The Key Elements About How to Improve English Language Educators' Teaching Competence Through Continuous Professional Development (CPD)

QIN LI[1], Lubna Ali Mohammed[2]

Abstract

This study aims to assess the impact of Continuing Professional Development (CPD) training on the teaching competence of English language educators at application-oriented universities in Henan, China. By employing a systematic literature review and bibliometric analysis, the study gathers and evaluates relevant data to understand the current state of CPD in English language instruction within this specific geographical and educational context. The research analyzes previous trends and their effects, identifying key areas for future refinement and targeted development.The study provides significant insights and practical implications for enhancing English language teaching competence through CPD in Henan and within the broader educational landscape of China. The findings indicate that recent publications from 2022 to 2024 have a limited citation impact, suggesting a lack of studies specifically addressing CPD's role in English language training. Addressing this gap will help in the development of customized CPD programs for application-oriented universities, aligning with China's strategic goals to improve English proficiency and promote international business and technological capabilities.The study also highlights that CPD research often draws insights from psychology and medical training, implying that a multidisciplinary approach can enhance the effectiveness of CPD for English language instruction. The relatively declining citation impact of Chinese educational research compared to European studies underscores the need for Chinese institutions to strengthen global collaborations and publish important findings in accessible journals to increase the global visibility and influence of their CPD advancements.

Keywords: *English Language Educators, Teaching Competence, Continuous Professional Development (CPD), Application-Type Universities, Improve.*

Introduction

Research Background

The literature reviews current and relevant studies on the role of Continuous Professional Development (CPD) in enhancing teaching competence. By synthesizing existing literature on CPD, improvements in pedagogy, teacher engagement, and adaptability to practical teaching environments, this review provides a background for understanding how tailored CPD approaches address the unique challenges faced by English language educators in Application-Type Universities in Henan. It highlights gaps and emerging trends relevant to enhancing teaching competence. Thus, CPD is a continuous, systematic, and deliberate process by which professionals develop their skills, knowledge, and competencies to improve their readiness and flexibility to evolving job requirements. This concept has become crucial as modern educational settings increasingly prioritize teacher readiness and lifelong learning to ensure instructors remain effective in various instructional contexts (Dunne, 2024; McChesney et al., 2024). In education, CPD encompasses various functions, including training, reflective practices, collaborative learning, and professional communities, which promote pedagogical development and professional advancement (Gu, 2023). Some key factors of CPD must be addressed by institutions, while others depend on teachers' self-motivated efforts to update their skills, fostering a culture of continuous growth and development within the profession (Day et al., 2023; Lafferty et al., 2024).

---

[1] Faculty of Social Science Arts and Humanities, Lincoln University College, 47301 Petaling Jaya, Selangor, Malaysia, Email: 675397275@qq.com

[2] Faculty of Social Science Arts and Humanities, Lincoln University College, 47301 Petaling Jaya, Selangor, Malaysia, Email: lubnaali@lincoln.edu.my

Continuous Professional Development (CPD) and Enhancing Teaching Competence

Various studies on CPD in language instructors, particularly English language teachers, have demonstrated the importance of improving teachers' capacity for enhancing student performance. A study by Yang (2021) argues that instructors often face common challenges in schools and CPD, with a significant gap between their CPD needs and institutional support. This highlights the necessity of social settings that address teachers' psychological needs to maintain their motivation for CPD. Yuan and Liu (2024) found that most Chinese college TEFL teachers struggle with academic advancement, personal achievement, and societal acknowledgment, driven by intrinsic motivation and identified regulation. They identified five motivational orientations, ranging from cognitive perception to societal responsibility. The study indicates that teachers encounter school-based challenges and CPD-related issues, underlining the gap between their CPD needs and institutional support. It suggests that social conditions that help meet teachers' psychological needs are required to motivate CPD. The learning experience of Chinese in-service university professors who participated in a three-month short-term CPD project in Canada revealed significant insights. The findings indicate that language and translation challenges, course arrangements, training content, personal interests, cultural differences, and the home university's requirements impacted the teacher trainees' learning (Yuan & Gao, 2023).

A research study on teacher professional development identified at least 5 to 7 basic design areas, such as collaborative tasks and content-based learning, that are essential for effective PD. The study focused on universal PD traits and suggested that teacher learning theories should be developed to improve PD research, policy, and practice (Asterhan & Lefstein, 2024). Mohammed and Gutema (2023) explored the need assessment and challenges in CPD for elementary English language teachers using a blended approach. They suggested a strong demand for in-service CPD to improve teachers' English proficiency and pedagogical skills, supported by experts during the period. The study also revealed that instructors face significant hurdles in attending CPD training. Another study evaluated reflective practice (RP) in promoting professional development among Mexican English Language Teaching (ELT) instructors and two in-service instructors from the U.S. and Ireland working in Mexico. Using classroom observations, feedback, interviews, and informal conversations, the study found that teachers who were responsive to re-examining their teaching approaches and practices tended to be reflective. Thus, their individual and professional development was further supported by reflective involvement, collaboration, and peer modeling (Godínez Martínez, 2022).

Wang et al. (2024) found that personal factors pose significant challenges to resilience in Chinese and Iranian EFL teachers. The research outlined that individual-focused challenges were critically important, while external factors also impact teacher resilience, offering insights into supporting instructors in these situations. To promote English Language teachers' attitudes toward professional development, capacity building, self-efficacy belief, and reflective thinking, Vygotsky's sociocultural theory was used as the foundational basis for the professional advancement program. Nine English language tutors from three different universities participated in the study using action research techniques to conduct their respective studies in unique contexts. The findings indicate that all participating instructors completed the action research cycle, including the Act, Observe, and Reflect phases (Dogan & Kirkgoz, 2022). Another study of 83 EFL teachers from diverse backgrounds found that while instructors actively participate in CPD, collaborative learning, reflective teaching, and a supportive community help them meet global educational standards. The study concluded that EFL teachers should actively seek CPD to improve their efficacy and student outcomes (Vadivel et al., 2021).

During an English teaching contest, a Chinese college English instructor demonstrated significant professional improvement, highlighting the technical aspects of learning through CPD training. The study found that CPD improved surface-level engagement, suggesting that personal learning and contextual tensions, such as limited resources and power relations, brought remarkable development. The findings also indicate that CPD should reflect teachers' personal experiences and community effects for comprehensive and sustainable teacher learning (Yueting, 2017).

Enhancing Teaching Competence and Language Instructors

The need to improve the teaching competence of English language teachers has led to various studies in areas that can enhance instructors' capabilities. One such study assessed the creativity, pedagogical interest, and professional success of EFL teachers, considering the role of emotional variables in educational growth. The findings indicate that pedagogical interest strongly impacts teacher professional achievement, mediated by teacher creativity. The study further suggests that improving these factors in teacher preparation can benefit both the teacher and the students, thus boosting teaching outcomes and EFL development (Zhi & Wang, 2023). Mehrpouyan (2023) argues that effective online literary teaching approaches for various college audiences require flexible lesson plans, class activities, assessments, and student participation. The study emphasizes the importance of using the right online platforms and e-pedagogical tools to enhance poetry, fiction, and drama learning. It highlights that online instructors facilitate learning through interaction, benefiting English literature and language students, language instructors, and course creators.

Karlen et al. (2023) investigated how teachers' self-regulated learning and facilitation skills impact metacognition promotion. According to the study, knowledge, self-efficacy, and intrinsic drive enhance both teachers' and students' metacognitive skills. The study further highlights that teachers' self-regulated learning capacities indirectly improve metacognition through self-efficacy and interest, underscoring their dual impact on metacognition. Gong et al. (2022) assessed how language teachers' diverse identities influence intercultural communicative competency instruction. The study supports that Chinese language teachers in Hong Kong possess various professional and sociocultural identities that reinforce each other, influencing teaching methods. Liu et al. (2021) investigated Chinese EFL teachers' perspectives and the use of task-based language teaching through a blended approach. They found that teachers typically adopt task-based language teaching, despite the need for further training on the approach.

Shao and Rose (2024) outlined significant pedagogical challenges in English-medium instruction (EMI) programs in non-anglophone countries such as the Netherlands, China, and Japan. Chinese and Japanese instructors face more student proficiency and teacher competence issues than their Dutch counterparts. The investigation identified different challenges and suggested context-specific EMI content and language integration approaches as potential solutions. Wu et al. (2022) delved into teachers' competencies in advancing students' information literacy, which requires a multi-layered perspective, including the school context. The study found that attributes associated with teachers, such as perceived usefulness, knowledge skills, and school factors like type, instructional materials, and network bandwidth, significantly impact their ability to develop students' information literacy.

From the current and relevant literature reviewed for this study, there is a notable lack of research that significantly investigates the interaction between continuous professional development and the enhancement of teaching competence by English Language Teachers in Henan Province, China, highlighting a gap in this study.

Problem Statement

Over the past few years, continuous professional development (CPD) has emerged as a crucial method for enhancing teaching competence. CPD is seen as an initiative aimed at upgrading teachers' capabilities throughout their careers. It includes any approach that can positively influence the classroom. The primary goal of CPD is to boost students' academic performance through improved teaching methods. Professional development programs are designed to foster the formation of teacher learning communities by involving them in learning activities that mirror real classroom scenarios. Currently, schools are generally viewed as educational institutions that offer a conducive environment for instructors to impart knowledge.

