17	2011	Education and Vocation
9	Wang Meiling	The role of e-mail in Business English writing from the perspective of ESP English Teaching	16	2005	Technology Enhanced Foreign Languages
10	Xu Junhang	Research on business English Writing Teaching Based on Metacognitive Theory	16	2012	Journal of Xi'an Foreign Languages University
11	Chen Xiaoxiao & Ge Shili	Exploration of process business English writing ability from the perspective of business communication	15	2016	Foreign Languages Research
12	Chen Jie	Application of achievement-oriented teaching model in Business English writing course in Higher Vocational Colleges	14	2011	Journal of Changchun Education Institute
13	Peng Yanling	Application of case teaching method in Business English Writing Teaching	14	2009	Yunnan Finance & Economics University Journal of Economics & Management
14	Zhang Yunqing	An empirical study on College Business English learners' experience of flipped classroom Taking Business English writing course as an example	14	2018	Shandong Foreign Languages Teaching Journal
15	Xie Yanqing	On the teaching mode of business English writing in Higher Vocational Colleges Based on "production-oriented method"	13	2017	Journal of Guangdong Radio & Television University
16	Cheng Yingchun	Course characteristics and Teaching Countermeasures of business English correspondence	13	2007	Vocational and Technical Education
17	Zhou Zhengzhong & Liao Caixi	Lexical chunk teaching method and its application in Business English letter Teaching	11	2008	Journal of Shenyang University
18	Chen Xiaohua	Practice and experience of "flipped classroom" in Business English Writing	10	2014	Journal of Kaifeng Institute of Education
19	Liu Yichun & Ruan Yali	Application of Task-based Teaching Model in Business English Writing Teaching	10	2011	Journal of Xi'an University (Social Sciences Edition)
20	Ruan Jizhi	Course design and teaching model of business English Writing	9	2006	Higher Education & Economy

Table 1. Top 20 Referenced Business English Writing Literature in China from 2002 to 2021

4.4 Analysis of Keyword Co-occurrence

Keywords are a succinct summary of an article's core material that can indicate a research area's trend and hotspots (Li & Chen, 2016). As a result, the hotspots of Business English writing education and research in China from 2002 to 2021 can be fairly recognized using the keyword map provided by CiteSpace (Figure 4). The wider font of terms in Figure 4 indicates a higher frequency of occurrence and a more popular study topic. We can omit high-frequency *Published by Sciedu Press* 247 *ISSN 1925-0703 E-ISSN 1925-0711* 

words like "business English" and "writing teaching" in the figure because the analysis focus of this study is Business English writing instruction, which does not fall within the scope of research hotspots. We can then accurately analyze the high-frequency keywords in the teaching and research of Business English writing by combining the statistical results in Figure 4 and Table 2, such as Teaching Mode (37 times), Flipped Classroom (22 times), Higher Vocational Education (15 times), Constructivism (14 times), Application (13 times), Memetics (10 times), Teaching Design (8 times), and Teaching Reform (8 times).

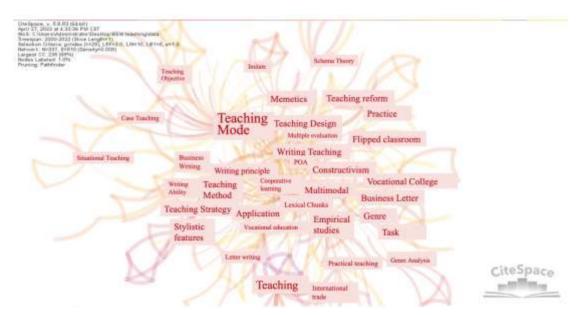


Figure 4. Co-occurrence Map of Hot Words in Business English Writing Instruction in China from 2002 to 2021 Table 2. High Frequency Keywords and Frequency of Business English Writing Instruction Research in China from 2002 to 2021

