

# The Research Situation of Student Teachers' Professional Development——A Study of Teacher Education Through CiteSpace

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**Abstract:** The analysis of the researches on the pre-service teacher education helps to explore the actual situation of my current English teacher education research, and promotes the reflection of researchers. In order to understand the development and research characteristics of the English teacher's study in China since 2000, the study used CiteSpace V to conduct 381 valid literatures on English teacher education from January 1st, 2000 to 2017 of CNKI. The results show that, since 2000, the topic of English teacher education research focuses on internships, curriculum standards and English majors. These researches have been influenced greatly by education policies, and the cooperation of researchers is not prominent.

**Keywords:** Knowledge Mapping; Timeline Analysis; Research Focus; Research Cooperation

## 1. Introduction

In 2015, the Ministry of Education implemented a reform of the teacher qualification examination, and required all candidate should take part in the national unified examination. Normal students and non-normal students are required to participate in the teacher qualification examinations organized by the Ministry of Education. These reforms fully reflect the importance attached by the state and educational institutions at all levels to the development of the practical ability of normal students and the determination to improve the proficiency of basic education teachers in China. At the same time, various colleges and universities in China, especially the teachers' colleges and universities, have also launched research on the related subjects of teacher training. A series of reforms have continuously promoted the reflection and reform of the pre-service teacher training in Normal Universities.<sup>[1][2][3]</sup> The study of English teacher education in colleges and universities must have an intuitive and systematic understanding of the hot topics, development contexts and trends of college English teachers in recent years. This will help researchers to improve the sensitivity of research and reflect on the research and development of this topic timely. On this basis, this study focuses on two research questions: What is the development of English teacher education research since 2000? What are the characteristics of English teacher training research since 2000?

## 2. Research method

### 2.1 The introduction of research software

This study used CiteSpace V as the main research tool, supplemented by China Knowledge Network (CNKI) visual analysis function. CiteSpace, also known as Citation Space, is a citation visualization analysis software that is developed in the context of scientometrics and data visualization. The software presents the structure, regularity and distribution of scientific knowledge through visual means.

### 2.2 Data Collection

This study uses the China Knowledge Network (CNKI) database as the main source of literature data. In the advanced search, the article "English teacher students" is used to search the documents from January 1, 2000 to December 31, 2017, and the type is not limited. A total of 382 relevant literature records were retrieved. The literature information includes the literature category, author, author's organization, title, journal, publication year, keywords, abstracts and other information. After deleting a supplementary announcement, 381 valid documents were retained. CNKI can output Refworks format files suitable for CiteSpace V analysis. The collected documents are converted to CiteSpace V analyzable format using the data conversion function Data in CiteSpace V. Then use CiteSpace V to study the key words and research hotspots of 381 literature data, set the time span to 2000-2017, analyze the time slice (Years per Slice) for one year, and the text processing (Text Processing) source segment source (Term Source) Select Title, Abstract, Author Keywords, and Keywords Plus. The data node analysis dimension uses a keyword (Keyword). Combined with the Timeline function in CiteSpace V, the document data was analyzed by keyword diachronic development. The relevant literature research hotspot knowledge map and research key words diachronic development knowledge map are obtained.

## 3. Data analysis

### 3.1 Hotspots analysis

Through the hotspot analysis with English teachers as the key words, we can effectively grasp the research development and research characteristics of English normal students from 2000 to 2017. The research uses the keyword co-occurrence visualization map analysis in CiteSpace V to analyze the collected 381 English teacher’s research literatures and obtain the keyword visualization results. In the visualization result map, a total of 59 hotspots and 107 connecting lines were obtained. Among them, there are four important research hotspots closely related to the study of English teachers and students, namely #1 Education Internship, #2 English Major, #3 Pre-service Internship, #4 New Curriculum Standard. In order to fully display the distribution of research hotspots in English teachers development, and to show the literature in more detail, the author uses CiteSpace V to export the list of relevant high-frequency keywords and classify them by year in Table 1.

Table 1. High-frequency keywords 2000-2017

Year	Keywords(Frequency)
2005	English Teaching Methods(7)Curriculum Goals(2)
2006	Pre-service students in Normal University(168)
2008	Pre-service Student(39)
2009	Teaching Skills(24)Educational Internship(13)Interns(3)Normal Students Education(2)
2010	Strategies (12)English(9)Pre-Service Education(2) English Major Students in Normal University(2)English Teacher(2)
2011	Cultivation(10)Mode of Cultivation(9)Teaching Practice(4)Comparation(2)
2012	Microteaching(8)English Teaching Skills(4)Normal University(3)New Curriculum Standards(2)Major course(2)Stereoscopic mode(2)
2013	English Major(6)Teacher Belief(6)Pre-service Teacher(4)Teaching Proficiency Skills(4)Issues(4)Situation(2)PCK Knoledge(2) Strategies(2)Trial(2)Teacher Education(2)
2014	Tpack Teaching Knowledge(2)English Major Students in Normal University(2)Phonetics(2)New University(2)Training System(2)
2015	Teaching Proficiency(11)Local University(4)Reform(4)Pedagogical Knowledge(3)Practical Teaching Ability(3)Teaching Files(2) Internship(2)Interns(2)Classroom Teaching Skills(2)Professional Skills(2)
2016	Identity Recognition(2)Teaching Proficiency Development(2)Major of Pedagogical(2)Ability of Self-assisted Learning (2) Comprehensive English(2)Necessity(2)Professional Standards(2)Ability of Reflection(2)Interactive Reflection Mode(2)
2017	English Teaching(2)English Major in Normal University(2)