Research into improving teaching proficiency through continuous professional development (CPD) has significantly increased in language education. Multiple studies highlight CPD as a means to enhance instructors' pedagogical understanding, teaching strategies, and adaptability to diverse classroom requirements. Guskey (2002) stresses that effective CPD programs provide teachers with practical tools and methods that can be directly applied in the classroom, leading to increased confidence and competence.

Darling-Hammond et al. (2017) argue that CPD is most impactful when it is collaborative, ongoing, and aligned with the practical and experiential nature of educators' teaching contexts. Studies indicate that CPD encourages continuous improvement and adaptation among educators, which is vital for addressing evolving educational standards and student expectations in language learning (Zhang & Liu, 2020).

Research on CPD for English language instructors shows a clear link between targeted professional development and improved teaching outcomes. Wu et al. (2019) found that CPD focused on language instruction techniques and cultural proficiency significantly enhances the capabilities of English language instructors, allowing them to better meet students' linguistic and intercultural needs. Researchers observe that CPD initiatives tailored to the local educational framework, such as workshops on applied language pedagogy and interactive learning strategies, have effectively improved both teaching quality and student engagement (Li & Qian, 2021). By equipping educators with relevant skills and knowledge, CPD supports individual professional growth while aligning with institutional goals to deliver high-quality education in practical settings.

Despite the extensive body of research on CPD and teaching approach improvement in various fields, including languages in and outside of China, the impact of CPD on English language teaching in China, particularly in Henan Province, remains underexplored. This gap leaves a significant vacuum in the enhancement of English language education in Henan. Findings from current research, such as a study on English as a Foreign Language (EFL) teachers' perceptions of CPD, show that while teachers typically manage their own CPD, they also benefit greatly from sharing experiences, reflective teaching, and strong community building. Additionally, these findings underscore the importance of teaching quality, supporting the idea that teacher-based professional development significantly influences student performance (Vadivel et al., 2021). Similarly, Zhang et al. (2021) examine the factors affecting Chinese teachers' motivation to participate in professional development training. The results indicate that previous learning experiences, acquired teaching experience, self-efficacy, learning beliefs, and school-level factors such as workload pressure, support from colleagues, and management leadership considerably impact teachers' motivation for professional development. This study highlights the need to manage both individual and organizational factors to develop effective CPD programs for teachers. Another study assessed the role of CPD in the relationship between teacher engagement and self-efficacy, mediated by teaching experience. It was found that teacher engagement influences self-efficacy, while CPD amplifies this effect. Younger teachers, who are more willing to participate in programs like repeated improvements in teaching methods, reflective practices, and collaborative activities, benefit most from CPD, which enhances their teaching capacities. In contrast, experienced teachers are primarily influenced by reflective and collaborative activities, which in turn boost their self-efficacy (Li et al., 2022).

Given the existing literature on enhancing teaching competence through continuous professional development, there is a notable lack of studies specifically addressing the interaction between CPD and the improvement of teaching competence among English language educators at Application-Type Universities in Henan. Therefore, the primary objective of this study is to explore the impact of English teachers' continuous professional development (CPD) on their teaching competence at Application-Type Universities in Henan Province, China, through the following research objectives:

Research Objectives

Despite the existing literature on enhancing teaching competence through continuous professional development (CPD), very few studies have been conducted, and no existing research has explicitly focused on the interaction between CPD and the improvement of teaching competence, particularly for English language educators at Application-Type Universities in Henan. Therefore, the main objective of this study is to investigate the impact of English teachers' CPD on their teaching competence at Application-Type Universities in Henan Province, China, through the following research objectives:

RO1: To examine the influence of temporal dynamics, thematic alignment with prevailing academic trends, and dissemination strategies on CPD for enhancing teaching competence among English language

educators at application-type universities in Henan.

RO2: To investigate how a multidisciplinary foundation contributes to the development of CPD programs that enhance teaching competence among English language educators at application-type universities in Henan, China.

RO3: To explore how global and cross-cultural institutional collaboration contributes to the development of CPD programs that enhance teaching competence among English language educators at application-type universities in Henan, China.

RO4: To analyze how variations in research impact and thematic focus across countries influence the design and effectiveness of CPD programs aimed at enhancing teaching competence among English language educators at application-type universities in Henan, China.

RO5: To explore how demographic factors, particularly gender and adult learner status, influence the design and effectiveness of human-centric CPD programs aimed at enhancing teaching competence among English language educators at application-type universities in Henan, China.

To achieve this, the study will leverage the capabilities of systematic literature review and bibliometric analysis.

This study is expected to offer substantial contributions to the practice and theories of education for English language instructors in application-type universities and beyond. The study emphasizes the direct impact of CPD on teaching effectiveness, highlighting its role in providing educators with modern language teaching methods, interactive techniques, and adaptive instructional strategies that align with the practical needs of their institutions. The study also identifies specialized CPD programs that address unique challenges faced by educators in Henan, such as limited resources and inadequate support for professional growth, thereby enhancing engagement and teaching quality. The findings will offer practical recommendations for policymakers in the education sector, underscoring the importance of investing in CPD programs to foster a community of reflective practice and collaborative learning among educators, which is crucial for maintaining teaching proficiency and adapting to evolving educational standards.

The remaining part of this study will discuss the literature reviewed, the methods employed to achieve the stated objectives, data collection procedures and analysis, results, discussions, and future research directions.

Research Significance

Education is a vital element in a society's development, and teachers play a crucial role in shaping students' futures (Ahmed & Ali, 2021). To ensure high-quality instruction, teachers must participate in ongoing professional development (CPD) activities (Maqsood A. & Naveed S., 2019). Effective educational systems worldwide recognize that the quality of education is a key factor in determining the quality of schools (Barber & Mourshed, 2007). This research examines the effective pathways for the continuous professional development of English teachers at application-oriented undergraduate colleges, providing practical guidance for implementing CPD activities and better understanding which activities are most beneficial for promoting teachers' professional growth.

The study analyzes the impact of CPD on the teaching competence and methodology of English teachers at application-type universities in Henan Province, China, highlighting its research value for improving the teaching system in such institutions. The results of this CPD research have enriched our understanding of teachers' professional development. The focus of the study is on the importance of CPD and ways to encourage its adoption. Consequently, the findings will contribute to advancing theoretical knowledge on teachers' ongoing professional growth.

This study has significant implications for various stakeholders in the field of English education in China. For policymakers, the findings will offer evidence-based insights to inform policies regarding CPD for

English teachers in applied universities, enabling the development of more targeted and effective professional development programs at both the provincial and national levels. University administrators will gain valuable information about the most effective CPD activities, which will help them allocate resources more efficiently and design programs that better meet the needs of teachers. English teachers themselves will have a clearer understanding of the benefits of CPD, potentially increasing their motivation to participate and providing guidance on the most beneficial forms of professional development. Teacher educators can use these findings to create more effective CPD programs that cater to the unique requirements of English teachers in applied universities. Additionally, this study will bridge a gap in the literature on CPD in applied universities and set the foundation for future research in this area, contributing to the broader academic discourse on professional development in the context of professional higher education.

Research Questions

To achieve the research objectives, this study aims to answers the following questions:

How do temporal dynamics, thematic alignment with prevailing academic trends, and dissemination strategies influence Continuous Professional Development (CPD) programs designed to enhance teaching competence among English language educators at application-type universities in Henan?

In what ways does a multidisciplinary foundation contribute to the development of CPD programs that enhance teaching competence among English language educators at application-type universities in Henan, China?

How does global and cross-cultural institutional collaboration impact the development of CPD programs aimed at enhancing teaching competence among English language educators at application-type universities in Henan, China?

How do variations in research impact and thematic focus across countries influence the design and effectiveness of CPD programs aimed at enhancing teaching competence among English language educators at application-type universities in Henan, China?

How do demographic factors, particularly gender and adult learner status, influence the design and effectiveness of human-centric CPD programs aimed at enhancing teaching competence among English language educators at application-type universities in Henan, China?

Definition of Key Terms

The phrase "continuous professional development" (CPD) is used to describe all the activities that teachers engage in over the course of their employment. CPD covers all procedures required to influence the learning environment. The goal of CPD is to raise students' academic attainment while also improving the job effectiveness of teachers in the classroom. Effective professional development courses encourage instructors to establish teachers' learning forums by including them in learning activities like those they could do with their students. Schools are increasingly being viewed as learning institutions that enable instructors to contribute their academic behaviors and abilities in a structured manner (Bacchus & Grove, 1996).

According to the OECD (2009), "activities that develop teachers' abilities, understanding, experience and other attributes as a teacher" are referred to as professional growth of teachers. According to (Levin, 2014), professional learning, which is "ongoing, frequently demanding; and always centered around enhancing student learning," is a more acceptable phrase to use these days to refer to professional growth (Levin, 2014).

Teacher competencies is the combination of knowledge, skill, attitudes, values, and personal characteristics, enabling the teacher to act professionally and appropriately in a situation.

