

Trends and Patterns of Integrated Curriculum in Language Teaching: A Bibliometric Study

Han Songjie¹; Mohd Afifi bin Bahurudin Setambah²

Faculty of Human Development, Universiti Pendidikan Sultan Idris (UPSI), Malaysia

DOI: <https://doi.org/10.47772/IJRISS.2026.100500052>

Received: 25 April 2026; Accepted: 01 May 2026; published: 22 May 2026

ABSTRACT

This study adopts a bibliometric perspective and focuses on the research topic of curriculum integration in language teaching. This study thoroughly investigates the present research scene and developmental patterns by methodically evaluating and analysing pertinent literature from specified data sources and using scientific knowledge mapping tools such as CiteSpace and VOS viewer. The study reveals the primary academic forces and cooperative networks inside the field of educational language teaching research by concentrating on the distribution patterns of core authors, top journals, major countries, and institutions. Keyword co-occurrence analysis and clustering study help to clearly show the present research hotspots and their internal interactions, so pointing up possible development directions including multidisciplinary integration and technologically advanced language learning. Further more underlined in the study are research shortages in fields including student learning motivation and teacher professional development. Through a summary of the current knowledge structures and developmental paths, this study also tackles problems such as regional inequalities and research fragmentation. It seeks to offer a methodical and all-encompassing reference for the ongoing development of the discipline, therefore fostering creativity in educational theory and practice. The work has important theoretical and pragmatic consequences.

Keywords: Bibliometric Analysis, Education, Language Teaching, Integrated Curriculum.

INTRODUCTION

Research on language instruction within the field of education has entered an unparalleled phase of growth among the continuous deep reforms in worldwide education and the fast development of information technology (Reynolds et al., 2023). Language has become more and more firmly established in educational institutions since it is a vital forum for communication and intellectual development. Language instruction not only provides a means of knowledge transfer but also is extremely important in developing students' cross-cultural communication skills, critical thinking, and innovative capacity in the framework of accelerating globalisation and multicultural integration (Tan, 2023). Thus, a thorough analysis of the present situation of language-teaching research in education, identification of its developmental trajectory, research hotspots, and developing trends, has great theoretical and practical relevance.

Research in educational language teaching has shown tendencies of diversification, multidisciplinary integration, and internationalisation with the change of educational philosophies and instructional approaches. How scientific instructional design, technological empowerment, and multidisciplinary approaches could improve the efficacy and adaptability of language acquisition has drawn more and more importance (Warschauer & Xu, 2024). A

significant amount of excellent research has surfaced in this process of evolution in fields including theoretical breakthroughs in language instruction, investigations of instructional strategies, teacher professional development, and student learning-motivation stimulation. But given the tremendous increase in publications and the fast spread of research topics, conventional qualitative review techniques are insufficient to adequately reflect the general field structure and evolutionary patterns.

Against this background, using bibliometric approaches to methodically review and quantitatively evaluate research on educational language teaching has become a necessary strategy for mapping its knowledge structure, research emphases, and developmental paths (Chen, 2023). This work uses scientific knowledge-mapping tools including CiteSpace and VOS viewer to analyse 243 extremely important papers taken from the Web of Science Core Collection using scientific knowledge-mapping techniques. On issues including core authors, top journals, keyword clustering, and the geographical distribution of nations and institutions, multi-dimensional studies were performed. By means of objective and quantitative data mining, the study intends to define a whole picture of the present situation and developing trends in educational language-teaching research, pinpoint top academic forces and frontier subjects, and so strengthen the knowledge system of the field.

Specifically, this study focusses on the following aspects: (1) exploring the distribution characteristics and academic contributions of core author groups to identify major research forces and collaborative networks; (2) analysing the publication patterns of high-impact journals and key research outputs to uncover mainstream communication channels and quality benchmarks; (3) using keyword co-occurrence and clustering analysis to map current research hotspots and potential growth areas; and (4) illustrating the degree of participation and collaboration patterns of countries and institutions worldwide, thereby revealing the international research landscape and regional features.

By means of multi-dimensional and multi-level systematic analysis, this paper not only presents a thorough and methodical reference framework for next studies in the field of educational language teaching but also offers pragmatic theoretical direction for legislators, teachers, and reformers of education. The results of this study should encourage knowledge accumulation and innovation inside the area, thereby supporting the sustained development of world education and the deepening of cross-cultural understanding.