Serial Number	Keywords	Frequency	Year
1	Teaching Mode	37	2005
2	Flipped Classroom	22	2015
3	Vocational College	15	2006
4	Constructivism	14	2010
5	Application	13	2010
6	Memetics	10	2007
7	Teaching Design	8	2009
8	Teaching Reform	8	2009
9	Teaching Method	7	2008
10	Teaching Strategy	7	2007
11	Schema Theory	6	2009
12	Cooperative Learning	6	2009
13	Empirical Studies	6	2011
14	Genre Analysis	5	2010
15	Practice Teaching	5	2007
16	Case Teaching	5	2007
17	Situational Teaching	4	2008
18	Multimodal	4	2017
19	Network	4	2007
20	Lexical Chunks	3	2009

As can be seen, the research hotspots primarily include the exploration of the teaching mode of Business English writing instruction, the practical research on the combination of flipped classroom and Business English writing instruction, Business English writing instruction in higher vocational colleges, the reform and innovation of Business English writing instruction against the backdrop of Constructivism theory, and the application of memetics in Business English writing instruction. When it comes to the date when keywords first appeared, more than half of the terms appeared after 2007, indicating that once Business English became an independent programme, Chinese scholars' research on Business English writing instruction began to gradually grow and develop.

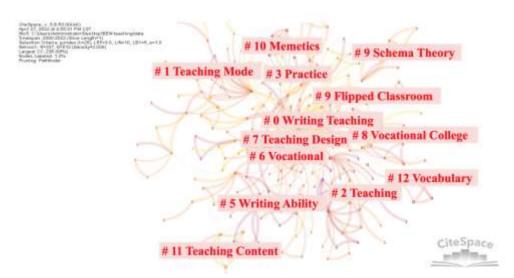


Figure 5. Clustering Map of Hot Words in Business English Writing Instruction Research in China from 2002 to 2021

As shown in Table 2, majority of keywords with a frequency of more than three first appeared prior to 2010, indicating that research themes connected to corporate English writing instruction remained generally steady from 2002 to 2021. Due to space constraints, Table 2 only includes the top 20 most often used keywords. Thus, a more complete picture of the research topic of Business English writing instruction would require an additional keyword analysis. The LLR algorithm generates 12 clusters after updating the knowledge map of keyword co-occurrence (Figure 5). In conjunction with Table 2 and Figure 5, the following aspects of Business English writing instruction and research can be summarized.

Firstly, Teaching Contents and Methods of Business English Writing. Cluster 0 "writing teaching," cluster 2 "teaching," cluster 9 "Schema Theory," cluster 10 "memetics," cluster 11 "teaching content," and cluster 12 "vocabulary" are all related to this field. Table 2 shows that "memetics" was mentioned ten times and "Schema Theory" was mentioned six times. The teaching contents and methods occupy a crucially significant place in the teaching and study of Business English writing, based on the number of clusters engaged. In research, most are eager to investigate vocabulary teaching approaches in Business English writing classes. It was found that Schema theory and memetics are frequently employed in Business English writing classes in terms of teaching theory.

Secondly, Model and Design of Business English Writing Instruction. Cluster 1 "teaching mode," cluster 4 "flipped classroom," and cluster 7 "teaching design" are all relevant to this field. Table 2 shows that "teaching mode" was mentioned 37 times, "teaching design" was mentioned 8 times, and "flipped classroom" was mentioned 22 times. Most Business English instruction researchers, as can be observed, focused on the teaching design of Business English writing and innovation in the teaching method. They have looked into how to include the flipped classroom paradigm into the teaching of Business English writing.

Thirdly, Business English Writing Instruction at Vocational Colleges. Cluster 6 "vocational " and cluster 8 "vocational colleges" are in this field. As observed in Table 2, the term "vocational college" appears 15 times, indicating that research on Business English writing instruction at a variety of vocational colleges is consistent with the mission of nurturing applicable abilities at vocational colleges. Indeed, the number of vocational institutions in China offering Business English programmes is significantly greater than what is offered at public and private universities. As most undergraduate foreign language majors are still English, translation, and other minority language/s, it is not surprising that the research findings on business English Writing instruction at vocational colleges account for a sizable share.

Research hotspots typically shift in response to the evolution of economy and society, as well as the development of disciplines. By grouping research issues into distinct phases, we can gain a better understanding of the field's historical evolution and hence have a more accurate grip on the future research trend. From the development history of Business English writing instruction, as well as the size and quantity of keyword typefaces (Figure 6), the research and development context for Business English writing instruction in China from 2002 to 2021 can be approximately split into three stages.