With the development of the society, as we all know, teachers play the most crucial role in student learning and achievement as they are the ones who make students learn effectively and efficiently. The effectiveness and ineffectiveness of a teacher closely depend on the teaching competencies of the teacher.(IGI Global, 2022)

Competencies are the knowledge and skills that enable a teacher to be successful. To make student learning more efficient. Teachers need to have expertise in wide-ranging fields to allow students to make critical decisions required each day.(teachmint, 2022)

The term "application type undergraduate" designates general undergraduate institutions with an emphasis on practical technology as opposed to academics. It is a kind of undergraduate that is distinct from an academic bachelor. Undergraduate programs that emphasize implementation have been beneficial in addressing China's demands for high-level, application-oriented skills as well as for popularizing higher education in China. China's Ministry of Education made it clear in March 2014 that out of the 1,200 broad undergraduate universities and colleges in the nation, more than 600 would gradually convert to application-type institutions. These undergraduate universities and schools make up exactly 50% of all universities (Pan M. Y.,2010).

Chapter 2: Research Methodology

As noted by Ritterbusch and Teichmann (2023), a systematic literature review (SLR) is a tool used to manage the extensive body of knowledge and identify relevant studies for a predefined research problem. This study employs SLR to investigate the impact of enhancing teaching competence through Continuous Professional Development (CPD) using insights from English Language instructors at application-type universities in Henan, China. Further cases are sought where the term "teaching competence" appears in the title, abstract, or keywords of a paper, along with any of the terms "Continuous Professional Development," "CPD," "English Language teachers," "Henan," or "China." Before conducting the SLR, a review protocol is established to ensure a fact-based and high-quality research process, which are key characteristics that distinguish systematic literature reviews. The review protocol aims to minimize bias by conducting comprehensive literature searches (Sauer & Seuring, 2023). This involves three steps: formulating the research questions, defining the search approach, and establishing the inclusion and exclusion criteria (Sauer & Seuring, 2023). Additionally, the study adheres to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) protocol to conduct the SLR. PRISMA is one of the evidence-based standards used to guide the development procedures for SLR and other meta-analyses (Belle & Zhao, 2023; Mishra & Mishra, 2023).

The Systematic Review Strategy

A review protocol, as outlined in Table 3.1, is typically determined before initiating the bibliometric analysis to identify, investigate, and interpret results relevant to the scope of the study. Therefore, research questions were formulated to provide insights into the analysis of published literature in the study area from various perspectives. These questions were designed to be addressed throughout the study. Next, a search approach was established to identify appropriate keywords for the search process, aiming to locate relevant sources of information such as academic databases and search engines that offer access to a broad array of digital documents.

A reliable online research database, Scopus, was used to retrieve relevant literature. To filter the search results from Scopus, parameters were set through predefined inclusion and exclusion criteria for further assessment and content evaluation of the extracted literature. For instance, the study defined a timeframe from 2014 to 2024. The study also limited itself to publications in English and Chinese and restricted the types of sources to articles and review papers. These steps are crucial as they enable the initial filtration of metadata sources and narrow down the scope of the study.

Table 2.1 Review Protocol for Systematic Literature Review

Review Questions	**RQ1:** How do temporal dynamics, thematic alignment with prevailing academic trends, and dissemination strategies influence Continuous Professional Development (CPD) aimed at enhancing teaching competence among English language educators at application-type universities in Henan? **RQ2:** How does a multidisciplinary foundation contribute to the development of CPD programs that enhance teaching competence among English language educators at application-type universities in Henan, China? **RQ3**: How does global and cross-cultural institutional collaboration influence the development of CPD programs aimed at enhancing teaching competence among English language educators at application-type universities in Henan, China? **RQ4**: How do differences in research impact and thematic focus from various countries shape the design and effectiveness of CPD programs for improving teaching competence among English language educators at application-type universities in Henan, China? **RQ5**: How do demographic factors, such as gender and adult learning needs, shape the development and outcomes of human-centric CPD programs focused on enhancing teaching competence among English language educators at application-type universities in Henan, China?
Study Selection Criteria	***Inclusion criteria***: • Peer-reviewed journal articles and Reviews. • Research published between the year 2014 and 2024. • Research needs to offer reasonable response to the established research questions. • The articles or reviews must include title, year, source, abstract, and DOI. Publications centers on enhancing teaching competence through Continuous Professional Development with particular interest to English Language teachers at Application-Type Universities in Henan, China ***Exclusion criteria***: • Summaries of events and seminars, book review, conference papers and editorial. • Publications that are not centered on enhancing teaching competence through Continuous Professional Development with particular interest to English Language teachers at Application-Type Universities in Henan, China • Literature published prior to 2014. • The publication is not available in full text. • The publication is not in English or Chinese.
Literature Search	***Sources***: Scopus, references and citations in the established literature Search equation: (("enhancing teaching competence") OR ("enhancing teacher competence") OR ("improving teacher competence") OR ("Continuous Professional Development " OR "Continuing Professional Development" OR "Continuing Professional Development Program" OR "CPD" OR "CPDT" OR "English Language Teachers" OR "English Language Instructors" OR "EFL" OR "Henan" OR "China"))

2.2 Assessment Procedure

The assessment of the document search procedure was carried out in four stages: identification, screening,

eligibility, and inclusion, as explained by the PRISMA flow diagram presented in Figure 2.1. After the initial metadata filtration using the appropriate search terms, a total of 173 documents were retrieved from Scopus for the next stage of the process. During the screening stage, the titles and abstracts of these documents were analyzed, and only 91 documents were selected for detailed reading. In the third stage, a comprehensive screening was conducted to verify the eligibility of these documents based on their relevance to the study objectives. From the 91 documents, 52 were found to be pertinent for this review, as shown in Figure 2.1.
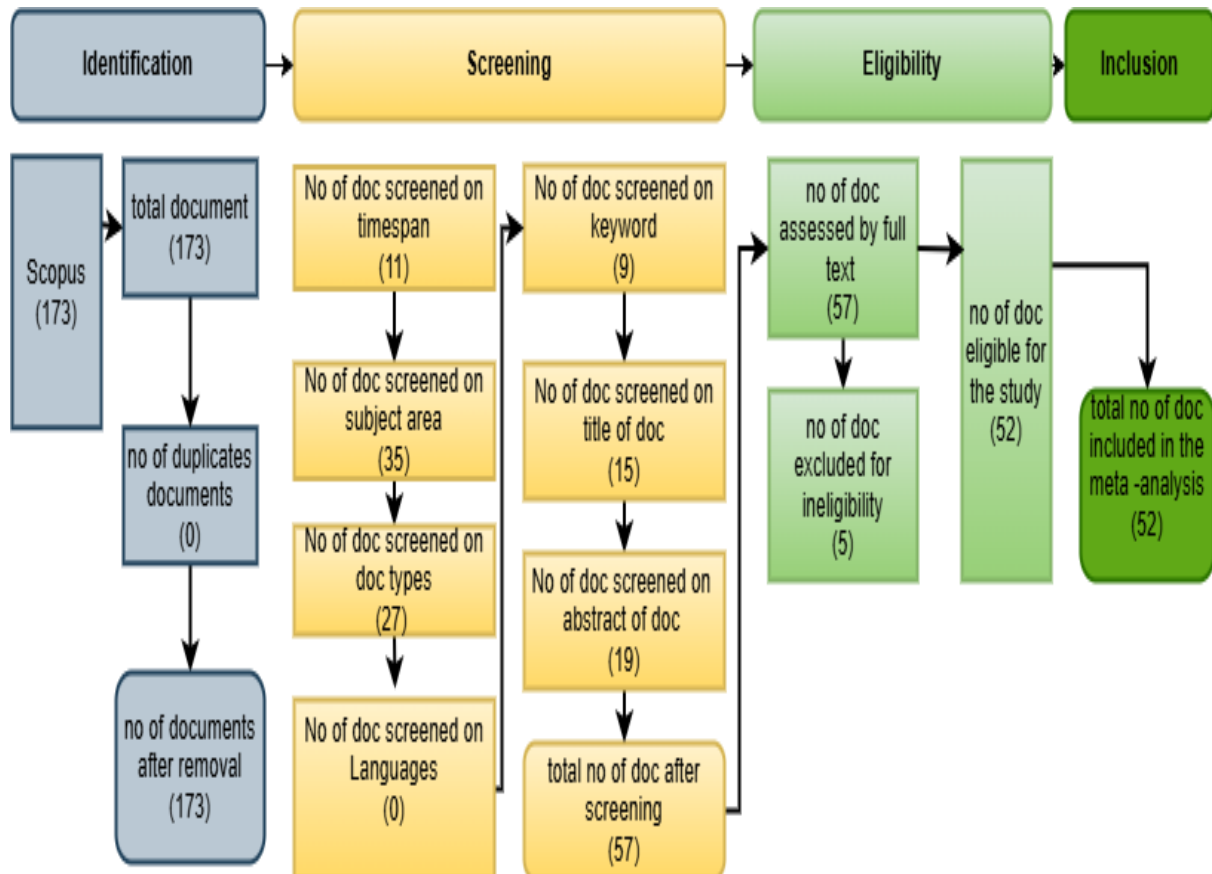

Fig. 2.1 Four-Step Evaluation of Literature Search Process (PRISMA)

Chapter 3 Conclusions and Discussions

Introduction

The results provide insights into collaborative trends, authorship patterns, and the types of documents among the 4,484 references. With a substantial number of authors (235), the results highlight both individual and collaborative aspects. While single-authored papers are limited (17), they still play a vital role in the research landscape, potentially representing unique individual perspectives. However, most of the literature is co-authored, with an average of 2.86 authors per document, indicating a strong trend toward collaborative efforts that can enhance the breadth and robustness of the findings.