DATA SOURCES AND METHODS

Data Sources

The main data source for this study was the Web of Science Core Collection. As a widely recognized academic database, Web of Science indexes high-impact publications across major disciplines and provides reliable bibliographic data for bibliometric and knowledge mapping analyses (Yan & Wang, 2023). The use of this database ensured the rigor, consistency, and traceability of the data collection process.

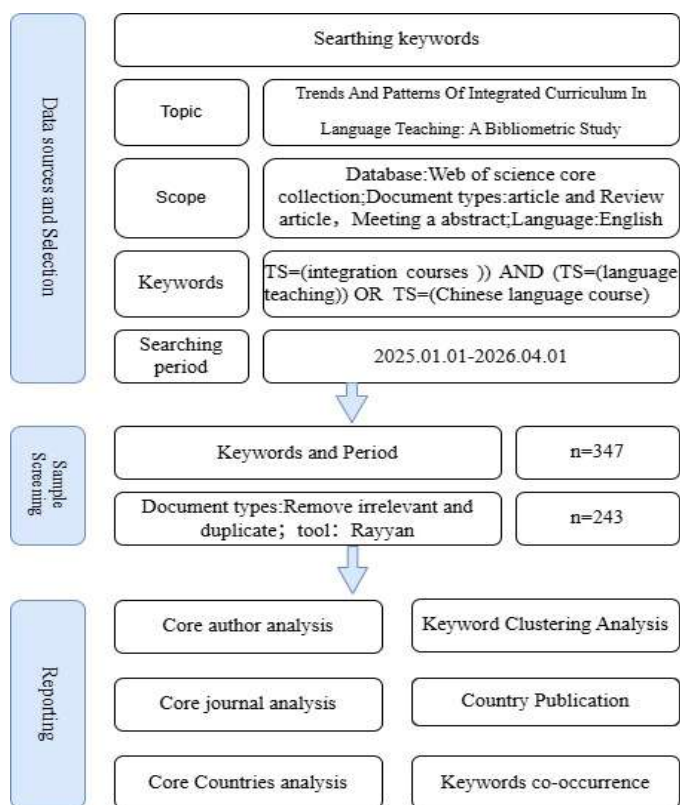
The data collection and analysis procedure was organized into three stages: data sources and selection, sample screening, and reporting. In the first stage, the research topic was defined as “Trends and Patterns of Integrated Curriculum in Language Teaching: A Bibliometric Study.” The search was conducted within the Web of Science Core Collection, and the scope was limited to articles, review articles, and meeting abstracts published in English. The retrieval period was set from January 1, 2025, to April 1, 2026, in order to capture recent research developments related to curriculum integration in language teaching. The search formula used in this study was “(TS=(integration courses)) AND (TS=(language teaching)) OR TS=(Chinese language course).” Based on the keywords and the selected time period, the initial search yielded 347 records.

In the second stage, the retrieved records were screened and refined to ensure the relevance and quality of the dataset. Studies that were not directly related to curriculum integration in language teaching were excluded, particularly those focusing on medical, natural science, or other non-educational contexts. Duplicate records and publications with incomplete bibliographic information were also removed with the assistance of Rayyan. After this screening process, 243 records were retained as the final dataset for bibliometric analysis. This filtering process helped ensure that the selected publications were thematically aligned with the research focus and suitable for subsequent visualization and knowledge mapping.

In the third stage, the final dataset was analyzed from multiple bibliometric perspectives. The reporting process included core author analysis, core journal analysis, core country analysis, country publication analysis, keyword co-occurrence analysis, and keyword clustering analysis. These analytical dimensions were selected to identify the major contributors, publication outlets, geographical distribution, collaboration patterns, and emerging research themes in the field. Through this process, the study provides a structured overview of the research landscape and development trends of curriculum integration in language teaching, offering a basis for identifying current hotspots and future research directions.

The overall data source, screening procedure, and reporting framework are presented in Figure 1.

Figure 1. Workflow of Bibliometric Analysis on Curriculum Integration in Language Teaching



Analysis Methods

This work systematically analysed the preprocessed bibliographic data using the bibliometric analysis approach in conjunction with two important scientific knowledge mapping tools, CiteSpace and VOSviewer (Ding & Yang, 2020).

CiteSpace, a widely used tool for bibliometric visualization and burst detection, effectively reveals the knowledge structure, research hotspots, and evolutionary pathways in the field of curriculum integration in

language teaching (Chen, 2018). CiteSpace supports a variety of functions, including co-citation analysis, burst term detection, and timeline analysis, which enable intuitive visualization of thematic focus shifts and knowledge evolution trends within research on integrated curriculum and language teaching.

