Analysis of Research Features on College Teachers' Ethics in China Based on CiteSpace Knowledge Map

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Abstract. This paper, based on the knowledge map drawn by the CiteSpace, found that the research on college teachers' ethics has three features. First, papers are published on a great number of journals, with a small distribution on the core journals. Second, college teachers are the main researchers and research institutions are widely distributed, which indicates a requirement for an improvement of the continuity and depth of the research. Third, the research focused on four core topics themes: the current situation of college teachers' ethics, the causes of problems on college teachers' ethics, the integration of socialist values and the construction of college teachers' ethics, which is the main, and the long-term mechanism of college teachers' ethics construction.

Keywords: college teachers' ethics; Knowledge Map; features.

1. Introduction

On December 24, 2020, the Ministry of Education and other six departments of Chinese government issued the Guiding Opinions on Strengthening the Reform of the Construction of College Teachers in the New Era. This is the first document for a comprehensive and systematic deployment on the construction of college teachers since the 18th CPC National Congress. It mainly emphasizes four aspects, that is the construction on teachers' ideological and political quality and their ethics, college personnel system reform, refinement of teachers evaluation reform and improvement on teachers' ability of educating people while imparting knowledge, so on and so forth. This indicates a new step to further deepen the construction of college teachers in China.

In order to clarify the current situation, features and problems of the present research and potential research issues on college teachers' ethics, this paper, using bibliometric method and taking advantage of the intuitive and visual features of CiteSpace software [1], collected and analyzed journal literature on CNKI from 1991 to 2020.

2. Research data and method

2.1 Research Data

According to the contents of some sample papers, both "college teachers' ethics" and "the construction of college teachers' ethics", as main key words, refer to research on the construction and development of college teachers' ethics. Since then, to fully cover the literature, both of the two key words were used for retrieval in this research, and the publishing time was set on 1991-2020. Altogether, 1143 papers were collected, involving the construction of teachers' ethics in undergraduate education and high vocational education. These papers were exported in the form of Refwork from CNKI and converted to the format applicable to CiteSpace, and then were processed by the software for classified statistics and knowledge maps.

2.2 Research Method

In order to intuitively present the current features of researches on the construction of college teachers' ethics, this paper, taking advantage of the visual software of CiteSpace developed by Dr. Chen Chao-mei, drew knowledge maps of the authors, research institutions and key words of the journal papers, acquired statistics of annual publishing and journal categories, and sorted out the research topics.

3. Research results

3.1 The Variation Trend of Paper Publishing

Through the statistical analysis of the number of papers on the construction of college teachers' ethics in the past 30 years, an overall variation trend can be achieved, as is shown in Fig. 1.

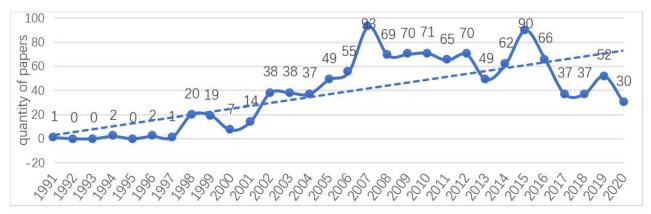


Fig. 1 The Variation Trend in Quantity of Published Papers from 1999 to 2000

In general, the number of papers on the construction of college teachers' ethics in the recent 30 years shows a growth trend, which can be divided into three stages: (1) The slow development period (1991-1997). The number of papers in this stage is very small, and even in 1992, 1993 and 1995 no paper was published. (2) The fluctuant growth period (1998-2015). The trend of this period is an overall growth with fluctuations. In 1998, 20 papers were published, which was an increase compared with the previous stage, but then came a fall from 19 papers in 1999 to 7 papers in 2000. After that, another increase started from 14 papers in 2001 to 38 papers in 2002, and from then on, a stable development was maintained until 2004. From 2005 to 2007, the number of papers increased from 49 to 93, which was two times more than that in the previous phase, and thus, the first peak was formed. In 2008, the number of papers was reduced to 69, and from then to 2012, another stable development was kept, ranging from 71 to 65 in the 5 years. The number of papers decreased to 49 in 2013, but in 2014 it increased to 62, and then 90 in 2015, in which the second peak was formed. (3) The fluctuant decline period (2016-2020). The overall trend of this period is a decline with fluctuations. From 2016 to 2018, the number of papers decreased to 37, but there came an increase to 52 in 2019, and then a decline again in 2020 with the number of 30. Generally speaking, the number of papers in this stage was in a declining way, but compared to that in the first period, it was still at a higher level.