A global perspective is evident, with over one-third of the publications (36.26%) involving international co-authorship. This high level of cross-country collaboration suggests a broad, potentially international interest in the field, facilitating the exchange of ideas across different cultural and regional contexts. Such collaboration can lead to richer, more comprehensive insights and improve the relevance of the research

across diverse settings.

Regarding the types of documents, the data primarily consists of articles (87) with a limited number of reviews (4). This indicates a focus on original research contributions, which is characteristic of an evolving or active field where new findings are continuously generated and published. The small number of review articles suggests a lack of consolidation in the research area, where background or integrative analyses that summarize current knowledge are still emerging. This pattern opens the door for future review-based research to organize and synthesize existing findings, contributing to a better understanding of the field's development and the areas that require further assessment.

In summary, the data highlights a research community that is highly collaborative and internationally engaged, predominantly producing original articles, with significant potential for future review-based contributions.

Table 3.1 Main Information Table

References	4484
DOCUMENT CONTENTS	
Keywords Plus (ID)	214
Author's Keywords (DE)	298
AUTHORS	
Authors	235
Authors of single-authored docs	17
AUTHORS COLLABORATION	
Single-authored docs	17
Co-Authors per Doc	2.86
International co-authorships %	36.26
DOCUMENT TYPES	
article	87
review	4

Average Citations Per Year

This study provides an overview of the patterns in total citations (TC) per article, annual mean citations, and the number of citable years for publications from 2010 to 2024. Over time, the analysis of mean total citations per article reveals fluctuating citation trends, with peak years in 2013 (111) and 2016 (52) highlighting particularly influential publications during these periods. These peaks suggest that certain articles garnered significant attention, possibly due to the relevance of their research themes or the impact of the methodologies used. However, years like 2012, 2015, and 2024, which have minimal mean citations per article, indicate either a decline in research impact or potentially less effective dissemination or engagement with those studies.

The mean citation count per year further contextualizes these insights by showing how frequently articles are cited annually, reflecting their lasting influence. For instance, 2013 and 2016 not only have high total citation counts per article but also lead in mean citations per year (9.25 and 5.78, respectively), indicating that articles from these years continued to be cited long after their publication. In contrast, more recent years like 2022 and 2023 exhibit lower mean citation counts per year (1.19 and 1.85), which may suggest that these studies need more time to gain traction or are focused on narrower or emerging topics that have not yet established broader citation networks.

The number of citable years also reveals the longevity of articles' impact on citation metrics. Publications from earlier years, such as 2010 and 2011, have the most citable years (15 and 14), which can contribute to

their higher citation counts simply due to a longer timeframe for impact. Conversely, very recent publications, starting from 2022, have naturally shorter citation windows, limiting their immediate citation opportunities. The year 2024, with no citations recorded yet, highlights the delay in citation accrual for the latest publications. Overall, these results suggest a correlation between the age of publications, the relevance of the research topics, and their ability to accumulate citations, emphasizing the importance of both the temporal context and the thematic resonance of the research within the scholarly community.

Table 3.2 Average Citations Per Year

Year	MeanTCperArt	N	MeanTCperYear	Citable Years
2010	53.5	2.00	3.57	15
2011	28.5	2.00	2.04	14
2012	4.75	4.00	0.37	13
2013	111	2.00	9.25	12
2014	15	1.00	1.36	11
2015	2	1.00	0.20	10
2016	52	3.00	5.78	9
2017	26.5	4.00	3.31	8
2018	14.5	4.00	2.07	7
2019	25	7.00	4.17	6
2020	5	3.00	1.00	5
2021	13.46	13.00	3.37	4
2022	3.57	14.00	1.19	3
2023	3.71	17.00	1.85	2
2024	0	14.00	0.00	1

RQ1: How do temporal dynamics, thematic alignment with prevailing academic trends, and dissemination strategies influence research on Continuous Professional Development (CPD) aimed at enhancing teaching competence among English language educators at application-type universities in Henan?

The findings reveal significant patterns in article citation trends from 2010 to 2024, highlighting years with peaks and troughs in citation counts that may indicate changes in research impact, distribution, and the visibility of specific themes over time. Notably, the peak citation years, such as 2013 and 2016, likely reflect important works that resonated with the academic community, generating substantial attention. Conversely, years with reduced mean citations per publication, such as 2012, 2015, and 2024, may indicate lower participation or a potential mismatch between research themes and the community's evolving interests. These variations suggest that factors like the relevance of research topics and dissemination strategies can significantly influence citation success.

The study also underscores the importance of time in citation generation. Articles from 2010 and 2011 have a considerable number of citable years, thus enhancing their citation counts. This contrasts with recent publications (e.g., 2022–2024), which have had limited time to accumulate citations, potentially affecting their impact. The low mean annual citation rates in recent years may indicate either a need for additional time to gain momentum or that modern research is focusing on niche or emerging topics that have not yet been integrated into broader citation networks. The findings suggest a strong relationship between an article's age, topic relevance, and the time allowed for it to gain influence within the scholarly community, highlighting the critical role of both temporal and thematic factors in shaping citation trajectories.

Therefore, the findings indicate that publications from 2022 to 2024 have low citation impact, possibly due to modern research having less interest in the intersection of enhancing teaching competence, continuous professional development training, and English language teachers in China. This implies a potential gap in

research focusing on improving English language teaching competence through continuous professional development training in Henan province, China.

The Relevant Resources

This study's results elucidate the originality and frequency of cited publications, providing insights into the variety and diversity of journals contributing to this body of research. The most-cited journals in this trend focus on educational theory, psychology, applied linguistics, and medical education, highlighting the interdisciplinary nature of educational research that spans fields such as cognitive psychology, applied linguistics, workplace learning, and medical training. Journals like Cogent Education (4 papers) and BMC Medical Education (3 articles) underscore the importance of open-access platforms in enhancing the accessibility and visibility of educational research, thereby potentially increasing the reach and impact of the findings.

The inclusion of journals such as Frontiers in Psychology and the Journal of Workplace Learning indicates an interest in psychological and organizational issues in educational settings, reflecting the growing recognition of mental and workplace dynamics in education. The presence of journals like SAGE Open and PLOS ONE signifies a broader shift towards open access, improving research accessibility and aligning with modern academic trends of openness and knowledge dissemination across disciplines.

Additionally, the inclusion of specialized journals such as the Chinese Journal of Applied Linguistics and the TEFLIN Journal highlights the significance of applied linguistics and language education, particularly in non-native English-speaking contexts. This underscores the relevance of the study to international educational approaches, especially where English language instruction intersects with local cultural and linguistic elements, as in China.

The integration of individual articles from prestigious publications like the British Journal of Educational Technology and the Cambridge Journal of Education further emphasizes that the study draws from a wide array of credible sources to address specialized topics or groundbreaking discoveries in educational technology and pedagogical advancement. The extensive range of sources fosters a comprehensive and nuanced understanding of educational methods, offering insights relevant to diverse educational contexts and fields. This source distribution demonstrates the study's broad, multidisciplinary background and its importance to various educational stakeholders.

Table 3.3 Most Relevant Sources

Sources	Articles
COGENT EDUCATION	4
BMC MEDICAL EDUCATION	3
CHINESE JOURNAL OF APPLIED LINGUISTICS	3
FRONTIERS IN PSYCHOLOGY	3
JOURNAL OF WORKPLACE LEARNING	3
SAGE OPEN	3
TEACHERS AND TEACHING: THEORY AND PRACTICE	3
ACADEMIC MEDICINE	2
EDUCATIONAL STUDIES	2
INTERACTIVE LEARNING ENVIRONMENTS	2
JOURNAL OF EDUCATION FOR TEACHING	2
PLOS ONE	2
SYSTEM	2
TEACHER DEVELOPMENT	2

TEFLIN JOURNAL	2
ACCOUNTING AND BUSINESS RESEARCH	1
ASIA PACIFIC JOURNAL OF EDUCATION	1
ASIA PACIFIC JOURNAL OF EDUCATORS AND EDUCATION	1
BRITISH JOURNAL OF EDUCATIONAL TECHNOLOGY	1
CAMBRIDGE JOURNAL OF EDUCATION	1

RQ2: How does a multidisciplinary foundation contribute to the development of CPD programs that enhance teaching competence among English language educators at application-type universities in Henan, China?

The study reveals that the development of CPD programs is supported by a multidisciplinary foundation, as evidenced by frequent citations from journals focused on education, psychology, linguistics, and medical training. Key journals such as Cogent Education and BMC Medical Education highlight the significant role of open-access publications, which suggest a strategic approach to increasing the accessibility and visibility of educational research findings to a wider audience. The presence of Frontiers in Psychology and the Journal of Workplace Learning underscores a growing interest in the psychological and organizational aspects within educational settings, indicating a trend towards integrating mental health, cognitive psychology, and workplace dynamics into educational matters.

Subject-specific journals like the Chinese Journal of Applied Linguistics and the TEFLIN Journal rejuvenate the study's relevance to non-native English-speaking environments, focusing on applied linguistics and language education within culturally diverse contexts. The inclusion of various respected sources, such as the British Journal of Educational Technology and the Cambridge Journal of Education, further demonstrates that the research covers both traditional and cutting-edge educational topics, from the use of technology in learning environments to advances in pedagogy. The diversity of these sources not only enriches the study with insights from different educational disciplines but also enhances its applicability across global educational settings, making it a valuable contribution to various fields and stakeholders involved in educational development.