VOSviewer, on the other hand, is primarily applied to keyword co-occurrence analysis, author collaboration network analysis, and citation relationship visualization. It is particularly advantageous for handling large-scale bibliographic datasets due to its ease of use and clear visual outputs (Khuan, Bakri, & Lusianawati, 2023). In this study, VOSviewer was utilized to construct keyword co-occurrence networks, author collaboration maps, and journal citation networks, further deepening the understanding of the internal structure and collaboration patterns within the field of curriculum integration in language teaching.

By integrating CiteSpace and VOSviewer, this study conducted a comprehensive analysis at both the macro level, such as the evolution of knowledge structures, and the micro level, such as author collaboration and hotspot clustering. This dual-level approach ensured that the findings achieved a high degree of scientific rigor, systematicity, and forward-looking insights for understanding the development trends of curriculum integration in language teaching.

RESULTS ANALYSIS

Descriptive Statistics

A total of 243 documents were collected in this study, authored by 596 researchers affiliated with 301 institutions across 43 countries, and published in 89 different journals. These documents cited a total of 12,524 references, which were distributed across 5,252 different journals.

Core Author Analysis

Table 1. Bibliometric Analysis of Core Authors in the Field of Educational Language Teaching Research

Rank	Author	Documents	Citations	Average Citation/Publication
1	Yuan rui	7	35	5
2	Zhang xiaodong	5	8	1.6
3	Hwang gwo-jen	3	47	15.7
4	Li mo	3	20	6.67
5	Wang kailun	3	6	2
6	Yu shulin	3	7	2.3
7	Gong qian	2	13	6.5
8	Han ye	2	91	45.5
9	Innes pamela	2	7	3.5
10	Jiang lianjiang	2	35	17.5

Table 1 presents the bibliometric analysis results of the most representative core authors in the field of curriculum integration in language teaching. It covers the number of publications, total citations, and average citations per article for each author, highlighting the distribution of academic output and influence within this research area.

In terms of overall trends, the field exhibits a classic “Pareto Principle” pattern, where a small group of authors contributes a disproportionately large share of research impact, forming a relatively concentrated group of academic leaders.

Yuan, Rui, as the only author with seven publications, has accumulated 35 citations with an average of 5 citations per paper, demonstrating sustained research productivity and foundational influence in the field of curriculum integration in language teaching.

His work may have addressed key topics such as integrated curriculum design, interdisciplinary teaching models, or curriculum-based language learning practices, contributing to the construction of the field’s knowledge base.

In contrast, although Hwang, Gwo-Jen has published only three articles, his total citation count reached 47, with an average of 15.7 citations per paper. This high output–high impact characteristic suggests that his research results have strong dissemination power and practical value, possibly focusing on current hotspots such as technology-enhanced curriculum integration, digital language learning, or integrated learning environments, and have been widely recognized by peers.

Notably, Han, Ye, despite publishing only two articles, achieved 91 citations, with an exceptionally high average of 45.5 citations per article, significantly surpassing other authors. This figure indicates that Han’s research is highly representative and groundbreaking, potentially serving as key reference literature within a specific subfield of language teaching curriculum integration and exerting profound influence on subsequent studies.

Similarly, Li, Mo (three articles, average 6.67 citations) and Gong, Qian (two articles, average 6.5 citations) also demonstrate above-average academic impact, reflecting a solid research foundation and recognition within the field, with the potential to grow into highly influential scholars.

By comparison, although Zhang, Xiaodong has published five papers, the total citation count is only eight, averaging 1.6 citations per paper. Wang, Kailun and Yu, Shulin also exhibit relatively low citation rates, suggesting that their research has not yet generated strong citation effects within a short period. This may be attributed to factors such as more specialized research topics, limited dissemination within curriculum integration studies, relatively narrow publication audiences, or emerging research directions that have not yet accumulated sufficient citations.

Overall, these core authors constitute an important academic force in the current research field of curriculum integration in language teaching. Their work partially reflects the major themes, methodological developments, and theoretical expansions within this domain, especially in relation to integrated curriculum design, interdisciplinary language learning, technology-supported instruction, and curriculum innovation.

Future studies could further focus on the representative papers and research trajectories of these authors, analyzing their adopted methodologies, collaboration networks, and thematic evolution trends to better grasp the field’s frontier dynamics and development potential.

For authors who have not yet achieved high citation rates, their sustained publishing activity still reflects long-term engagement with curriculum integration and language teaching research; with the accumulation and wider adoption of their work over time, their academic influence is expected to grow.

