

# Bottleneck of China's Higher Education Development from the Differences between Chinese and American Higher Education System

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## ABSTRACT

The construction of an efficient and long-term higher education system is an important prerequisite and guarantee for the development of higher education in a country, which is conducive to laying a good intellectual foundation for the enhancement of national strength. However, in the face of the shortcomings of the construction of China's higher education system, most of the researches are limited to theoretical researches and many researches are one-sided with self-styled thinking, which lack open and inclusive ideas and practical proof to theory. In order to further analyze the bottleneck of China's higher education development, on the basis of analyzing the characteristics of Chinese and American higher education system, this paper analyzes the difference between Chinese and American higher education system by the method of comparative research and literature research, and adopts the multi-level fuzzy hierarchy comprehensive evaluation method to deal with the relevant data of Chinese and American higher education system. Then, it discusses and contrasts the macro-control function of the American government and the direct control function of the Chinese government, and then puts forward the aspects that China's higher education system should improve on the basis of fully considering China's national conditions. It also proposes that while enhancing the independence of educational evaluation, we should improve the Chinese law, change the government functions, and pay attention to the construction of higher education system theory research to build a pluralistic higher education system. Compared with other researches on the China's higher education development, this paper draws on the advantages of the American higher education system and puts forward the countermeasures and suggestions which are more suitable for the development of higher education system in China.

**Keywords:** Chinese higher education system, American higher education system, differences between Chinese and American higher education system, development bottleneck

## INTRODUCTION

For a country's education system, higher education is an important component and a social cause which is concerned by people (Ma, 2016; Hershkovzt and Forkosh-Baruch, 2017). After years of efforts, China's higher education has been developed rapidly, which not only expands the scale of running schools, but also improves the quality of running a school. The pattern of higher education has also undergone great changes, which becomes multi-level, multi-form and multi-channel to provide important talent and technical support for China's modernization construction (Zhou, 2016; Putman, 2017). However, due to the rapid development and the rapid expansion of the enrollment scale, the higher education exposes more and more problems, such as: fuzzy positioning of higher institutions, lack of teachers, internal management chaos and so on. With the continuous development of society and economy, the main contradiction of higher education has been transformed from short

### Contribution of this paper to the literature

- It not only carries out simply exploration for the Chinese and American higher education system's fact and descriptive nature, but also proceeds from the theoretical point of view to recognize and understand the education system comprehensively. It is no longer a simple low-level application.
- The research of this paper is comprehensive and each part of it has a close relationship. The comparative study involves both horizontal and vertical aspects, and it is more conducive to construct Chinese higher education system, which lays the theoretical basis for overcoming the bottleneck of the development of Chinese higher education.
- It not only carries out a macro analysis of the higher education system, but also carries out an in-depth analysis of itself, which makes this paper more profound and comprehensive.
- It makes a feasibility analysis on the experience of learning from the construction of American higher education system, which makes this paper more practical.

supply to the contradiction between the large number of people's educational needs and a small amount of quality educational resources (Wu and Li, 2016; Stylianides and Stylianides, 2017).

From the perspective of foreign higher education system, if we want to improve the quality of higher education and enhance the competitiveness of universities and scientific research, we must build a highly efficient and long-term higher education system. Because of its extraordinary achievements, The American higher education system is concerned and adopted by more and more international organizations and countries, which is not only because of the status of the United States in the world and its developed higher education, but also because of the characteristics and advantages of the American higher education system. It is in line with the requirements of quality control of all the countries in the world to higher education in the popularization and internationalization (Qie and Zhang, 2015; Gabel and Dreyfus, 2017). Therefore, the analysis of the differences between Chinese and American higher education system is conducive to the improvement and further development of China's higher education system to make China's higher education system become more practical, reasonable, scientific and standardized. In summary, the analysis of the differences between Chinese and American higher education systems has important academic and practical significance (Yang and Li, 2017; Appelbaum and Appelbaum, 2017).

Through this paper, more and more people will pay attention to the shortcomings of Chinese education system, which can promote the research and perfection of the higher education system and provide a more comprehensive exposition for understanding and grasping Chinese and American higher education system. And the comparative research provides decision-making basis and reference for grasping the characteristics and trends of China's higher education system (Lawson et al., 2017; Kwon and Block, 2017).

## LITERATURE REVIEW

American sociologist and economist Solstein • Veblen, the earliest person who thought of the American higher education system, believes that the kind of system of authority control, standardization, grade, accounting work, classification, credit and punishment owned to the American university organization will certainly be crowned with more stringent rules, and more universities show the characteristics of the nursing home and criminal exile, he believes that the pursuit of "random curiosity" is the university really want to do (Zhang, 2016; Collins and Staples, 2017).