*Note: The number in the brackets is the frequency of the Keywords.*

The data shows the research on development of English teachers in 2000-2017. First of all, from 2000 to 2004, there was no research hotspot in the study of English teachers, and no relevant research was published in 2000 and 2002. In 2001 and 2003, one research literature was published. In 2004 and 2007, there were two and eight related literatures published, but none of them formed the hotspot of keyword research in the year. Based on this, it is found that when CiteSpace V conducts hotspot analysis, the frequency of occurrence of keyword research articles in the current year is generally used as the basis for calculation, and the co-occurrence of two or more document keywords in the same year is the hotspot analysis basis of the software. In 2005, the outstanding research hotspot was English teaching method. In 2006, it was English teacher’s student. In 2008, it was a teacher’s student. In 2009, it was teaching skill and educational internship. In 2010, it was a countermeasure and English. In 2011, it was a training mode. In 2012, it was a micro. Grid teaching, teaching skills, higher education institutions and new curriculum standards. In 2013, English majors, teacher beliefs, pre-service English teachers and teachers’ vocational skills. In 2014, research hotspots were more average. In 2015, teaching ability, local colleges and reforms. In 2016, the research hotspots were more diverse but the frequency keeps even. In 2017, there were only two frequencies in the research hotspots, mainly in English. The above data shows the development characteristics of the English teacher’s study since 2000. First of all, before 2009, the relevant research of English teachers and students was not enough, and there was no obvious professional features. The keywords in the research were mostly teachers, English teachers and English teaching methods. The years when Hotspots are not listed by CiteSpace V are as follows: 2001 “Reflection mode and the cultivation of professional competence of English teachers”. This article mainly describes the cultivation of the reflective ability applied to the professional ability of English teachers. 2003 “Importance and Teaching Methods of English Teacher’s Professional Voice Course”. In 2004, “Theory Discussion in English Teacher’s Tests” and “Thoughts on the Construction of English Major Teacher Education Curriculum System”. In 2007, “Discussion on the Professional Development of English Teachers in Higher Vocational Colleges”, “Reflexive Teaching and Cultivation of English Teachers”, “A Preliminary Study on the Quantitative Methods for the Evaluation of English Teachers’ Students in Higher Vocational Colleges”, “English Class for Non-English Normal Students”.

Secondly, after 2009, there are many research hotspots in the teaching skills, teaching ability, internship, teacher professional development, vocational skills, pre-employment training and so on. This embodies the practical research on the study of English teacher’s students from theory to the beginning, paying attention to the cultivation of practical ability of normal students. This research hotspot change was particularly prominent in the three years from 2009 to 2011. During the three years, the English teacher’s research hotspots were the 2009 teaching skills and internships, the 2010 policies, the 2011 training model and teaching practices. The “National Education Reform and Development Plan (2010-2020)” issued in 2010 clearly states that higher education is required: “Teachers should take teaching as their primary task and continuously improve their education and teaching; strengthen laboratories,

schools inside and outside. Teaching infrastructure such as practice bases and course materials.” (2010) At the end of 2011, the Ministry of Education’s first “Teacher Education Standards” and “Teacher Professional Standards (Trial)” clearly demonstrated that the state’s emphasis on education and teaching has been enhanced. At a high level, and put forward higher requirements for teachers, promote the reform and development of normal student education. Therefore, the research hotspots at this stage are embodied in the practice-oriented English teacher training. Third, the increase in the study of English teacher students is highlighted in two time periods, 2009-2011 and 2015-2016. The “National Education Reform and Development Plan (2010-2020)” (hereinafter referred to as the “Outline”) promulgated in 2010 clearly states that Article 19 of higher education requires higher education to improve the quality of personnel training. Strengthen the construction of internship bases inside and outside the laboratory, and strengthen the practical teaching links. The study of English teacher’s development in the period from 2009 to 2011 before and after the promulgation of the “Outline” focuses on the teaching skills (24), educational internships (13), policies (12), English (9), training (10) and training of normal students. Mode (9). These research hotspots embodies the efforts of English majors in the cultivation of normal students to explore the training of professional talents suitable for their own disciplines, and begins to strengthen the cultivation of practical ability and educational teaching skills of normal students, and explore effective training mode of practical ability of normal students. The research hotspots of the following years have continued this trend and vividly reflected the new research topic of the year. Such as: 2012 microteaching (8), stereo mode (2), teacher beliefs in 2013 (6), pre-service English teachers (4), Tpack (2) in 2014, new colleges (2), Training system (2). In 2015, the Ministry of Education will apply for professional teachers who are enrolled in 2015 and beyond. Students who apply for primary and secondary school qualifications should take the teacher qualification examination. The proposal of this policy further urges the reform of normal colleges and universities in the education of normal students, promotes the quality improvement of normal colleges in the training of normal colleges, and maintains the advantages of training their professional talents. The research hotspots in 2015-2016 are obviously reflected in the research field of focusing on the characteristics of the discipline, refining the practical ability of normal students, paying attention to the basic English major courses, practicing teaching guarantees, teachers’ own identity and other activities that are closer to the frontline education and teaching activities and more pragmatic. For example, the hot keywords in 2015 are teaching ability (11), local colleges and universities (4), reform (4), teacher knowledge (3), practical teaching (3), teaching plan (2), internship (2), and internship (2) Classroom teaching skills (2), vocational skills (2), 2016 for identity (2), teacher professional development (2), teacher major (2), independent learning ability (2), comprehensive English (2), necessity, (2) primary school teacher professional standards (2), reflective ability (2), interactive reflection mode (2).