Core Journal Analysis

Table 2. Influence Ranking of Core Journals in Educational Language Teaching Research

Rank	Source	Documents	Citations	Average Citation/Publication
1	system	21	159	7.6
2	education and information technologies	15	83	5.5
3	computer assisted language learning	10	136	13.6
4	language teaching research	10	47	4.7
5	applied linguistics review	8	78	9.8
6	journal of english for academic purposes	7	42	6
7	asia-pacific education researcher	6	38	6.3
8	language learning & technology	6	24	4
9	international journal of bilingual education and bilingualism	5	140	28
10	recall	5	62	12.4

In the core journal analysis presented in Table 2, it is evident that the academic influence and research activity across journals in the field of language teaching show significant variations. In terms of publication volume, System ranks first with 21 articles, demonstrating its sustained focus and high research output capacity in the area of language education. This indicates that System has become a major publication platform for researchers in language education, attracting a substantial number of submissions and playing a key role in advancing scholarly development within the field.

Education and Information Technologies and Computer Assisted Language Learning rank second and third with 15 and 10 articles, respectively, further confirming the deepening integration between language teaching research and educational technology, as well as computer-assisted language learning tools.

Regarding the average number of citations per article, the International Journal of Bilingual Education and Bilingualism stands out prominently, with an average of 28 citations per article—substantially higher than that of other journals—indicating its strong influence in the field of bilingual education. Research published in this journal likely holds significant reference value in both theoretical innovation and practical application. Similarly, Computer Assisted Language Learning (average 13.6 citations) and ReCALL (average 12.4 citations) also exhibit high recognition within the academic community, reflecting their specialization and citation value in studies related to language technology support and computer-assisted language learning.

Other journals such as Applied Linguistics Review, Journal of English for Academic Purposes, and Asia-Pacific Education Researcher also demonstrate respectable citation levels, each with an average exceeding six citations per article, indicating their stable academic influence in specialized areas of language teaching research. Language Teaching Research and Language Learning & Technology exhibit moderate performance in both publication volume and citation frequency, suggesting that there remains potential for further development in teaching methodology research and technology integration.

Overall, the core journals mentioned above have played an active role in promoting the in-depth development of research in language teaching and education. They provide researchers with diversified publication outlets and reflect the multidimensional directions currently shaping language education research. A comprehensive analysis of both publication volume and citation frequency reveals a landscape consisting of journals characterized by broad research coverage (e.g., System) as well as journals marked by depth and high academic

impact (e.g., International Journal of Bilingual Education and Bilingualism), offering valuable references for researchers in selecting journals for submission and tracking scholarly hotspots.

Core Country Analysis

Table 3. Publication Volume and Influence Ranking of Core Countries in Educational Language Teaching Research

Rank	Source	Documents	Citations	Average Citation/Publication
1	Peoples R China	150	867	5.78
2	USA	37	137	3.702702703
3	England	17	224	13.17647059
4	Australia	14	96	6.857142857
5	Taiwan	12	169	14.08333333
6	Spain	8	66	8.25
7	New Zealand	7	73	10.42857143
8	Iran	5	34	6.8
9	Turkey	5	45	9
10	Thailand	4	17	4.25

As shown in Table 3, China ranks first with 150 publications, demonstrating its high level of activity and substantial research investment in the field of curriculum integration in language teaching. With the advancement of educational reforms and the rapid development of educational informatization in recent years, scholarly attention toward integrated curriculum design, interdisciplinary language teaching, and technology-supported language learning in China has continued to grow. A substantial number of studies focusing on teaching models, interdisciplinary integration, and the application of educational technologies have emerged, solidifying China's international academic position in this field.

The United States ranks second with 37 publications, continuing to demonstrate strong capabilities in integrating educational technology, curriculum innovation, and language learning research. The United Kingdom, with 17 publications, ranks third. Although its publication volume is relatively smaller, it stands out in terms of average citations per article, reaching 13.18—the highest among all countries. This figure reflects the UK's emphasis on theoretical depth and academic originality in curriculum integration and language teaching research, indicating strong international influence and leadership.

Notably, Taiwan recorded 12 publications with 169 total citations, achieving an average of 14.08 citations per article, indicating high research quality and significant academic attention. This achievement is likely related to Taiwan's sustained research efforts in areas such as bilingual education in Chinese-speaking contexts, integrated curriculum practice, and the integration of digital tools in language teaching. Similarly, New Zealand (10.43 citations), Spain (8.25 citations), and Turkey (9 citations) also demonstrate strong research impact. Although their publication volumes are relatively modest, their research has been highly recognized internationally, suggesting distinct characteristics and strong thematic relevance in language teaching curriculum integration.