3.2 Categories of Journals and Distribution of Papers

The category of journals here refers to the classification of journals containing the papers on the construction of college teachers' ethics. Through the analysis of journal categories and paper distribution, the quality and level of the research on the construction of college teachers' ethics can be roughly revealed. There are altogether 545 journals, including 82 journals of education, 307 journals of colleges, and 156 other kinds of journals. In terms of the number of papers, there are 225 papers published in journals of education, 399 published in journals of colleges, and 519 published in other kinds of journals. From the aspect of the average publishing, there are 2.7 papers published in per journal of education, 1.3 papers published in per journal of colleges, and 3.3 papers published in per other kind of journal. Detailed information is shown in Table 1.

Among all the journals, there are 70 core journals, including Chinese core journals and Chinese social science citation index journals (CSSCI), accounting for 13% of the total number of journals. Totally, 217 papers were published in these journals, accounting for 19% of the total papers, with an average publishing of 3.1 papers per journal. Among the 70 journals, 39 are CSSCI, accounting

for 7.1% of the total journals. 102 papers were published in the 70 journals, accounting for 8.9% of the total papers, with an average publishing of 2.6 papers per journal.

Table 1 Journal Categories and Paper Distribution

Journal Categories	The Number of	The Number of	The Average Number of	
Journal Categories	Journals	Papers	Papers Per Journal	
Journals of Education	82	225	2.7	
Journals of Colleges	307	399	1.3	
Other Kinds of Journals	156	519	3.3	
Total	545	1143	2.1	

Generally speaking, there are various categories of journals, and the papers are scattered widely in the journals, with a low average publication in each journal. Furthermore, the number of papers published in core journals is small, raising a demand for more efforts to improve the research level and quality.

3.3 Categories of Authors and Research Institutions

The distribution of research institutions and paper authors can detect the formation of research bases and research teams on a certain research topic. There are 376 research institutions focusing on the construction of college teachers' ethics, among which institutions of higher education at all levels are the main. According to the number of papers published by the institutions, Northeast Normal University, Nantong University, Guangdong Ocean University and Central China Normal University, and the other 16 colleges and universities are ranked top 20 (see Fig. 2). The total number of papers created by these institutions is 156, accounting for 13.6% of the total papers.

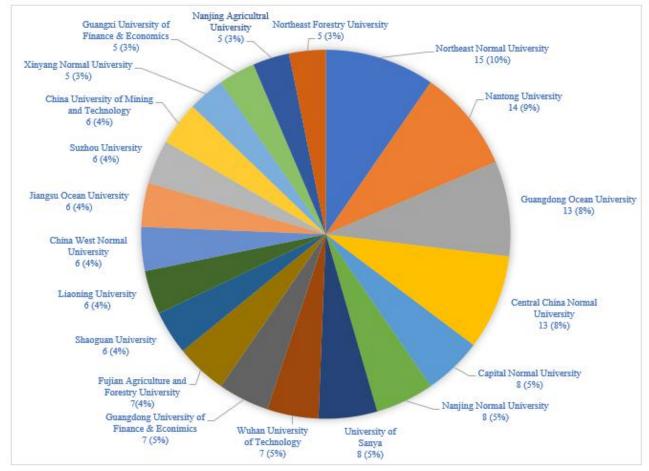


Fig. 2 The Top 20 Research Institutions Ranked According to the Number of Published Papers

