

CITISPACE-BASED VISUALIZED ANALYSIS OF RESEARCH ON CHINESE EFL LEARNERS' ORAL ENGLISH OUTPUT IN RECENT FIFTEEN YEARS

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Abstract

Oral English output is a core link in the transformation of linguistic knowledge into practical application ability. Taking the China National Knowledge Infrastructure (CNKI) academic journal network publishing database as the data source, this paper uses the CiteSpace 6.3.R 1 data visualization software to map scientific knowledge, and conducts a systematic analysis of relevant literatures in the field of Chinese EFL learners' oral English output over the past 15 years, so as to reveal the development trends, hotspots and frontiers of this field. The results show that the research in the field of Chinese EFL learners' oral English output from 2010 to 2025 presents a fluctuating characteristic, going through three stages: the accumulation and development stage, the significant growth stage and the stable maturity stage. Research hotspots focus on oral English output, with emphasis on English teaching practice in different school stages; research frontiers concentrate on the cultivation of oral English output ability in specific school stages. Future research should, on the basis of diversifying research methods, carry out studies around different themes, promote interdisciplinary research, and conform to the development of educational digitalization.

Keywords: *CiteSpace; Oral English; Oral output*

1. Introduction

Against the backdrop of increasingly frequent global communication, fluent oral English output is particularly important. In the context of deepening the reform of English curriculum in basic education, the teaching pain point—how to develop students' core competencies, cultivate their oral output ability, and truly improve their language proficiency—urgently needs to be addressed. Meanwhile, the popularization of digital technology has provided new variables for oral English output. However, most prior reviews rely on narrative summaries rather than data-driven visualization methods and they generally lack the overall view of this field. In view of this, this study uses the CiteSpace 6.3.R 1 data visualization software to map scientific knowledge

based on the relevant literatures on Chinese oral English output research published in China National Knowledge Infrastructure (CNKI) from 2010 to 2025, aiming to address the following questions: (1) What is the research trajectory of Chinese EFL learners' oral English output in recent fifteen years?, (2) What are the research hotspots in this field?, and (3) What are the research frontiers of this field in different periods? Through this, this analysis reveals the overall research dynamics of this field in the past 15 years, aiming to provide references for the research of Chinese EFL learners' oral English output.

2. Research Design

2.1 Research Tool

This study adopts the CiteSpace 6.3.R 1 data visualization software, a widely used data visualization software developed by Professor Chaomei Chen, to construct a scientific knowledge graph for the field of Chinese EFL learners' oral English output. The software is particularly suitable for this research for two key reasons: First, it excels at analyzing large-scale literature datasets to identify hidden knowledge structures—such as cluster analysis of research themes and burst detection of hot topics—which aligns with the study's goal of revealing long-term (2010–2025) research trends. Second, its visualization function (e.g., node-size mapping of literature impact, color-coding of time periods) enables intuitive presentation of the overall research landscape, making it easier to interpret complex relationships between research hotspots and frontiers. With the assistance of CiteSpace 6.3.R 1 data visualization software, this study is allowed to present the overall research landscape, development trends, research hotspots and research frontiers in this field of Chinese EFL learners' oral English output.

2.2 Data Source

This study takes the China National Knowledge Infrastructure (CNKI) Academic Journal Network Publishing Database as the data source. The advanced search mode is adopted, with “oral output” as the subject term for retrieval. The time span is set from January 2010 to August 2025, and initially retrieved 374 literature records. To ensure data relevance and methodological rigor, manual screening was then performed: 47 records were excluded, including those irrelevant to the research topic, as well as conference proceedings, newspaper articles, and review papers (which are prone to bias or lack of original empirical content). Finally, 327 valid literature samples meeting the research criteria were selected as the dataset for subsequent analysis.

3. Research Results and Data Analysis

3.1 Annual Number of Published Papers

A diachronic statistical analysis of the number of published literatures can, to a certain extent, reflect the overall development trend in the field of Chinese EFL learners' oral English output. In this study, the CiteSpace 6.3.R 1 data visualization software was used to conduct a visualized analysis of 327 literatures published between

January 2010 and August 2025, and the corresponding statistical results of the number of published papers were obtained. The specific data are shown in Figure 1.