Australia, with 14 publications and an average of 6.86 citations per article, ranks in the upper-middle range, showing steady contributions to research combining educational technology, interdisciplinary curriculum design, and language teaching. Iran (6.8 citations) and Thailand (4.25 citations) also exhibit reasonable citation averages



			Strength		
1	English	37	93	Highly associated with 'learners,' 'language,' and 'students,' it is the most widely used target language keyword in language teaching research.	Reflects the predominant focus on English as a foreign/second language teaching, positioning it as the mainstay of global language education research.
2	Learners	32	96	Closely linked to keywords such as 'motivation,' 'beliefs,' and 'perceptions,' representing a learner-centered research orientation.	Emphasizes learners' agency in the language learning process and forms the basis for studies on learning strategies, differentiated instruction, and motivation.
3	Language	30	78	Constitutes the core discipline of the research, frequently co-occurring with 'education,' 'Chinese,' and 'English.'	Encompasses multilingual teaching research, including second language acquisition, language policy, and intercultural comparisons.
4	Education	29	62	Connects with 'language,' 'students,' and 'motivation,' highlighting its macro background and application context.	Serves as the institutional and practical platform for language studies, reflecting the deep integration between language education and educational studies.
5	Students	29	89	Closely connected with 'learners,' and frequently co-occurs with 'perceptions' and 'beliefs.'	Represents research on learner diversity, widely applied in classroom-based empirical studies, learning experiences, and assessment analyses.
6	Chinese	22	65	Commonly co-occurs with 'language,' 'education,' and 'learners,' being a core keyword in Chinese language studies and international Chinese education.	Focuses on the teaching of Chinese as a first or second language, reflecting the development of Chinese language education both domestically and internationally.
7	Motivation	22	52	Connected to 'learners,' 'students,' and 'beliefs,' representing a key node in learning psychology research.	A crucial entry point for exploring students' motivational mechanisms in language learning, widely applied in instructional design and intervention studies.
8	Time-course	17	23	Frequently associated with 'language processing' and 'longitudinal study.'	Used in research on temporal variables in language acquisition, reflecting a focus on learning progress and language processing dynamics.

9	Perceptions	13	35	Forms a cognitive research module with 'students,' 'teachers,' and 'beliefs.'	Highlights learners' subjective evaluations of teaching content, strategies, and outcomes, often used in survey-based research designs.
10	Beliefs	12	26	Closely linked to 'learners,' 'teachers,' and 'motivation.'	An important concept in teacher and student belief research, uncovering educational philosophies and cognitive differences underlying language teaching.
11	Integration	18	54	Highly associated with "language teaching," "education," "technology," and "interdisciplinary," forming a central node in curriculum integration research	Highlights the importance of curriculum integration in language teaching as a key approach to promoting interdisciplinary learning, enhancing knowledge transfer, and supporting instructional innovation

Overall, these keywords demonstrate close internal connections within the high-frequency co-occurrence network, collectively forming the core thematic cluster of current educational language teaching research. Among them, English—the most frequently occurring keyword—firmly occupies the thematic center, reflecting the significance of English education in the context of globalization. Correspondingly, Chinese also exhibits a high level of attention, indicating the simultaneous development of both international Chinese education and local language education research.

Learners and Students construct a learner-centered research network, frequently co-occurring with keywords such as Motivation, Beliefs, and Perceptions. This reflects an in-depth exploration of individual psychological characteristics, learning experiences, and cognitive construction within language education research. The emergence of this learner-centered research paradigm marks a shift from a teacher-centered to a learner-centered educational philosophy, providing theoretical support for instructional interventions, assessment systems, and feedback mechanisms.

Integration, Language and Education together constitute the macrostructural background of the research, highlighting the interdisciplinary nature of language teaching studies, which encompass areas such as language policy, intercultural communication, and instructional design. Keywords like Time-course further reflect the deepening and specialization of research paradigms, indicating that researchers have begun to re-examine issues of language acquisition from temporal, processual, and developmental perspectives, thus expanding the traditional boundaries of language teaching research.

Structurally, these core keywords present a three-layered nested relationship: "macro educational background — learner perspectives — language targets and cognitive mechanisms." This framework not only reflects current research hotspots but also provides a structured theoretical perspective and pathway reference for future studies.

Keyword Clustering Relationships

The Figure 3 below shows the visual representation of the keyword clustering.