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According to the combined analysis of the knowledge map of authors drawn by CiteSpace (Fig. 3) and background data, it is found that there were 583 authors in the study of the construction of college teachers' ethics, with 1.9 papers per ca pita. The top 3 authors ranked on published papers are Tang Yong from Shaoguan University, He Xianglin from Central China Normal University, and Wang Min from Huaihai Institute of Technology (Jiangsu Ocean University). Some of the authors have formed their own research characteristics and research team, such as He Xianglin, Yuan Benfang and Ren Youzhou from central China normal university, who analyzed the current situation, problems and proposed possible countermeasures for the construction of college teachers' ethics based on the survey of a certain university in Hubei Province. Also, Wang Hong and Ren Wenfang as a team from Shenyang University of Technology explored the effective ways for the construction of college teachers' ethics.

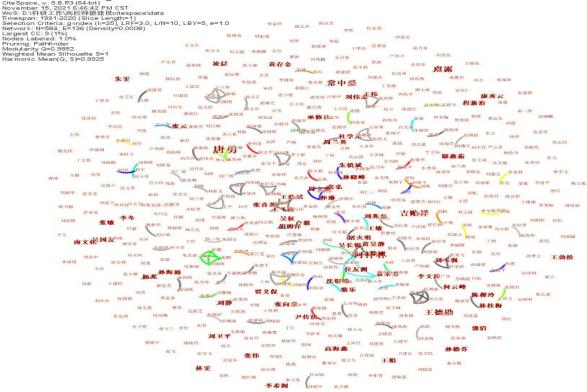


Fig.3 The Knowledge Map of Authors

Based on the comprehensive data analysis of research institutions and authors, it can be inferred that there are many research institutions, but they are widely distributed in different colleges without a strong centrality and impact. The relevant research forces are not concentrated to form strong research centers. The average number of papers published by per author is small. Therefore, the continuity and depth of research needs to be further improved.

3.4 Keywords of the Present Research

Keywords are the refined expressions of the core content of a paper, and the hot issues of research can be detected through the analysis of emergence and frequency of keywords. Keyword emergence refers to the change of research focus in a specific period, through the analysis of which forefront issues in a research field can be achieved. CiteSpace was used to draw the keyword emergence knowledge map (see Fig. 4), and totally 12 keywords emerging from 1991 to 2020 were collected

Top 12 Keywords with the Strongest Citation Bursts

Keywords	Year	Strength	Begin	End
the construction of college teachers' ethics	1991	24.72	1991	2004
running the country with	1991	4.02	2001	2004
construction	1991	6.49	2002	2007
teachers	1991	5.6	2002	2009
socialistic outlook on honor and disgrace	1991	7.41	2006	2008
colleges	1991	3.52	2007	2010
socialist core value system	1991	6.86	2008	2014
private colleges	1991	4.26	2013	2016
long-term mechanism	1991	10.36	2014	2018
socialist core values	1991	5.59	2014	2016
college teachers' ethics	1991	5.61	2015	2017
new era	1991	6.56	2018	2020