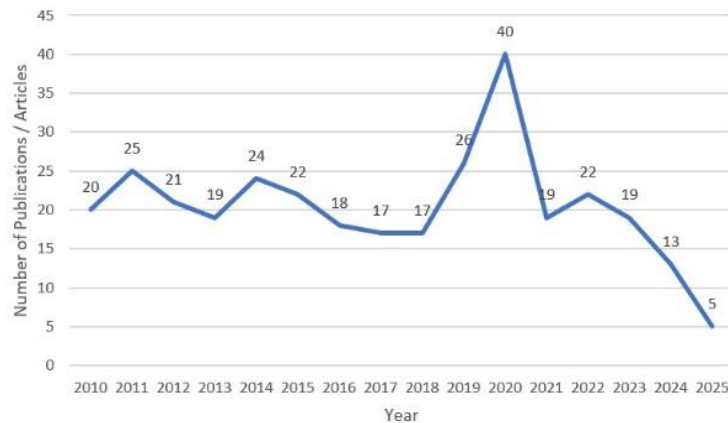


Figure 1. Article Publication Trend Chart

As can be seen from Figure 1, the number of papers on Chinese EFL learners' oral English output research showed obvious fluctuating characteristics during the period 2010-2025, which can be roughly interpreted in three phases.

(1) Accumulation and Development Phase (2010-2018)

During this phase, the number of published papers ranged from approximately 17 to 26, with a relatively even distribution. This period can be regarded as the initial development and accumulation stage of research in this field. During this period, relevant studies focused more on output theories, which have laid a solid theoretical foundation for the conduct of subsequent research.

(2) Significant Growth Phase (2019-2020)

During this period, research on oral English output in China entered a stage of significant growth, with the number of published papers reaching a peak of 40 in 2020. The emergence of this growth trend is closely tied to the practical context of accelerated digital transformation in China's English education. The popularization of online oral English learning platforms and the application of AI-assisted oral training tools have provided richer practical contexts and analytical perspectives for research, effectively expanding the scope of research questions. Meanwhile, the practical demand for oral English proficiency development at the societal level has continued to rise—this has significantly increased the academic community's attention to the field of oral output and encouraged more researchers to direct their academic focus toward innovative exploration in this area.

(3) Stable Maturity Phase (2021-2025)

During this stage, the number of published studies in the field of Chinese EFL learners' oral English output has shown a declining trend, entering a mature phase of research. However, this does not mean that research in the field of oral English output

has lost its value; future research in this field is likely to move toward a path of greater refinement and depth.

3.2 Keyword Co-occurrence Analysis

Keywords are the condensation and summary of the core content of literature, and serve as important indicators for identifying research hotspots, development contexts, and evolutionary trends in an academic field. The research hotspots of a field can usually be identified through high-frequency keywords (Li & Chen, 2016). Therefore, to gain an in-depth understanding of the hotspots in the field of Chinese EFL learners' oral English output research, this study used the CiteSpace 6.3.R 1 data visualization software to generate a keyword co-occurrence network of Chinese EFL learners' oral English output research from 2010 to 2025, as shown in Figure 2.