Figure 3. Keyword Clustering Visualization

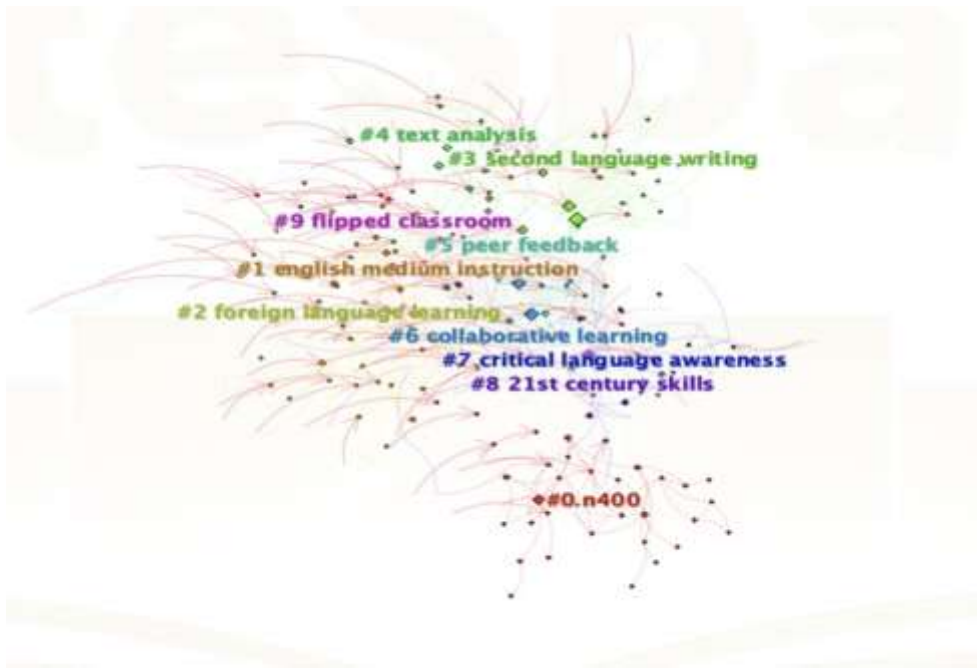


Table 5. Keyword Clustering Analysis and Research Directions

NO.	Topic Name	Keywords	Research Direction
0	Neurolinguistics and Language Processing	n400, brain, semantic processing, ERP	Explore the neural mechanisms underlying language comprehension. Focus on how brain signals (e.g., N400) reflect semantic processing in language learners. Promote interdisciplinary research connecting neurolinguistics, cognitive science, and language education.
1	English Medium Instruction (EMI)	english medium instruction, CLIL, subject integration	Investigate the impact of using English as the medium of instruction in non-native settings. Explore content-language integration strategies and their effects on learners' academic performance and language development.
2	Foreign Language Learning	foreign language learning, vocabulary, grammar, reading comprehension	Focus on the process of second/foreign language acquisition. Study learners' linguistic development, instructional strategies, and effectiveness of interventions in vocabulary and grammar learning.
3	Second Language Writing	second language writing, academic writing, coherence, writing instruction	Examine the development of writing skills in L2 contexts. Emphasize writing pedagogy, coherence-building strategies, and task-based writing instruction.
4	Text Analysis and Discourse	text analysis, discourse, genre, linguistic features	Study the structural and functional characteristics of texts in language teaching. Promote genre-based pedagogy and discourse analysis to support learners' academic literacy.
5	Peer Feedback and Assessment	peer feedback, assessment, revision,	Investigate the role of peer assessment in language learning. Focus on how peer feedback contributes to



		feedback types	learner autonomy, metacognition, and writing improvement.
6	Collaborative Learning and Interaction	collaborative learning, group work, interaction, communication	Explore cooperative learning models in language classrooms. Analyze the impact of peer interaction on learning outcomes and communicative competence.
7	Critical Language Awareness	critical language awareness, identity, ideology, language and power	Examine the sociopolitical dimensions of language education. Promote critical pedagogy by exploring how language reflects and reinforces identity, ideology, and power relations.
8	21st Century Skills in Language Education	21st century skills, creativity, critical thinking, digital literacy	Address the integration of transversal competencies into language education. Develop curricula that promote innovation, problem-solving, and digital communication skills.
9	Flipped Classroom and Technology Integration	flipped classroom, blended learning, technology-enhanced learning	Study the transformation of language instruction through flipped learning environments. Investigate student engagement, learning autonomy, and instructional design in tech-supported classrooms.