Thus, the findings clearly establish the multidisciplinary background of the research, showing how continuous professional development training is interconnected with important disciplines outside of education, such as linguistics, psychology, and medical training. It can be inferred from the findings that continuous professional development programs are more aligned with psychological and medical training to enhance teaching competence than with linguistics, such as English language.

The Prominent Affiliations

This analysis reveals important trends in article citation patterns from 2010 to 2024, highlighting years with peaks and troughs in citation counts that can indicate changes in research impact, distribution, and the visibility of specific themes over time. Notably, the years 2013 and 2016 saw the highest citation counts, suggesting that these periods produced significant works that resonated within the academic community, garnering increasing attention. Conversely, years with reduced mean citations per publication, such as 2012, 2015, and 2024, may indicate decreased participation or a potential mismatch between research themes and the community's evolving interests. These variations suggest that factors including the relevance of research topics and dissemination methods may influence citation success.

The research emphasizes the importance of time in the accumulation of citations. Articles published in 2010 and 2011 have benefited from a longer period of citable years, thereby improving their citation counts. This is not the case for recent publications (e.g., 2022–2024), which have had less time to accumulate citations, potentially limiting their immediate impact. The lower mean annual citation rates in recent years may indicate either the need for more time to gain traction or that modern research may focus on niche or emerging subjects that have not yet been fully integrated into broader citation networks. The findings

suggest a significant relationship between an article's age, topic relevance, and the time allowed for it to attract influence within the scholarly community, underscoring the critical role of both temporal and thematic factors in determining citation trajectories.

The analysis of institutional affiliations highlights the main contributors to the academic discourse, representing an international array of experts in education, psychology, medicine, and linguistics. Leiden University leads with 8 articles, indicating a strong research interest in education or related interdisciplinary fields at this institution, possibly with a focus on innovative teaching approaches or psychological perspectives on education, given Leiden's strengths in both psychology and educational sciences. Similarly, Mayo Clinic's high representation with 7 articles signals substantial contributions from the medical education field. This could reflect the growing importance of educational research in healthcare, such as the application of continuous professional development (CPD), competency-based education, and instructional methods tailored for healthcare settings. This affiliation also underscores the increasingly crucial role of medical institutions in educational research, particularly in the development of competencies and skills for healthcare professionals.

The emergence of Asian universities, such as Zhejiang University and Beijing Normal University (each with 6 and 5 articles, respectively), demonstrates the expansion of educational research into diverse cultural and pedagogical contexts. These universities, renowned for their research in education and applied sciences, likely contribute findings on teaching effectiveness, language education, and pedagogical flexibility. Their presence also highlights China's strategic commitment to improving educational practices through research, particularly in language learning and intercultural competence. Contributions from The Education University of Hong Kong and Beijing Institute of Education emphasize a strong focus on teacher training, educational policy, and technology-enabled learning, key areas of research in East Asia, reflecting the region's emphasis on advancing educational standards and promoting internationalization.

The inclusion of Oslo Metropolitan University with 4 articles suggests an emphasis on applied educational research, possibly related to integrated education and pedagogical advancement in Scandinavian settings. The presence of Universitas Negeri Padang in Indonesia accentuates the growing scholarly output from Southeast Asia, participating in the global educational research network with a focus on language education, pedagogical strategies, and culturally relevant teaching techniques. Overall, the diversity of institutional affiliations indicates a robust cross-cultural and interdisciplinary approach in educational research. Institutions from North America, Europe, and Asia contribute insights that address various educational needs, from medical and psychological training to teacher education and curriculum design, reflecting the global nature of modern educational challenges and advancements. This variety enhances the applicability of the findings across different educational systems and cultural settings, demonstrating a rich, collaborative effort to advance educational practices globally.
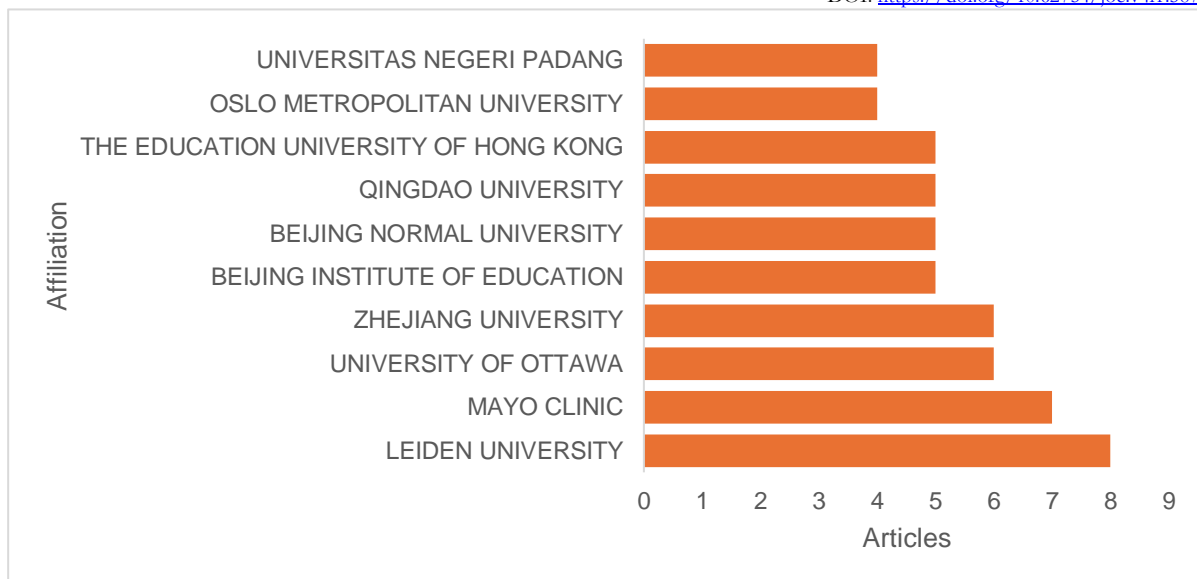
Figure 3.1 Most Relevant Affiliations

RQ3: How does international and cross-cultural institutional collaboration affect the development of CPD programs designed to improve teaching competence among English language educators at application-oriented universities in Henan, China?

This discovery showcases a broad spectrum of global collaboration in educational research, emphasizing contributions from diverse regions and institutions. The prominent role of Leiden University, with 8 articles, reflects a robust interest in psychology and educational sciences, likely focusing on innovative teaching methods and the psychological aspects of learning. Similarly, the significant presence of Mayo Clinic, with 7 articles, underscores the importance of educational research in medical training, highlighting a growing focus on continuous professional development (CPD) and competency-based education within healthcare settings.

Asian institutions, such as Zhejiang University, Beijing Normal University, and The Education University of Hong Kong, demonstrate the rising influence of China and East Asia in educational research, particularly in areas like language education, intercultural competence, and teacher training. Their emphasis on educational policy and technology-enhanced learning aligns with the region's commitment to elevating educational standards and fostering internationalization. The inclusion of Oslo Metropolitan University and Universitas Negeri Padang adds to the diversity, with Oslo concentrating on integrated education in the Scandinavian context and Padang emphasizing culturally sensitive teaching methods from Southeast Asia. Overall, this variety of institutional affiliations fosters a cross-cultural, multidisciplinary research environment that caters to a wide range of international educational needs, indicating a collaborative effort to enhance educational practices and policies across different cultural and academic landscapes.

The study highlights the evolving nature of educational science on a global scale, with a significant role played by Chinese and Southeast Asian universities. It also establishes the growing interconnection between educational sciences, psychology, and medical training, particularly in the context of continuous professional development and improving teaching competence. However, the study notes a lack of research in the area of linguistics, especially concerning English language education in Henan province, China.

Most Cited Countries

The total citations (TC) and average article citations from different countries provide valuable insights into the influence and citation impact of their publications in the field of study. China leads with a total of 329 citations across multiple articles, averaging 13.2 citations per article. This moderate average suggests that China is generating a substantial volume of research with consistent citation rates, though not necessarily

high-impact publications. Given China's strong emphasis on educational research, particularly in areas like teacher development, educational technology, and language education, these figures highlight the breadth of Chinese contributions but also indicate the potential for further growth in the global impact of individual articles.

The United States follows with 224 total citations and an impressive average of 56 citations per article, reflecting a significant impact per publication on the international research community. This high average suggests that US research is highly regarded and often cited in various educational studies, especially in fields such as instructional design, online education, and globally applied pedagogical approaches. The focus on impactful and well-considered studies underscores the value placed on evidence-based research in American educational scholarship.

The United Kingdom and Canada also demonstrate strong research influence, with 218 and 123 total citations, averaging 21.8 and 24.6 citations per article, respectively. These citation rates indicate that both countries contribute research of considerable importance to global discourse, likely due to their focus on educational psychology, teacher training, and international educational standards. The consistent citation rates suggest that research from these countries is frequently used as a reference in global educational studies.

Hong Kong's data reveals 86 total citations with a notable average of 17.2 citations per article, highlighting its growing significance in educational research. Hong Kong's contributions, particularly in areas like bilingual education, intercultural competence, and technology-enhanced learning, reflect its strategic role as a bridge between Eastern and Western educational systems, with research findings applicable in diverse cultural contexts. Iran's high average of 65 citations per article, despite a smaller total of 65 citations, indicates that its research is highly impactful. This may be due to a focus on specialized topics or emerging fields within education that align with global standards, such as teacher resilience, instructional psychology, or educational challenges in developing settings. The high average citation count per article suggests that Iranian research is particularly relevant to international discussions in niche fields.