Fig. 4 The Knowledge Map of Keyword Emergence

As the main keyword, "the construction of college teachers' ethics" is the earliest and lasts the longest, till 2004. "Running the country with ethics" firstly appeared at the National Conference of Propaganda Ministers in January 2001, where Jiang Zemin clearly proposed the governance strategy of "running state affairs according to law and closely combining with ethics". "Socialistic outlook on honor and disgrace "firstly appeared in March 2006, when General Secretary Hu Jintao attended the joint discussion with committee members from China Democratic League and Democratic Progressive Party during the 4th session of the 10th CPPCC National Committee and proposed that it is necessary to guide cadres and the masses, especially young people, to establish a socialist view of honor and disgrace with eight honors and eight disgraces as the main content. In October 2006, the Sixth Plenary Session of the 16th CPC Central Committee adopted the Decision of the CPC Central Committee on Several Major Issues on the Construction of Building a Harmonious Socialist Society, which for the first time clearly put forward the major proposition and strategic task of "building a socialist core value system". The "Socialist Core Values" was first clearly put forward in November 2012, and the report of the 18th CPC National Congress clearly put forward the "three advocates", namely the 24-word socialist core values. In 2005, the Propaganda Department of the CPC Central Committee and the Ministry of Education's Opinions on Further Strengthening and Improving the Ideological and Political Theory Course of Universities and the Opinions on Further Strengthening and Improving the Construction of Teachers' Education made the construction of teachers' ethics of "colleges" once again a hot topic of research. After that, the number of papers surged, and the first peak was formed in 2007. The "long-term mechanism" was first seen in the Opinions on Establishing and Improving the Long-term Mechanism for the Construction of College Teachers' Ethics issued by the Ministry of Education in 2014. In 2015, the State Council's "Notice on Printing and Issuing the Overall Plan for Promoting the Construction of World-class Universities and First-Class Discipline" made "college teacher ethics" a new hot research topic, and the number of papers formed the second peak. The "New Era", as an essential term in the Ten Code of Professional Conduct for College Teachers in the New Era issued and implemented by the Ministry of Education on November 8, 2018, formed a continuity with the following series of "new era" opinions on the development and reform of education, pushing the research on the construction of college teachers' ethics to a new pattern. Based on the emerging time of the above keywords and the issuance date of the relevant policy documents, it can be found that most of these hot research topics are related to the promulgation of education policies.

Keyword co-occurrence and clustering is to classify similar or closely related keywords into a class via algorithm, and through the analysis of keyword clustering the main topics and issues of existing research results can be abstracted. The knowledge map of keyword clustering was drawn by CiteSpace (see Fig. 5), with Modularity Q=0.8954 (Q> 0.320 means a significant cluster

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structure), Silhouette S=0.9796 (S>0.5 means the clustering is reasonable, S>0.7 means the clustering is convincing). The result indicates an effective and significant cluster structure.

Through the analysis of keyword clustering knowledge map, it is found that the research results of the construction of college teachers' ethics are mainly clustered into 20 key keywords, such as the construction of college teachers' ethics, college teachers, colleges, college teachers' ethics, moral education, professional dedication, socialist concept of honor and disgrace, teacher ethics, and status quo, as shown in Table 2. Among them, the construction of college teachers' ethics, college teachers, colleges, college teachers' ethics can be re-classified as one topic. Combining the analyses of the knowledge map drawn by CiteSpace in the perceptive of Timezone View and background data, it can be found that since the construction of college teachers' ethics emerged as a keyword in 1991, relevant research topics were gradually derived, such as those reflected by keywords like professional dedication (1998), socialist spiritual civilization (1998), status quo (2000), moral education (2001), teachers' ethics (2001), management mechanism (2006), socialist concept of honor and disgrace (2006), socialist core value system (2008), young college teachers (2014) and other keywords.

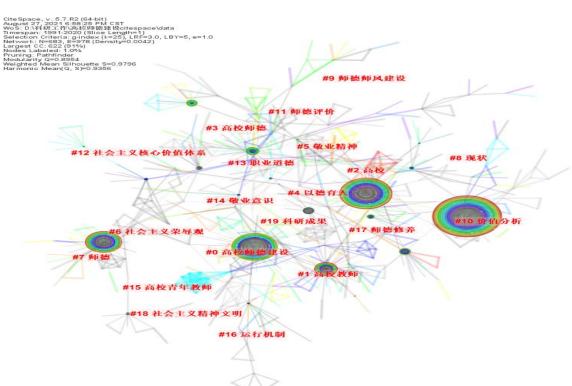


Fig. 5 The Knowledge Map of Keyword Clusters

Table 2 The Distribution of Clustered Keywords and Emergence Time

Number	Clustered Keywords	Emergence Time
1	the construction of college teachers' ethics	1991
2	college teachers	2002
3	colleges	2000
4	college teachers' ethics	2000
5	moral education	2001
6	professional dedication	1998
7	socialist concept of honor and disgrace	2006
8	teachers' ethics	1998
9	status quo	2000
10	the construction of teachers' ethics and morality	2004
11	value analysis	2004
12	teacher's ethics evaluation	1999
13	socialist core value system	2008
14	professional ethics	2014
15	dedication consciousness	1999
16	young college teachers	2014
17	management mechanism	2006
18	teachers' morality	2001
19	socialist spiritual civilization	1998
20	research results	2000