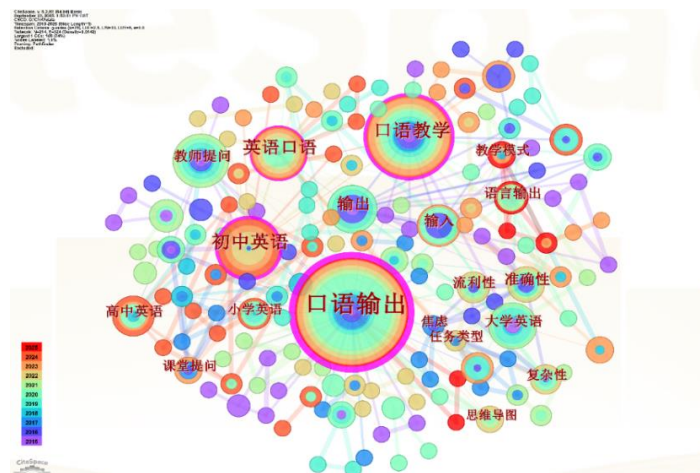


Figure 2. Keyword Co-occurrence Map

As can be seen from Figure 2, the nodes of keywords such as “oral output”, “oral teaching”, “oral English”, “junior high school English”, “output”, “input”, “teacher questioning”, “senior high school English”, and “output theory” are relatively large. This indicates that these keywords have high occurrence frequencies and are the research hotspots in the field of Chinese EFL learners' oral English output. Based on this, this study summarizes the research hotspots in the domestic field of oral English output from two dimensions—research subjects and research focus—by relying on the generated keyword co-occurrence knowledge graph and relevant reference literature.

First, in terms of research subjects, studies on Chinese EFL learners' English oral output mainly focus on four educational stages: primary school, junior high school, senior high school, and university, with attention paid to real-world English teaching scenarios. Against the backdrop of core competencies, English education has long shifted from “knowledge imparting” to “competence development”. Consequently, studies on Chinese EFL learners' English oral output primarily focus on improving the oral output proficiency of learners at different educational stages and exploring effective pathways for truly fostering oral English literacy. For instance, Zhang (2018) focused on primary school English classrooms and studied the impact of teachers' question types on primary school students' English oral output. Sun & Zhao (2022) examined the application of the situational teaching method in junior high school English oral teaching classrooms and pointed out that this method enables students to learn in a

joyful atmosphere and helps develop their English oral output competence. Li (2016) drew on the Input and Output Theories, combined with the current status of senior high school English oral teaching, and explored strategies for cultivating senior high school students' English oral output ability. Wang (2014) investigated the influence of motivation deficiency on the English oral output of non-English major university students, aiming to enhance these students' oral output proficiency.

Second, regarding research focus, relevant studies mostly concentrate on factors influencing the effectiveness of English oral output, such as affective factors, classroom questioning, and peer feedback. Huang & Zhuang (2025) focused on the relationship between students' self-efficacy and in-class oral output, and explored the role of foreign language enjoyment in English oral output. Wu (2015) examined the impact of teachers' questioning on students' oral output in junior high school English classes, and proposed that open-ended questions, effective questioning techniques, and appropriate wait-time can enhance both the quality and quantity of students' oral output. Zeng, Wang, & Tan (2020) investigated the different effects of one-way peer feedback and dialogic peer feedback on second language (L2) oral output in a mobile-assisted language learning (MALL) environment. The study showed that students are more inclined to dialogic peer feedback compared with one-way peer feedback, and this finding provides new insights for the cultivation of L2 oral output ability. From the perspective of theories and competencies, relevant studies rely on L2 acquisition theories such as the "Output Hypothesis" and explore competence indicators of English oral output, including "fluency", "accuracy", and "complexity". For example, Zhang (2015) took Swain's Output Function Hypothesis as a framework, proposed a new model for oral output teaching, and focused on the accuracy, fluency, complexity, and appropriateness of oral output.

3.3 Keyword Burst Analysis

The keyword burst graph reveals the evolution of research frontiers through burst strength and the start and end years of bursts, reflecting the emerging and rapidly developing research directions in the field. In this study, the CiteSpace 6.3.R 1 data visualization software was used to generate the keyword burst graph of Chinese EFL learners' oral English output research from 2010 to 2025, as shown in Figure 3.

Top 15 Keywords with the Strongest Citation Bursts

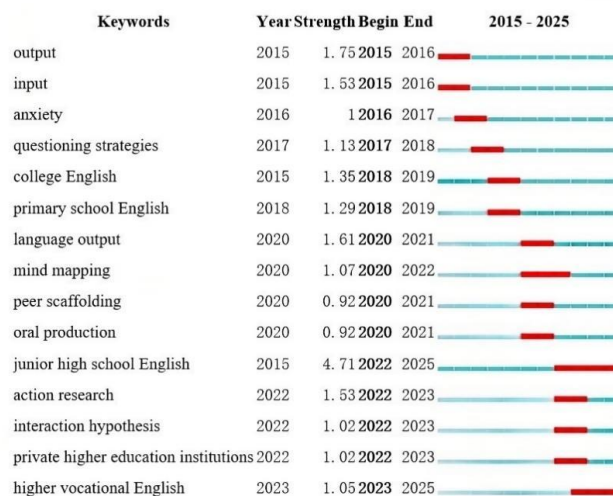


Figure 3. Keyword Burst Map

As can be seen from Figure 3, 15 burst terms are presented in the graph, including keywords, start-end years, and burst strength. After summarization, this study will analyze the research frontiers in the field of Chinese EFL learners' oral English output over the recent 15 years from three stages.