### 3.2 Chronological analysis

The time development of the hot topics related to the English teacher’s study has four important research hotspots closely related to the study of English teachers and students, namely #1 Education Internship, #2 English Major, #3 Pre-service Internship, #4 New Curriculum Standard. In CiteSpace’s Timelining visualization, we can clearly see the time development cycle of each relevant hotspot. The first line is #0. The hotspot is the core keyword English teacher. The research runs through the whole period of 2000-2016, and the characteristics of English subjects in 2017 have become prominent, which has turned its hotspot into keyword English teaching and English teacher professional, which reflects the continuous improvement of the awareness and attention of English teachers. #1 Research hotspots are educational internships. Since 2009, the cultivation of teaching practice ability of normal students has begun to receive attention, and a series of research hotspots have been formed under the research hotspot. #2 Hotspots are in English, and the hotspots started in 2009 and lasted until 2017. The study of English teacher students since 2008 gradually formed a study of normal students with a clear perspective of English. It shows that in the study of English Major Normal students, the researchers pay more attention to the subject profession of the normal students, and rely on the characteristics of the subject profession to explore effective training paths for normal students. The #3 hotspot is an internship. The hotspots linked to the hotspot include teacher education, local colleges, vocational ability, teaching skills, lectures, pre-vocational education, etc. The #4 keyword hotspot is the new curriculum standard, and only appeared in 2012 at a frequency of 2. The hotspot keyword has fewer connection lines with other hotspots, and is at the periphery of the research hotspot.

## 4. Conclusion

Through the above analysis, first of all, a clear understanding of the development of English teacher education since 2000. Since 2000, the research hotspots of English teachers have focused on four aspects: educational internship, English, internship, and new curriculum standards. Among them, there are three aspects related to English teacher training, English internship, English internship and internship. The diachronic development of the vein map shows the development of relevant hotspots. The English teacher’s study has always paid much attention to the subject profession, which also reflects the researcher’s research attaches importance to the subject profession and attaches importance to the academic professional ability of the English teacher.<sup>[4][5]</sup> Educational internships and post-training internships have been the focus of researchers in this field since the publication of the Outline. This reflects the researchers’ increasing concern about the practical dimension of English teacher’s study and tries to explore an effective development model of English teacher’s practical ability. Taking the English teacher’s students as the object, the attention of the two basic dimensions of subject basic knowledge and teaching practice ability has made the study of English normal students in 2000 show a distinct combination of learning and learning.<sup>[6]</sup> Secondly, it also has a certain understanding of the characteristics of English teacher training since 2000.

(1) It is more sensitive to relevant policies. Since 2000, English teacher life research has experienced four distinct development periods. Among them, there are three time nodes that are more interesting, the promulgation of the 2010-2011 Outline, Teacher Education Standards and Teacher Professional Standards (Trial), and the release of the 2012 curriculum standards and the implementation of the 2015 National Teacher Examination. (2) Research has close contact with the disciplines of English.

From the above analysis of the development and characteristics of the English teacher’s research since 2000, the paper has an

intuitive preliminary understanding of the overall situation of the research field, and can provide some reference for researchers who pay attention to the research field. On the occasion of the completion of the draft, the Central Committee of the Communist Party of China and the State Council issued the “Opinions on Comprehensively Deepening the Reform of the Construction of Teaching Staff in the New Era” on February 1, 2018. This is the first landmark policy document issued by the Party Central Committee since the founding of New China. The publication of the “Opinions” means that normal education has an important strategic position in the Chinese teacher education system. Therefore, the characteristics of my current English teacher training in China have certain practical significance for the development of related research. Due to the delay in the network presentation of related literature, the sample collection of this research literature is due to be early 2017, which is the place for future research needs improvement.

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