Malaysia, Indonesia, Turkey, and Ireland represent emerging contributions to educational research with varying degrees of citation impact. Malaysia and Indonesia, with lower average citations of 4.8 and 6, respectively, are still establishing their relevance in the international research landscape. Their research may concentrate on region-specific issues, such as language teaching and cultural context in education, which are crucial for local application but have not yet achieved high international citation rates. Turkey's low average of 4.0 citations per article suggests similar trends, with research impact primarily concentrated in national or regional journals. In contrast, Ireland's consistent average of 10 citations per article reflects its growing commitment to research with moderate global impact, possibly in areas like educational technology and teacher training. These contributions highlight the broader influence of Western educational systems on international research priorities, while emerging nations enrich the research landscape with diverse and in-depth perspectives.
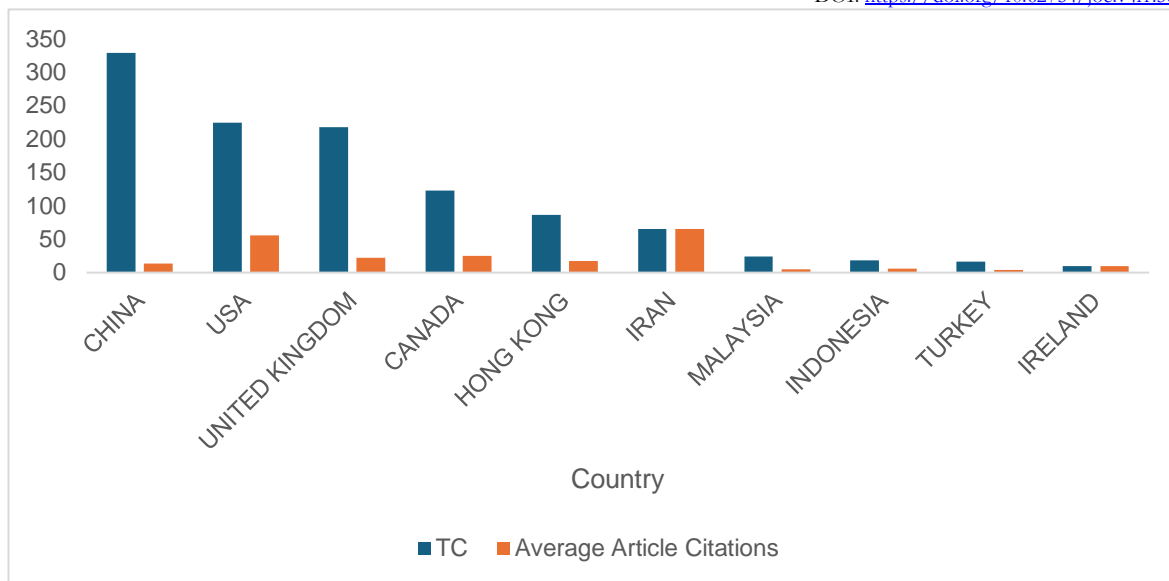
Figure 3.2 Most Cited Countries

RQ4: How do variations in research impact and thematic focus among different countries influence the design and effectiveness of CPD programs aimed at enhancing teaching competence among English language educators at application-oriented universities in Henan, China?

This finding sheds light on the global dynamics of educational research, highlighting changes in both the volume and impact of research across different countries. China, with a substantial total of 329 citations spread across numerous publications, indicates a significant output in educational research, particularly in areas like teacher development and educational technology. However, the moderate average citation rate per article (13.2) suggests that while Chinese research covers a wide range of topics, it has not yet achieved the high-impact status seen in European publications. This could be due to a focus on local issues or a tendency to prioritize quantity over highly cited breakthroughs, although it solidifies China's role as a prolific contributor to educational research.

In contrast, countries like the United States, the United Kingdom, and Canada, while having fewer total citations compared to China, exhibit much higher average citations per article (56, 21.8, and 24.6, respectively). This indicates that their research is highly valued and frequently cited on a global scale, significantly influencing global educational discourse, especially in fields such as instructional design, teacher training, and educational psychology. The relatively high average citation rates for Hong Kong (17.2) and Iran (65) further emphasize that their research, though less numerous, focuses on impactful and relevant topics, with Iran's data possibly pointing to emerging or niche areas with strong international relevance. Meanwhile, emerging studies from countries like Malaysia, Indonesia, Turkey, and Ireland show varying degrees of citation impact, which may be influenced by regional specialization in areas such as language teaching and internally focused educational challenges. Collectively, these data illustrate an international hierarchy in research impact, with European countries leading in per-article influence, while high-volume contributors like China add depth and diversity to the discussions.

The findings underscore the significance of European countries in educational disciplines, while China, despite its large volume of research, has not reached the same level of impactful relevance in the discourse. Only research conducted in Hong Kong has achieved substantial breakthroughs. Therefore, this study highlights the deficiency in impactful research in China, particularly when compared to the growing influence of European research in the field of education.

Most Frequent Words

The word frequency analysis emphasizes the thematic significance of the study, with "China" and "human/humans" appearing 16 and 13 times, respectively. The prominence of "China" indicates that a considerable portion of the research either originates from China or addresses issues pertinent to Chinese educational or professional development contexts. This aligns with the broader trend of increasing academic output from Chinese institutions, especially in areas like professional development, clinical education, and human-centered research, reflecting a regional interest that influences the discourse.

The frequent use of "human" and "humans" (16 and 13 occurrences) underscores a strong focus on human-oriented research, likely centered on topics related to medical education and clinical competence (each appearing 9 times), as well as professional development (11 instances). This emphasis highlights an interdisciplinary approach that links education with human behavior, healthcare, and professional skills, effectively corresponding with studies on clinical proficiencies in healthcare and the ongoing development of professionals in fields like medicine and education. Such research may delve into skill acquisition, ethical considerations, and psychological insights into human behavior, enhancing the understanding of how trainees can more effectively serve in human-centric professions.

Professional development is prominently featured, appearing 11 times, which underscores the importance of continuous learning and improvement for individuals in professional settings. This could involve theoretical explorations of effective training methods and empirical studies of professional development concepts across different contexts, such as healthcare, where constant skill enhancement is crucial. The focus on adult learners (10 instances) highlights a specific demographic within professional development research, indicating an emphasis on post-graduate education and specialized training designed to boost the skills of those already in their careers.

The frequent use of "female" and "male" (8 instances each) signals an examination of gender dynamics in these professional environments. This may include assessing how gender affects access to and outcomes of professional development or clinical training. The inclusion of this aspect reflects a forward-thinking approach to understanding the impact of various identities and backgrounds on educational and professional experiences, aligning with global trends towards inclusivity and gender equity in educational and occupational settings.
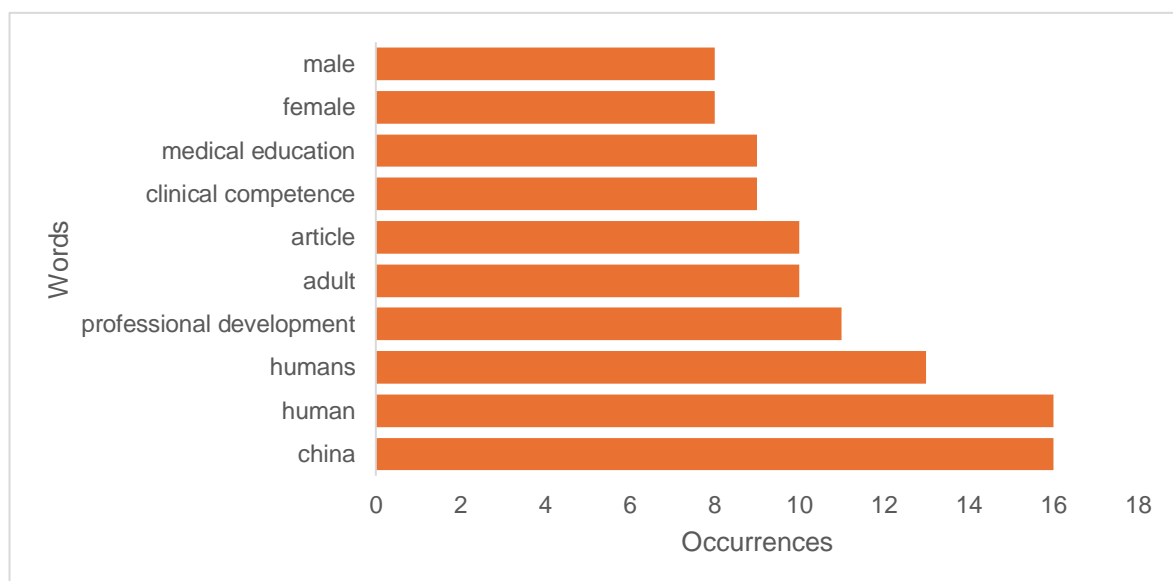

Figure 3.3 Most Frequent Words

RQ5: How do demographic factors, such as gender and adult learning needs, influence the development and outcomes of

human-centric CPD programs aimed at improving teaching competence among English language educators at application-oriented universities in Henan, China?