From a macro perspective, these clusters comprehensively reflect the multidimensional issues and developmental pathways of contemporary research on curriculum integration in language teaching, demonstrating both a solid theoretical foundation and extensive practical applicability. Among them, second language learning (Cluster 2), second language writing (Cluster 3), and text analysis (Cluster 4) constitute the core zones of integrated language curriculum research. These areas engage in in-depth explorations of language acquisition mechanisms, the development of academic competencies, and the optimization of instructional strategies, forming the most stable pillars of curriculum-integrated language teaching studies.

At the same time, research on English-Medium Instruction (EMI, Cluster 1) closely aligns with the context of internationalized education, focusing on the integration of content and language within curriculum design and instructional practices. Particularly within education systems in non-English-speaking countries, the widespread implementation of EMI brings new challenges and opportunities for curriculum integration and language development. The rise of critical language awareness (Cluster 7) reflects a deepening shift from cognitive to social dimensions in language education, emphasizing the intricate relationships among language, identity, ideology, and social structures, and promoting the realization of educational equity and social justice within integrated curriculum contexts.

Of particular note is the cluster on neurolinguistics and language processing mechanisms (Cluster 0), representing a cutting-edge interdisciplinary area that provides scientific insights into learners' cognitive processes. Research findings in this area are expected to further guide the personalization and refinement of integrated language curriculum design. Collaborative learning and peer assessment (Clusters 5 and 6) illustrate the widespread application of constructivist pedagogies in curriculum-integrated language classrooms, highlighting the vital roles of teacher-student interaction, group collaboration, and mutual assessment in enhancing learning motivation and effectiveness.

The clusters on 21st-century core competencies (Cluster 8) and flipped classrooms with technological integration (Cluster 9) focus on future-oriented educational directions and technological transformation pathways. They emphasize the necessity of fostering innovation, information literacy, and learner autonomy within curriculum-

integrated language education, indicating a shift from traditional classroom settings toward more open, flexible, and digitally supported integrated learning environments.

Overall, these clusters are interwoven and mutually reinforcing, outlining a research blueprint that spans from language cognition to social significance, and from instructional strategies to technological innovation within the framework of curriculum integration in language teaching. They not only reveal current research hotspots but also provide valuable directions for future curriculum integration practices, interdisciplinary teaching models, and instructional reform. Particularly against the backdrop of educational globalization, technological advancement, and the learner-centered paradigm, the theoretical and practical significance of curriculum integration in language teaching is expected to become increasingly prominent.

DISCUSSION AND IMPLICATIONS

Discussion

Based on keyword co-occurrence analysis and clustering visualization techniques, this study systematically reviewed and deeply interpreted the core topics, research pathways, and developmental trends in the field of curriculum integration in language teaching. The findings indicate that the field has formed multiple clusters with clearly defined research themes, such as "Second Language Writing," "English-Medium Instruction (EMI)," "Text Analysis," and "Critical Language Awareness," presenting a diversified and interdisciplinary developmental pattern within integrated curriculum research contexts.

However, from the perspectives of cluster structure and network density, the connections between different research directions remain relatively loose, particularly in terms of curriculum integration across thematic domains. In areas such as "Neurolinguistics," "Collaborative Learning," and "Educational Technology Integration," there is still a lack of high-level integrative research, which constrains synergistic innovation and theoretical construction in curriculum-integrated language teaching. Moreover, although emerging frontiers such as "Critical Language Awareness" and "21st-Century Skills" are evident in the keyword distribution, research on themes such as "Cultural Diversity," "Regional Educational Disparities," and "Cross-linguistic Transfer" remains insufficient, especially from the perspective of integrated curriculum design and interdisciplinary application, and a systematic theoretical framework and practical guidance pathways have yet to be established.

Additionally, although high-frequency keywords like "Learners," "Motivation," and "Writing" reflect a learner-centered educational philosophy, discussions at the macro level—such as teacher roles, policy support, and resource allocation—are relatively scarce within the context of curriculum integration in language teaching. Future research should expand and deepen the research objects and perspectives by incorporating multi-level curriculum integration frameworks, policy-driven support mechanisms, and cross-disciplinary instructional models.

Future Research Directions

From an academic perspective, future research should further promote interdisciplinary integration and theoretical fusion in the field of curriculum integration in language teaching. It is recommended to combine second language acquisition theories with frameworks from neurolinguistics, educational technology, and sociology, thereby enhancing the systematicity and forward-looking nature of integrated language curriculum

research. In terms of research methods, greater methodological diversity should be encouraged, such as the incorporation of longitudinal study designs, eye-tracking experiments, and corpus linguistics analyses, to improve the scientific rigor, precision, and explanatory power of empirical studies in curriculum-integrated language learning contexts.

