Seminar Teaching in Chinese Higher Education: 
A Bibliometrics and Content Analysis

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Abstract. Seminar has become an attracting teaching method in higher education in past few decades. To give a comprehensive picture of seminar in Chinese higher education, the bibliometrics and content analysis were employed to analyze the relevant articles indexed by the Chinese Social Science Citation Index between 2000 and 2016. The distribution characteristics of literature quantity, published journals and research institutions were revealed in bibliometrics analysis. The law of change on research field, research type and research topics were described in content analysis. This study provides some reference for related research and also suggests directions for further work.

Introduction

Seminar teaching was first introduced from Germany in the early nineteenth, and has been widely adopted by many universities around the world. Seminar teaching, which has the characteristics of research and inspiration, can stimulate students' learning potential and promote teacher-student interaction. So, seminar has become an important form of teaching, and has been widely used in many disciplines.

Accordingly, numerous studies have increased considerably and many topics have been discussed in Chinese higher education in recent years. But so far no researches have yet summarized the characteristics of previous studies. In this context, there is a need for a thematic overview to understand this important research field. This study aims to discover the major research situation of the field.

Research Design

Research Method

Being a quantitative method, bibliometrics analysis can use mathematical and statistical methods to describe the features of relevant articles. Content analysis is a systematic and quantitative method, which can give a comprehensive description of the status of information from literature. The key processes of content analysis include determining the analysis unit and analyzing the categories.

Data Collection

The data were collected through a set of procedures. First, Chinese Social Science Citation Index (CSSCI) database was selected as the data source. Second, according to the purpose of this study, the search criteria were formulated by including “seminar” and “higher education. The year range of the
sample literature determined as from 2000 to 2016. Finally, the researchers selected 73 articles for data analysis.

**Research Results**

**Results of Bibliometrics Analysis**

The distribution characteristics of literature quantity, published journals and research institutions are showed in Fig.1, Fig.2 and Fig.3.

![Figure 1. The year distribution of the seminar particles.](image1)

As showed in Fig.1, the increase rate is slow before 2005. There has been a steady increase since 2005 and the quantity reached to a high tide in 2013.

![Figure 2. Leading journals contributers in seminar research.](image2)

From 2000 to 2016, 35 journals contributed 73 articles. We ranked journals on their total contribution to the list of articles. The top 13 journals with the largest number of publications were identified. The result is presented in Fig.2. In addition to 2 comprehensive journals, most of them are educational journals.
Figure 3. Leading institutions contributors in seminar research.

During the 17 year period of the study, the 73 first authors were affiliated with 50 institutions. The top 12 universities are ranked in Fig. 3, which are mostly top universities in China. It is suggested that top universities usually pay more attention to the advanced education mode.

Results of Content Analysis

A content analysis was performed to extract the most interesting concepts. To provide a picture of the state of the art of academic research, this study has explored the articles following three dimensions: research filed research type and research topics. The results of content analysis are showed in Fig. 4, Fig. 5 and Fig. 6.

According to the fields of Disciplines of Conferring Academic degrees in Chinese higher education, we coded the 73 articles from 10 fields, which are showed in Fig.4. Evidence shows that most researches are to discuss generally the seminar teaching, but more specific contributions concern with law, engineering, management, literature and philosophy.
As concerning research type and methodology, we distinguished among conceptual (descriptive vs normative) and empirical (qualitative vs quantitative) contributions. The results are presented in Fig.5. There are more conceptual researches before 2008, and empirical researches began to increase in 2008. Quantitative studies are rarely present in the literature.

This study categorized the research topic of each published article into one of the following 6 categories: experience introduction, practical experience, theoretical analysis, instructional design, effect assessment and improvement suggestion. The results are showed in Fig. 6. According to the Fig.6, the first four types of research are more, and the latter two types of research is less.

In researches of experience introduction, the scholars mainly summarized the main features of seminar teaching mode from United States, Britain, Belgium, Japan and other countries, and provided references for Chinese universities[5].

In researches of practical experience, the scholars mainly analyzed the practice from Tsinghua University, Peking University, Shanghai Jiao Tong University, Renmin University of China, etc[6].

In theoretical analysis, the scholars mainly discussed the connotation, importance, characteristic and procedures and so on[7].

In instructional design, the scholars mainly provided suggestions about how to apply seminar teaching based on the main characteristics of course of engineering, management, literature, law, etc[8].
In effect assessment, the scholars mainly used survey questionnaires and interview to investigate the influence of seminar teaching on student, including stimulating learning enthusiasm, enhancing academic self-confidence and innovation ability, cultivating cooperative habits, improving the retention rate and promoting the relationship among students, etc.\(^9\)

In improvement suggestion, the scholars mainly analyzed the existing problems of seminar teaching and provided the suggestions to solver them from students, teachers, classrooms, technological means and universities, etc.\(^{10}\)

**Conclusions**

Based on bibliometrics and content analysis, this study produced a reasonable result. This study can analyze the characteristics and trends of the previous studies, and describe systematically development situation, which can give reference for other researches.

In the future, we can enlarge the sources of publication and use other quantitative approaches to learn more about the intellectual structure of research of seminar teaching in Chinese higher education.

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**References**