The findings highlight that China, human-centric research, and professional development are key themes. The frequent appearance of "China" as a keyword suggests a significant focus on the country's educational and professional development landscape, reflecting an increase in academic contributions from Chinese institutions. This indicates a broader trend of China's active involvement in advancing research on professional development and training. Additionally, the repeated use of "human/humans" illustrates an interdisciplinary approach, integrating insights into human behavior with professional contexts, which may encompass both technical and ethical dimensions of human-centered fields.

Moreover, the high frequency of terms related to gender ("female" and "male") and adult learning ("adult") points to a strong interest in demographic factors that influence access to and experiences within professional development. The attention to adult learners underscores a targeted assessment of post-graduate training, aimed at enhancing the skills of working professionals through specialized education. The focus on gender dynamics reflects an awareness of inclusivity, with the study likely examining how gender impacts professional training and outcomes.

Overall, the study reveals that China emphasizes educational disciplines and the competence enhancement of its professionals through continuous professional development (CPD) training. However, it indicates a limited research and practical interest in the interaction between CPD, teaching competence improvement, and English language instructors in Henan province, despite the crucial role of English in promoting China as a global hub for business, technology, and development.

Chapter 4 Conclusions

This research aimed to explore how teaching competence can be improved through Continuous Professional Development (CPD) programs, specifically for English language instructors at application-oriented universities in Henan, China. It reviewed pertinent literature to inform the study. The review revealed that publications from 2022 to 2024 have low citation impact, possibly due to modern research having less interest in the relationship between enhancing teaching competence, CPD training, and English language teachers in China. This suggests a lack of research focused on improving English language teaching competence through CPD in Henan province, China.

Moreover, the study established the multidisciplinary nature of the research, integrating educational discourse on CPD with other significant fields such as linguistics, psychology, and medical training. The findings indicate that CPD programs are more closely aligned with psychological and medical training to enhance teaching competence than with linguistics, particularly English language. The study also highlighted the evolving global trends in educational science, with Chinese and Southeast Asian universities playing a major role. However, it noted the growing interconnectedness of educational sciences with psychology and medical training in the context of CPD and teaching competence, underscoring the limited research in the area of linguistics, especially English language, in Henan province, China.

Additionally, the findings emphasized the relevance of European countries in education-related disciplines. Despite China's substantial volume of research on educational issues, it has not matched the impact and relevance of European research in contributing to the discourse. Only studies conducted in Hong Kong have shown significant breakthroughs. Thus, this research highlights the dearth of impactful studies in China, particularly in the field of education, where European research is gaining prominence.

Furthermore, the study found that China places a strong emphasis on educational disciplines and the enhancement of professional competence through CPD programs. However, it indicated a lack of research and practical interest in the interaction between CPD, teaching competence improvement, and English language instructors in Henan province and China in general, despite the critical importance of English in advancing China's position as a global hub for business, technology, and development.

Practical Implications

This study highlights several practical implications for improving English language teaching proficiency through Continuous Professional Development (CPD) programs in Henan, China, and in the broader Chinese educational landscape. The limited citation impact of recent publications from 2022 to 2024 reveals a gap in current research that focuses on the intersection of CPD and English language instruction within Chinese contexts. Addressing this gap could provide valuable insights into the design and implementation of CPD initiatives aimed at enhancing the teaching skills of English language instructors at application-oriented colleges. Establishing research projects and CPD programs in Henan would offer immediate, locally tailored solutions to improve English language instruction, while also supporting China's strategic goals to become a hub for international business and technology, where English proficiency is increasingly important (Liu et al., 2023; Mu & Yu, 2023).

Additionally, the results emphasize the multidisciplinary nature of CPD research, showing that meaningful contributions often combine educational science with psychology and medical training to foster the development of teaching competencies. The reduced impact of linguistics and English language-specific studies in this multidisciplinary context underscores the need for educational research that leverages CPD's potential to improve language-specific skills alongside psychological perspectives (Yan & Wang, 2022). To this end, stakeholders in Henan and other regions could profit from developing CPD programs that integrate linguistic theory and applied psychology, thus promoting a holistic approach to the professional development of English language educators. Incorporating interdisciplinary methods into CPD can boost program effectiveness, helping educators adopt advanced pedagogical techniques while addressing the unique challenges of teaching English in non-native settings (Rao & Yu, 2021).

The underrepresentation and relatively lower citation impact of Chinese educational research compared to European counterparts suggest that Chinese institutions could benefit from producing high-quality publications and fostering international collaborations. While Chinese universities contribute significantly to educational improvement, the findings indicate that European research is perceived as more influential, particularly in the areas of CPD and teaching competency (Rao & Yu, 2021). Bridging this gap might require enhancing research dissemination methods and aligning Chinese research priorities with global educational concerns, thereby increasing the visibility and impact of Henan's efforts on an international scale. Encouraging collaboration with international experts and publishing in reputable open-access journals could amplify the reach and significance of Chinese research, driving significant advancements in English language teaching proficiency through CPD.

Theoretical Implications

The findings of this study carry significant theoretical implications. The observed decline in citation impact for publications from 2022 to 2024 underscores a lack of engagement with the unique interplay between CPD, teaching competence, and English language education in China, particularly in Henan Province. This gap highlights the need for more robust theoretical frameworks that emphasize the importance of CPD in language instruction, especially in addressing the situational challenges of Chinese education. Despite China's substantial contribution to global research, its limited participation in this specific field suggests that a theoretical framework focused on CPD for language proficiency can provide a foundational platform for more influential and pertinent studies (Merry et al., 2023). This approach can align with China's educational aspirations while enhancing the broader scholarly discourse on teacher development and instructional effectiveness.

The multidisciplinary nature of CPD research, as demonstrated in this study, shows that CPD transcends educational research, intersecting with fields like psychology and medical training. Theoretical developments in CPD would benefit from incorporating insights from various disciplines, particularly as psychological and cognitive theories have shown effectiveness in improving teaching methods and teacher motivation (Bardach & Klassen, 2021; Bardach et al., 2022; Schunk & DiBenedetto, 2021). The focus on psychological and medical training, rather than linguistics, in current CPD models highlights a deficiency in addressing language-based competencies, such as English language education, in non-native English

environments like Henan. Integrating psychological theories into CPD can help bridge this gap by grounding CPD activities in principles that foster teacher resilience, flexibility, and cultural responsiveness, thereby enhancing language teaching proficiency (Entesari et al., 2020).

Furthermore, the study highlights the key role of Chinese and Southeast Asian institutions in developing educational sciences, especially in the global context of CPD and teaching competence. The data shows that, despite the prolific output in educational research, Chinese studies have less international impact compared to European contributions. This suggests a theoretical implication: Chinese educational research could benefit from frameworks that prioritize cross-cultural utilization and universal principles to improve teaching competence, thereby connecting local research with international educational challenges (Entesari et al., 2020). Formulating theories that integrate intercultural competency and align with international educational trends can enhance the citation impact of Chinese research and promote a more cohesive approach to CPD that can be applied in diverse educational settings (Smith & Gillespie, 2023).

The findings also underscore the need for CPD models that recognize the unique role of English as a global lingua franca, which is becoming increasingly important as China grows in international business and technology. Contemporary CPD theories may overlook the significance of English language teaching proficiency in Chinese contexts, limiting theoretical advancements in this area. A theoretical framework for CPD in China that emphasizes English language proficiency can support China's global participation and enable instructors to develop competencies in line with international best practices (Xie & Curle, 2022). Therefore, there is a pressing theoretical need to formulate CPD models that encompass not just generic teaching competencies but also language-specific and culturally relevant strategies.

Limitations of the Study

One of the main limitations of this study is the scarcity of current, high-impact publications. The data indicates that publications from 2022 to 2024 in this field have seen low citation rates, possibly due to a reduced emphasis on the interconnectedness of teaching competence, CPD, and English language education in China. This highlights a significant deficiency in the literature, particularly in the context of how CPD contributes to enhancing English language teaching proficiency in application-oriented universities in Henan. The study may also be constrained by a lack of recent, high-impact sources directly relevant to its research objectives, thereby limiting the depth of insights it can provide and emphasizing the need for a larger body of modern studies that explicitly assess CPD in relation to teaching competence in English language instruction within the region.

While the study benefits from the diverse attributes of current CPD literature, a critical aspect comes from fields outside linguistics, such as psychology and medical training. This multidisciplinary approach can dilute the study's focus on language-based CPD frameworks. The interwoven nature of these fields underscores the growing global importance of psychology and medical training in professional development, while also pointing to a lack of targeted studies on linguistics and English language instruction within the Henan context. Therefore, the study may face challenges in presenting its results in a way that specifically addresses the needs of English language instructors in China. Moreover, although educational science in East Asia is advancing, the data highlights that Chinese research lacks the international impact of European contributions, thus limiting the theoretical framework for providing high-impact, regionally relevant CPD concepts for English language teachers.

Recommendations for Future Studies

Future research should concentrate on investigating the precise relationship between CPD and teaching competence in English language instruction, especially in the context of China. Given the low citation rates of recent publications from 2022 to 2024, which highlight a lack of studies on CPD for English language teachers, researchers can aim to fill this gap by assessing the specific challenges and professional requirements of English language instructors. Focusing research on the effectiveness of CPD training in enhancing the pedagogical skills of English language teachers in this region will not only address the current gap in the literature but also support China's efforts to globalize its workforce through improved English

proficiency.