3.5 Research Topics

Based on the analysis of keywords clustering knowledge map and further research of the literature, it can be found that in the recent 30 years, the research on the construction of college teachers' ethics mainly focused on 4 topics: the current situation of college teachers' ethics, causes of college teachers' ethic problems, the integration of socialist values and the construction of college teachers' ethics, long-term mechanism of college teachers' ethic construction. Among them, research on causes of college teachers' ethic problems plays the central part.

3.5.1 The current situation of college teachers' ethics

He Xianglin [2] [3], Jia Guanghui[4], Deng Jinghong [5], Fu Guoguang [6], Tong Feng [7], Ruan Xiaojing [8], and Wang Min [9] investigated the current situation of teachers' ethics in some universities in Hubei, Shandong, Hainan, Zhejiang, Guangdong, Fujian and Nanjing, respectively. In general, the research on the current situation of the construction college teachers' ethics is mainly carried out by questionnaire survey, with front-line teachers as main respondents, and the content of the survey focuses on their mental state, academic research, and interpersonal relationship.

3.5.2 Causes of college teachers' ethic problems

The current research on the causes of college teachers' ethic problems mainly focuses on three aspects: social environment factors in macro level, factors of colleges in the middle level, and factors of teachers and students in the micro level. The interaction of these three levels leads to the prominent problem of college teachers' ethics in colleges.

In the aspect of society, some people think that under the negative factors of market economy, some college teachers put their value completely measured by market price, they "take their work as a means for personal interests, and place too much emphasis on that, thus twisting the original value orientation of the profession" [10].

In the aspect of colleges, the expansion enrollment starting from 1999 leads to contradiction between the shortage of qualified staff and the increase of students with qualities at different levels, which objectively increases the difficulty of educating, leaving teachers no much extra time to improve themselves [11].

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In the aspect of teachers and students, without enough educational ethics, teachers "lack correct understanding and recognition of the professional ethic principles that teachers should observe, let alone consciously follow in practice" [12]. The development of network greatly affected students' awe for college teachers and created psychological alienation which can hardly be influenced by the teachers' education in class.

In general, the analysis of the causes of college teachers' ethic problems involves three major aspects, including more studies on social factors, internal factors and teachers themselves, and relatively few studies from the perspective of students.

3.5.3 The integration of socialist values and the Construction of college teachers' ethics

The construction of teachers' ethics is an important part of the construction of socialist spiritual civilization, and socialist values must be the basic content and fundamental principle to follow. College teachers shoulder the important mission of cultivating high-level talents for the socialist modernization cause, and teachers' ideology will directly affect the formation and development of students' ideology. The integration of socialist values and teacher ethics cultivation has become a compulsory course of teachers' ethic construction.

On the whole, the development and progress of the times give new connotation to the construction of college teachers' ethics, and it is the constant pursuit of college ethics construction to keep pace with the time. The development of social values in every period is an important part of college teacher's ethic construction.

3.5.4 Long-term mechanism of college teachers' ethic construction

Xu Ying [13] believes that the breakthrough in the construction of teachers' ethics lies not in the teachers themselves, but is closely related to the justice of the teacher management system itself. Without the improvement of the institutional environment and the institutional morality, only through self-discipline it is not enough to fundamentally improve the status of teachers' ethics. Therefore, the construction of a long-term operation mechanism is the guarantee and an important driving force of the construction of college teachers' ethics.