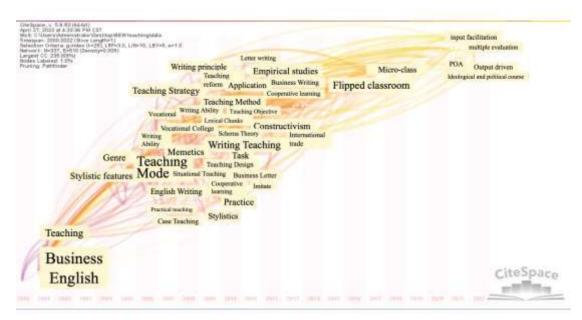


Figure 6. Keywords Time Zone Map of Business English Writing Instruction Research in China from 2002 to 2021

Stage One: Initial Exploration Stage (2002-2006). At this stage, there are few publications and limited research materials focusing mostly on the mode and content of Business English writing instruction. The key phrases "stylistic features," "teaching mode," and "genre" appear larger in font than other keywords, suggesting that the teaching mode has been a focus of Business English writing education research since 2002. Without a doubt, research at this level is groundbreaking and establishes a general path for future research.

Stage Two: Prosperity and Development Stage (2007-2014). Although the number of papers fluctuated at times during this period, it exhibited a general pattern of rapid expansion. As illustrated in Figure 6, this stage's research topics are more diverse than those in the initial exploration stage. The bold key words are "teaching mode", "teaching reform", "teaching design", "teaching method", "cooperative learning", "memetics", "Constructivism", "situational teaching", "practical teaching", "case teaching", "writing ability", "vocational colleges" and "international trade", thus research topics at this stage are primarily focused on the teaching theory of Business English writing, teaching reform and design, teaching methods, and the implementation of cooperative learning. There are two critical development milestones at this stage for Business English majors. The first is that Business English was approved as an independent programme in 2007, and the second is that the Business English programme was formally included in the catalogue of undergraduate programmes at Chinese Ordinary Colleges and Universities in 2012. When these two crucial aspects are combined, the research theme clearly shows the reasons for its diverse distribution: time was relatively short for institutions and colleges to run Business English programmes, and research results of Chinese scholars on Business English writing instruction gradually increased and expanded.

Stage Three: Sustainable Development Stage (2015-2021). The overall number of papers produced at this moment exhibited a declining tendency, but was still very high, as evidenced by the number of keywords given in Figure 6. With the exception of "flipped classroom," "micro class," "curriculum thought and politics," "POA," "output driven," "input facilitation," and "multiple evaluation," there are basically no keywords with a large font and no large keyword nodes. As shown in Figure 6, Chinese experts have been attempting to blend "flipped classroom" and "micro class" into Business English writing instruction since 2015, with promising results. The Ministry of Education released a National Standard in January 2018 that specifies the training objectives and curriculum for Business English programmes. In this context, Business English writing instruction is undergoing change and progress. Many academics have attempted to include "POA" into Business English writing instruction, with promising outcomes. Relevant scholars have attempted to combine the teaching concept of "Ideological and Political Courses" into higher education. As a result, future studies are likely to continue focusing on hot topics like Business English writing instruction model and POA, as well as the use of "Ideological and Political" contents in Business English writing instruction.

#### 5. Discussion

#### 5.1 Research Findings

This section summarizes prior study findings by responding to three research questions.

RQ 1: What are the changes and trends of papers on Business English Writing Instruction?

From 2002 to 2021, the number of papers on business English writing instruction and research based on the CNKI database increased with the continuing development of the Business English programme, before gradually falling although remaining high. There are no researchers who have an absolute advantage in terms of the number of published articles, which may reflect the fact that researchers did not devote their full attention to the teaching and research of Business English instruction, and related institutions exhibited the same distribution characteristics. The high-frequency cited literature was predominantly from CSSCI, and the publication dates were mostly before 2010, indicating that CSSCI literature was more preferred, and early published publications benefited from time accumulation in citation frequency. However, with the exception of the literature of the top 20 most frequently referenced writers, a majority of the remaining literature was from regular publications. Furthermore, when reading several sample documents at random, the authors discovered that most of the articles are qualitative analyses of case studies or summaries of personal experiences. The generalization of such study conclusions is evidently insufficient, indicating that the overall coverage of scholarly work in the area was not particularly extended and broad.