The Future of American Public Universities proposes that the best universities in the United States will focus more and more resources on fewer and fewer students and teachers, and the goal of the country should not only expand the education opportunity of all citizens, but also build more universities which are capable of developing the highest quality graduates. More concisely, what the United States needs today is not an increasingly wealthy Harvard, but rather more and more high-quality universities like Harvard, which needs the universities like Harvard all over the country (Zhu and Shi, 2016; Stoehr et al., 2017).

There are also many papers related to the higher education system, Paul Harding's Academic Ethics and Economic Issues: The View of University Presidents explores that the ethical dilemma faced by university managers in management. The Evaluation of Academic Research Policy on Plagiarism and Other Forms of Academic Misconduct written by Panker Joya S. B and Avuod G • F analyzes the academic misconduct of some teachers and evaluate the academic research assessment policy. Anna Klein Ruinus • Fu Ruuste • Evans's PhD thesis: Ethical Issues in American Higher Education: A Biblical Interpretation of the Social Background from 1900 to 1950, carries out a panoramic study for a series of problems of American higher education in the first half of the 20th century (Chen, 2017; Yi et al., 2017).

In the Good System: the Ethics Pursuit of Higher Education System, Wu Daguang thinks that the university system of an era reflects the spirit of the university and the level of social development in that era. In the modern

**Table 1.** Statistical analysis table of research methods of Chinese higher education system

	Classification of research methods	Number of papers	Proportion
Classification of methodology	Survey	30	14.22%
Quantitative research	Literature research	98	46.45%
	Historical research	16	7.58%
Qualitative research	Comparative research	29	13.74%
	Case study	26	12.32%
	Narrative research	0	0%
	Grounded theory research	0	0%
	Quantitative research + qualitative research	12	5.69%
Mixed research	Quantitative research + qualitative research	211	100%
	Total	211	100%

**Table 2.** Statistical analysis table of research methods of American higher education system

	Classification of research methods	Number of papers	Proportion
Classification of methodology	Survey	36	16%
Quantitative research	Literature research	88	39.11%
	Historical research	21	9.33%
Qualitative research	Comparative research	22	9.78%
	Case study	31	13.78%
	Narrative research	6	2.67%
	Grounded theory research	2	0.89%
	Quantitative research + qualitative research	19	8.44%
Mixed research	Classification of research methods	The number of papers	Proportion
	Total	225	100%

**Table 3.** Three levels of data analysis methods

Data analysis methods	Basic level	Mainly use descriptive statistics for analysis
	Intermediate level	Based on descriptive statistical analysis, statistical analysis techniques were used to carry out groups comparison
	Advanced level	Establish mathematical model based on research

higher education system, the tradition and modern coexist, conservatism and innovation coexist. Wu Daguang’s dynamic analysis of the higher education system will help people to understand the dynamic evolution of the university system more clearly (Li and Huang, 2015; Goren and Yemini, 2017).

There are many research papers and opinions on higher education system. For example, Liang Nianqiong thinks that China should follow the concept of equal openness, university autonomy and quasi-marketization of higher education in the 21st century, and promote the independent development of Chinese universities. In the paper Exploration of the Historical Development of the American Higher Education System points out that the necessary authenticity needed by the development of American higher education system is obscured by the advantages of marketization, diversity and competitiveness. For the higher education system, rational choice is particularly important. In the Discussion on the Value Orientation of the Construction of Modern University System, Wang Hongcai thinks that the innovation of higher education system is a game among society, individual, knowledge and school values. In Care for Life: The Basic Value Appeal of University System, Li Xia proposes that norms and freedoms exist as the two main values of the system, and the value orientation of the origin is to find the freedom of individual life (Qin, 2016; Mathews et al., 2017).

## METHOD

This paper mainly uses the comparative research method and the literature research method to clarify the viewpoints. In it, the statistics of the research methods of the Chinese higher education system are shown in **Table 1**. The statistics of the research methods of the American higher education system are shown in **Table 2** (Instefjord and Munthe, 2017).

As this paper deals with the analysis of the differences between Chinese and American higher education system, it is necessary to collect large amounts of data and to carry out statistical analysis. As shown in **Table 3**, there are three main levels of data analysis methods, and this paper mainly uses the intermediate level to analyze the data (Durksen et al., 2017).