Burst Strength

Among the 15 burst terms, “junior high school English” has the highest burst strength (4.71). This indicates that during the period 2022-2025, research related to “junior high school English” has attracted significant attention from the academic community and become a frontier topic in the field of Chinese EFL learners' oral English output. For example, Wang (2022) focused on the impact of teacher questioning types on the quality and quantity of students' oral output in junior high school English classes, and put forward targeted suggestions for different scenarios. Liu & Liu (2022) explored the impact of teachers' interruption and error correction on students' oral output in junior high school English classes, proposing that teachers should grasp the appropriate timing for error correction, select effective error correction methods, and improve the quality of students' oral output. The burst strengths of other burst terms are relatively evenly distributed, and these terms also received phased attention from the academic community during their corresponding burst periods.

3.3.1 Temporal Evolution of Research Hotspots

During 2015-2019, relevant research mainly focused on second language acquisition theories such as “input”, “output”, “college English”, and “primary school English”, as well as English research in different educational stages.

During 2020-2021, keywords related to English teaching methods and learning strategies, such as “language output”, “mind mapping”, and “peer scaffolding”, began to burst. This indicates that the research focus gradually shifted to specific strategies for improving oral English output competence, promoting the development of research in a more practical direction.

During 2022-2025, the burst of keywords such as “junior high school English”, “higher vocational English”, “action research”, “interaction hypothesis”, and “private higher education institutions” shows that in recent years, domestic research on oral English output has tilted toward specific educational stages, research methods, theoretical hypotheses, and types of colleges and universities, and relevant research has become more refined and in-depth. The burst of “higher vocational English” indicates that research has paid attention to the cultivation of oral output in different educational stages, especially in vocational education, reflecting the comprehensive expansion of research.

4. Conclusion

Using CiteSpace 6.3.R1 for bibliometric analysis of 327 literatures (2010–2025) on Chinese EFL learners' oral English output, this study identifies key insights that advance existing research. It is found that the research in this field has experienced a fluctuating development process, which went through initial development and accumulation, then rapid growth, and finally precipitation and subdivision. There is still broad space for exploration and expansion in the future. Centering on the core of “oral output”, research hotspots have been deepened and expanded in multiple dimensions such as theoretical foundations, teaching practice, and influencing factors, showing a

trend of continuous refinement. However, most current studies in this field focus on practical English teaching scenarios in different educational stages, while interdisciplinary integrated research and research on the application of emerging technologies are relatively scarce, leaving considerable room for further exploration.

Over the past 15 years, research on oral English output in China has been continuously deepened and refined. From theoretical research to discussions on teaching practice, the research scope has gradually expanded. Future research on oral English output can be carried out from the following aspects:

(1) Cross-stage and Interdisciplinary Research

Research on oral English output can strengthen the connection and comparison between different educational stages, such as primary school, junior high school, senior high school, higher vocational education, and university. It can explore the inherent laws of oral output cultivation in different stages to realize cross-stage research. At the same time, research on oral English output can draw on theories from related disciplines such as psychology to broaden research perspectives and achieve interdisciplinary research.

(2) Artificial Intelligence and Oral Output

Generative Artificial Intelligence (GAI), especially the generative artificial intelligence technology represented by Large Language Models (LLMs), is exerting a revolutionary impact on foreign language education and teaching (Kong, 2024). In the future, research in the field of oral English output should be closely combined with digital tools. It is necessary to analyze how digital tools can more effectively promote oral output, explore the new characteristics of oral output in the digital environment, and provide scientific guidance for practical oral teaching scenarios.

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