Future studies on educational practice could delve deeper into the ways that curriculum-integrated instructional interventions can effectively support students' metacognitive development, collaborative skills, and autonomy. In order to empirically support the idea of "learning-centered instruction," instructional design research should further examine tactics such as project-based learning, peer assessment, and collaborative learning within integrated curriculum frameworks in language teaching across diverse educational contexts.

The impact mechanisms of digital infrastructure construction on the balance between urban and rural education, as well as the roles and strategies of research organisations and higher education institutions in fostering international collaboration, teacher training, and the development of teachers' research competence, should be the focus of future research from the perspectives of educational policy and teacher development in advancing curriculum integration in language teaching.

Future research in language teaching should prioritize curriculum integration, interdisciplinary alignment, methodological innovation, and the practical application of research findings, thereby driving a paradigm shift from conventional "teaching-learning" models to integrated models such as "understanding-expression-application-social practice". This transformation would provide a strong theoretical foundation and practical pathways for constructing educational ecosystems that are diverse, open, intelligent, and equitable within curriculum-integrated language education.

CONCLUSION

This study conducted a bibliometric analysis of 243 publications from the Web of Science Core Collection using CiteSpace and VOSviewer, focusing on curriculum integration in language teaching. The findings show that this field has formed several major research themes, including second language learning, second language writing, text analysis, English-Medium Instruction, critical language awareness, and technology-enhanced language learning. Overall, the field demonstrates a growing trend toward interdisciplinary integration, learner-centered instruction, and technology-supported teaching.

At the same time, the study reveals several limitations. The connections among different research themes remain relatively loose, the depth of theoretical integration needs to be strengthened, and research on teacher development, policy support, resource allocation, and practical implementation pathways remains insufficient. These findings suggest that although the field has established a solid research foundation, further development is needed in terms of systematicity, practicality, and international collaboration.

Overall, this study maps the knowledge structure and development trends of curriculum integration in language teaching, providing visual evidence and theoretical references for future research. Future studies may further focus on the construction of curriculum integration models, interdisciplinary teaching practices, technology-enhanced language learning, and the development of learners' comprehensive competencies, thereby promoting language teaching toward a more open, integrated, and innovative direction.

REFERENCES

1. Chen, J. (2023). Sketching the landscape of corrective feedback by bibliometric analysis and structural topic modeling. *Journal of Language Teaching*, 3(10), 51-67. <https://doi.org/10.54475/jlt.2023.029>
2. Fei, X., Mahfoodh, O. H. A., & Ganapathy, M. N. G. (2024). Bibliometric evaluation of publications on second-language vocabulary acquisition (2000–2024). *Language Teaching Research Quarterly*, 45, 176–192. <https://doi.org/10.32038/ltrq.2024.45.10>
3. Reynolds, B. L., Xie, X., & Pham, Q. H. (2023). The potentials for incidental vocabulary acquisition from listening to computer-science EMI lectures. *Frontiers in Psychology*, 14, 1219159. <https://doi.org/10.3389/fpsyg.2023.1219159>
4. Tan, C. W. (2023). Large language-model-driven classroom flipping: Empowering student-centric peer questioning with flipped interaction (arXiv 2311.14708). <https://doi.org/10.48550/arXiv.2311.14708>
5. Warschauer, M., & Xu, Y. (2024). Artificial intelligence for language learning: Entering a new era. *Language Learning & Technology*, 28(2), 1-4. <https://hdl.handle.net/10125/73569>
6. Warschauer, M., & Xu, Y. (2024). Artificial intelligence for language learning: Entering a new era. *Language Learning & Technology*, 28(2), 1–4. https://www.lltjournal.org/item/10125-73569/?utm_source=chatgpt.com
7. Yuan, Y. (2024). Bibliometric and visualized analysis of research on English learning under mobile-assisted language learning based on CiteSpace. *International Journal of Academic Research in Progressive Education and Development*, 13(4), 624–639. <https://hrmars.com/index.php/IJARPED/article/view/22985/Bibliometric-and-Visualized-Analysis-of-Research-on-English-Learning-Under-Mobile-Assisted-Language-Learning-based-on-CiteSpace>
8. Yue, N., Bazari, N. B. A., Sun, X., & Xia, L. (2024). A bibliometric analysis of cross-cultural adaptation research on international students (1990–2024). *International Journal of Academic Research in Progressive Education and Development*, 13(4), 1078–1101. https://hrmars.com/papers_submitted/23166/a-bibliometric-analysis-of-cross-cultural-adaptation-research-on-international-students.pdf