In general, the research on the construction mechanism of college teachers' ethics mainly involves the importance of institutional construction, the basis of institutional construction, and the reference from foreign teacher ethics construction mechanism, among which the goal and basis of institutional construction are the focus.

4. Summary

Through the analysis of the research on college teachers' ethics in China based on CiteSpace knowledge map, it can be found that the research force has not been centralized and concentrated, so that the research results are scattered widely. The perceptive of most research is limited on teachers ignoring the affects of students. As to the mechanism of the construction of college teachers' ethics, more researches on theories and concepts have been carried without practical effective and practical countermeasures being put forward. Therefore, in the future research, the research perceptive should be expanded and more research should be performed on the path for the construction of college teachers' ethnics.

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of New Liberal Arts (Project No.: xbmuyjrc2021012), and (3) Northwest Minzu University Innovation Project on Foreign Language Teaching and Research (Project No.: 11101301136).

References

- [1] Chen Yue, Chen Chaomei, Hu Zhigang et al. Principles and application of citation space analysis: CiteSpace Practical Guide [M]. Beijing: Science Publishing House, 2014.
- [2] He Xianglin, Huang Wujing, Xu Li. Teachers as the Essence, Ethics as the Soul——Research Report on the Current Situation of the Construction of Teachers' Ethics in Colleges and Universities (I) [J]. The Party Building and Ideological Education in Schools, 2010, (22): 85-87.
- [3] He Xianglin, Huang Wujing, Xu Li. Teachers as the Essence, Ethics as the Soul——Research Report on the Current Situation of the Construction of Teachers' Ethics in Colleges and Universities (II) [J]. The Party Building and Ideological Education in Schools, 2010, (28): 68-71.
- [4] Jia Guanghui, Cao Sikang. Construction of Long-term Mechanism of College Teachers' Ethics from the Perspective of System—A Case of Colleges in Shandong Province[J]. Journal of Heze University, 2015, 37 (04): 102-105+133.
- [5] Deng Jinghong. Problems and Countermeasures about the Construction of College Teachers' Morality in Hainan Province[J]. Journal of Hainan Radio & TV University, 2011, 12 (04): 8-12.
- [6] Fu Guoguang, Yu Jinlong. Modern College Teachers' Code of Morality and Its Multidimensional Construction Mechanism: Take Zhejiang Province as an example [J]. Journal of Shaoxing University, 2020, 40(02): 81-86.
- [7] Tong Feng, Xia Quan. Empirical Study on Influence Factors of Academic Concentration of College and University Teachers——Analysis Based on Colleges and universities in Guangdong Province[J]. Journal of National Academy of Education Administration, 2018, (01): 81-87.
- [8] Ruan Xiaojing.Research on the Connotation and Construction of College Teachers' Ethics under the New Situation——Analysis Based on Colleges and universities in Fujian Province[J]. Fujian Tribune (The Humanities and Social Sciences Edition), 2017, (05): 178-183.
- [9] Wang Min, Liu Zhaolei, Han Jian. The Actualities of the College Teacher's Occupation Morality and Its Inspiration ——Based on Survey of Three Nanjing "211" Universities [J]. Shanghai Journal of Educational Evaluation, 2014, 3 (03): 55-59.
- [10] Zhao Peiju. Strengthen the Construction of Teacher Ethics and Train High-quality Teachers [J]. China Higher Education, 2013, (Z2): 66-68.
- [11] Qing Dayong. Strengthening the Building of Teacher's Ethics to Improve Harmonious Development in Colleges and Universities[J]. Journal of Chongqing University of Technology (Natural Science), 2007, (03): 154-156.
- [12] Liu Yicang, Du Deyu, Zhan Xiaohang, Yang Zaoyua. Pondering on the Construction of College Teachers' Ethics in the New Era [J]. Higher Agricultural Education, 2002, (09): 46-49.
- [13] Xu Ying. Myth Analysis and Suggestions in the Construction of College Teachers' Ethics[J]. Heilongjiang Researches on Higher Education, 2009 (01): 108-110.