Additionally, there is a need for improved interdisciplinary studies that combine educational challenges with perspectives from linguistics, psychology, and other disciplines to develop a comprehensive CPD framework tailored for English language teachers. Current research predominantly links CPD to psychology and medical training, but future studies should explore the potential integration of concepts from these fields into language instruction. Consequently, such studies can devise more effective CPD methods that blend cognitive, psychological, and pedagogical elements to meet the unique competencies required for English language instruction. This interdisciplinary approach can elevate the global impact of Chinese educational studies, offering more competitive and innovative dimensions that resonate internationally, similar to the influence of European research in the field.

References

Asterhan, C. S., & Lefstein, A. (2024). The search for evidence-based features of effective teacher professional development: a critical analysis of the literature. Professional development in education, 50(1), 11-23.

Bardach, L., & Klassen, R. M. (2021). Teacher motivation and student outcomes: Searching for the signal. Educational Psychologist, 56(4), 283-297.

Bardach, L., Klassen, R. M., & Perry, N. E. (2022). Teachers' psychological characteristics: Do they matter for teacher effectiveness, teachers' well-being, retention, and interpersonal relations? An integrative review. Educational Psychology Review, 34(1), 259-300.

Belle, A. B., & Zhao, Y. (2023). Evidence-based decision-making: On the use of systematicity cases to check the compliance of reviews with reporting guidelines such as PRISMA 2020. Expert systems With applications, 217, 119569.

Day, C. W., Simpson, A., Li, Q., Bi, Y., & He, F. (2023). Teacher professionalism: Chinese teachers' perspectives. Journal of Professional Capital and Community, 8(2), 65-89.

Dogan, C., & Kirkgoz, Y. (2022). Promoting continuous professional development of English teachers through action research. International Journal of Educational Reform, 31(3), 246-277.

Dunne, G. (2024). Deliberate Ignorance and Myopic Intellectualist Understandings of Expertise: Are Philosophers of Education Epistemic Trespassers in Initial Teacher Education Programmes? Studies in Philosophy and Education, 1-18.

Entesari, E., Yousefi, M. H., & Eslami, H. (2020). A mixed-method study of Iranian EFL teachers' achieving resiliency: implications for teacher development. Asian-Pacific Journal of Second and Foreign Language Education, 5(1), 15.

Godínez Martínez, J. (2022). Action research and collaborative reflective practice in English language teaching. Reflective Practice, 23(1), 88-102.

Gong, Y. F., Lai, C., & Gao, X. A. (2022). Language teachers' identity in teaching intercultural communicative competence. Language, Culture and Curriculum, 35(2), 134-150.

Gu, Q. (2023). Anchoring teacher professional learning and development in context: How schools enable teachers to thrive. In The Palgrave handbook of teacher education research (pp. 745-761). Springer.

Karlen, Y., Hirt, C. N., Jud, J., Rosenthal, A., & Eberli, T. D. (2023). Teachers as learners and agents of self-regulated learning: The importance of different teachers competence aspects for promoting metacognition. Teaching and Teacher Education, 125, 104055.

Lafferty, N., Sheehan, M., Walsh, C., Rooney, A. M., & Mannix McNamara, P. (2024). School leaders' perspectives of the continuous professional development of teachers. Cogent Education, 11(1), 2392422.

Li, R., Liu, H., Chen, Y., & Yao, M. (2022). Teacher engagement and self-efficacy: The mediating role of continuing professional development and moderating role of teaching experience. Current Psychology, 41(1), 328-337.

Liu, H., Zhang, X., & Fang, F. (2023). Young English learners' attitudes towards China English: unpacking their identity construction with implications for secondary level language education in China. Asia Pacific Journal of Education, 43(1), 283-298.

Liu, Y., Mishan, F., & Chambers, A. (2021). Investigating EFL teachers' perceptions of task-based language teaching in higher education in China. The Language Learning Journal, 49(2), 131-146.

McChesney, K., Gurney, L., & Chivers, M. (2024). Teacher Professional Learning and Development Research in Aotearoa New Zealand: A Scoping Review of Literature, 2010–2023. New Zealand Journal of Educational Studies, 1-24.

Mehrpouyan, A. (2023). Enhancing online English language and literature classrooms: effective and practical teaching strategies. Education and information technologies, 28(4), 4127-4141.

Merry, L., Castiglione, S. A., Rouleau, G., Létourneau, D., Larue, C., Deschênes, M.-F., Gonsalves, D. M., & Ahmed, L. (2023). Continuing professional development (CPD) system development, implementation, evaluation and sustainability for healthcare professionals in low-and lower-middle-income countries: a rapid scoping review. BMC Medical Education, 23(1), 498.

Mishra, V., & Mishra, M. P. (2023). PRISMA for Review of Management Literature–Method, Merits, and Limitations–An Academic Review. Advancing Methodologies of Conducting Literature Review in Management Domain, 125-136.

Mohammed, A. K., & Gutema, H. (2023). ENGLISH LANGUAGE TEACHERS'CONTINUOUS PROFESSIONAL DEVELOPMENT OBSTACLES. LLT Journal: A Journal on Language and Language Teaching, 26(1), 255-271.

Mu, Y., & Yu, B. (2023). Developing intercultural competence in college business English students: A study of innovative teaching in China. International Journal of Intercultural Relations, 92, 101747.

Naseer, S., & Saif, M. (2020). The impact of continuing professional development on teachers' teaching approaches. Journal of Education and Practice, 11(7), 79-87.

Rao, Z., & Yu, H. (2021). Enhancing students' English proficiency by co-teaching between native and non-native teachers in an EFL context. Language Teaching Research, 25(5), 778-797.

Ritterbusch, G. D., & Teichmann, M. R. (2023). Defining the metaverse: A systematic literature review. IEEE Access, 11, 12368-12377.

Sauer, P. C., & Seuring, S. (2023). How to conduct systematic literature reviews in management research: a guide in 6 steps and 14 decisions. Review of Managerial Science, 17(5), 1899-1933.

Schunk, D. H., & DiBenedetto, M. K. (2021). Self-efficacy and human motivation. In Advances in motivation science (Vol. 8, pp. 153-179). Elsevier.

Shao, L., & Rose, H. (2024). Teachers' experiences of English-medium instruction in higher education: A cross case investigation of China, Japan and the Netherlands. Journal of Multilingual and Multicultural Development, 45(7), 2801-2816.

Smith, C., & Gillespie, M. (2023). Research on professional development and teacher change: Implications for adult basic education. In Review of Adult Learning and Literacy, Volume 7 (pp. 205-244). Routledge.

Smith, J., & Johnson, K. (2020). The influence of continuing professional development (CPD) on the teaching approaches of secondary school teachers. Education Research Review, 15, 1-14.

Smith, T., & Lee, H. (2021). Staying current: How frequent CPD influences creative teaching. Journal of Modern Education, 28(2), 78-92.

Tuo, X.B., & Li. Y.F. (2023). Problems and countermeasures in large class teaching of college English. Education Space, 159.

Ullah, N., & Almani, A. S. (2022). Factors affecting students' academic performance: A case study of secondary schools of makran division balochistan, Pakistan. Webology, 19(2), 2749.

Vadivel, B., Namaziandost, E., & Saeedian, A. (2021). Progress in English language teaching through continuous professional development—teachers' self-awareness, perception, and feedback. Frontiers in Education,

Wang, Y., Derakhshan, A., & Rahimpour, H. (2024). Developing resilience among Chinese and Iranian EFL teachers: A multi-dimensional cross-cultural study. Journal of Multilingual and Multicultural Development, 45(6), 2111-2128.

Wang, X. (2020). A study of current professional standards for ESL Teachers in the united states. Harbin: Harbin Normal University.

Wu, D., Zhou, C., Li, Y., & Chen, M. (2022). Factors associated with teachers' competence to develop students' information literacy: A multilevel approach. Computers & Education, 176, 104360.

Xie, W., & Curle, S. (2022). Success in English medium instruction in China: Significant indicators and implications. International Journal of Bilingual Education and Bilingualism, 25(2), 585-597.

Yan, C., & Wang, L. (2022). Experienced EFL teachers switching to online teaching: A case study from China. System, 105, 102717.

Yang, J. (2021). Understanding and enhancing Chinese TEFL teachers' motivation for continuing professional development through the lens of self-determination theory. Frontiers in Psychology, 12, 768320.

Yuan, G., & Gao, Y. (2023). Factors impacting an overseas continuing professional development programme: Chinese teachers' voices. Asia Pacific Journal of Education, 43(1), 270-282.

Yuan, K., & Liu, S. (2024). Understanding EFL instructor identity changes during online teaching in the COVID-19 pandemic: A case study in China. RELC Journal, 55(1), 46-62.

Yueting, X. (2017). "I Cannot Dance Upon My Toes": A Case Study Into Teacher Learning Through Participating in an English Teaching Contest in China. Chinese Journal of Applied Linguistics, 40(4), 353-370.

Zhang, X., Admiraal, W., & Saab, N. (2021). Teachers' motivation to participate in continuous professional development: relationship with factors at the personal and school level. Journal of Education for Teaching, 47(5), 714-731.

Zhang, W., (2022). Modern modernization: Ideas, systems, institutions, contents, methods and governance. Journal of Jilin Normal University (Humanities & Social Science Edition), 2022(01), 51-58.

Zhi, R., & Wang, Y. (2023). English as a foreign language teachers' professional success, loving pedagogy and creativity: A structural equation modeling approach. Thinking Skills and Creativity, 49, 101370.