RQ 2: What are the research hotspots for Business English Writing Instruction?

The focus of research on Business English writing instruction is mostly on teaching content and methods, teaching mode and design, and Business English writing instruction in vocational colleges. Indeed, a majority of scholars examined vocabulary instruction for Business English writing, and the most often quoted research theories are Schema Theory and memetics. Research in this sector also reveals innovations in teaching modes and instructional design based on the flipped classroom. It is worth noting that a sizable research was carried out on Business English writing instruction at vocational colleges, demonstrating the breadth of the research scope for Business English writing courses in vocational colleges, and aligning with the vocational colleges' mission of cultivating applied foreign language talents. It is anticipated that as the number of universities offering a Business English programme increases, the share of research on Business English writing instruction at these universities would steadily grow as well.

RQ 3: What are the research stages of Business English Writing Instruction?

The development of business English writing instruction and research in China from 2002 to 2021 can be divided into three stages: Initial Exploration Stage (2002-2006), Prosperity and Development Stage (2007-2014) and Sustainable Development Stage (2015-2021). As expected, the number of publications published during the earliest stages of development was modest, and the research topic was quite narrow, focusing mostly on the mode and content of Business English writing instruction. At the stage of prosperity and development, the number of articles published had increased rapidly, and the research topics became more diverse, focusing primarily on the teaching theory of Business English writing, educational reform and design, teaching methods, course implementation in vocational colleges, and the relationship between Business English writing courses and the cultivation of international trade talents. The number of papers published during the stage of sustainable development, on the other hand, had fallen in comparison to the previous stages of prosperous growth, however, it remained reasonably high. Apart from "POA," "flipped classroom and micro class," and "Ideological and Political Courses," very few new hotspots emerged.

#### 5.2 Research Suggestions

The following suggestions for future studies on Business English writing instruction are made in light of the research findings:

On the one hand, future studies could utilize scientific methodologies and broaden the research subject's scope. Qualitative analysis predominates in the sampled literature, while quantitative analysis is less prevalent. A majority of the research location are the universities where the researchers are located, and the articles are also brief in length, which undoubtedly affect the persuasiveness and popularization of the research conclusions. Also, as it turned out, the lack of publication in CSSCI generally suggests that the articles' overall quality could be improved. As a result, it is recommended that future studies incorporate a sufficient focus on quantitative analysis. Simultaneously, larger samples can be selected based on locations other than universities, and more scholarly works should aim for publication of results in diverse and high-quality publications.

On the other hand, future studies should place a greater emphasis on the needs of social talents and hotspots of educational reform. Business English programme's talent development objective defines its positioning as a provider of applied foreign language abilities for the country's economic and social development. Thus, talent training cannot be divorced from social demands for talents, and social demands for talents typically change with economic development, necessitating researchers to fully consider social demands when practicing and studying Business English writing instruction in order to arrive at more objective and credible conclusions. The mode of instruction, the design of the classroom, and the methods of instruction have long been the focus of Business English writing instruction studies. After a gradual stabilization of the research focus over the last two years, these themes will continue to dominate future research. A slight pivot in research could also focus on cross-border e-commerce, Ideological and Political Courses, and blended teaching and learning in the post-pandemic era.

#### 6. Conclusion

Using the literature visual analysis tool of the database and CiteSpace, this paper selected 433 journal articles on the teaching and research of business English writing in China from 2002 to 2021 from the CNKI database as the analysis object and conducted a bibliometric analysis on the number of published articles, authors and institutions, hotspots and development stages of Business English writing instruction in China. Within the context of the past two decades, the findings of the analysis illustrate the progress and changed trends in Business English writing instruction research in China.

This study, however, was unable to use CiteSpace to undertake a co-citation analysis of the selected literature due to the format of CNKI literature. Furthermore, because the study only examined journal articles (not magazines, dissertations, or conference papers) and only used the CNKI database, which excluded papers published by Chinese scientists in international journals, some materials were bound to be excluded. Future research might use both local and foreign databases to search for literature on the subject, as well as conduct a comparative analysis of Business English writing instruction in China and other countries.

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