**Table 4.** Similarities and differences between Chinese and American higher education system

	Approval authority	School conditions	Identification function	Evaluation mode	Recognized accreditation
China	Education department	General	Have	National assessment	Center on law
America	State Government	High	Have	Mainly based on civil assessment	Standards are fine, involving wide ranges

This paper uses the multi-level fuzzy hierarchy comprehensive evaluation method to deal with the relevant data of Chinese and American higher education system, the concrete steps are shown as follows:

Step 1: Create a data collection  $A = \{A: A_1, A_2, A_3, A_4\}$ , set each first-level data sets has  $G_i$  secondary data sets, which are denoted as  $A_i = \{A_{i1}, A_{i2}, \dots, A_{iG_i}\} (i = 1, 2, 3, 4)$ , the he resulting secondary data sets are shown in formula 1:

$$\begin{aligned}
 A_1 &= \{A_{11}, A_{12}, A_{13}, A_{14}, A_{15}, A_{16}\} \\
 A_2 &= \{A_{21}, A_{22}, A_{23}\} \\
 A_3 &= \{A_{31}, A_{32}, A_{33}\} \\
 A_4 &= \{A_{41}, A_{42}, A_{43}\}
 \end{aligned}
 \tag{1}$$

Step 2: Build the coefficient matrix;

Step 3: Carry out statistical analysis for the data by using formula (2), formula (3) and formula (4):

$$H_m = \sum_{i=1, j=2}^{G_i} x_{ij}
 \tag{2}$$

$$V_i = \sum_{n=1}^N H_m / N
 \tag{3}$$

$$W_i = V_i \sum_{i=1}^{G_i} V_i
 \tag{4}$$

In them, formula (2) is used to calculate the score of each row of data, formula (3) is used to find the average score, formula (4) is used to determine the weight value.

## RESULTS

With the continuous development of China's higher education system, China's higher education system has become more and more standardized, legalized, and institutionalized. But each coin has two sides, while achieving success, it exposes many problems and deficiencies, the display of higher education system's role and function is not sufficient. However, modern China urgently needs an efficient and long-term higher education system to promote the Chinese higher education system to develop to the deep level. The similarities and differences between Chinese and American higher education systems are shown in **Table 4** (Tian et al., 2017).

Through the analysis of the differences between Chinese and American higher education system, we can see that if we want to strengthen the self-discipline of the higher education system, we must have a mature higher education system, which also reflects the people's desire to improve the quality and efficiency of higher education. China should learn the advantages and positive practices of the American higher education system, establish and improve relevant laws and regulations, strengthen the theoretical research on the construction of higher education system, communicate with the developed countries on the construction of higher education system as much as possible, and further establish and improve China's higher education system (Cobbinah and Bayaga, 2017).

Although the development of American higher education system is relatively balanced and promotes the development of the national higher education system. However, due to the shortcomings of the American higher education system, it is often in a state of nonuniformity. Therefore, in drawing lessons from the experience, we must take full account of the shortcomings of American higher education system and the different national conditions, consider China's specific institutional environment and make a choice. Chinese and American higher education system learn from each other, accept each other and complement the advantages, which must be able to avoid their own system defects and create a new path of development (John et al., 2017).

## DISCUSSION

Because of the different national conditions and political systems, the American educational system is different from Chinese education system, which is mainly reflected in the government's control function of education. In order to analyze the bottleneck of Chinese higher education development from the differences between Chinese and American higher education systems, this paper discuss the differences between the two governments' higher education systems, and find new ways by exploring the differences (Singh-Pillay and Sotsaka, 2017).

### The Macro-Control Function of American Government

Although the American higher education is a non-governmental activity, it doesn't mean that the government don't care about education. The American government has passed the Higher Education Act in 1965, allowing the federal government to intervene in higher education directly, to strengthen the management of education financing and allocation to make up for the lack of local decentralization.

### The Direct Control Function of Chinese Government

For China's higher education system, the government is located in centre position and plays a leading role. Interim Provisions clearly states that the work of Chinese higher education is organized and implemented by various levels of people's governments and their educational administrative departments, which makes China's education system have obvious administrative coercive and authoritative. Universities must receive the government-designated work arrangements and the conclusions and recommendations given by movement. The government directly control most of the links of higher education system and directly reflect the will of the government.

Through the analysis of the American higher education system, it can be found that the American higher education system attaches great importance to mobilizing the university's own initiative and enthusiasm. In contrast, Chinese higher education system regards the government as the main body, the consequences of this is difficult to harmonize the parties and it is difficult to mobilize the enthusiasm and initiative of the universities. This education system cannot manage Chinese education objectively, fairly and accurately, which is not conducive to the coordination and improvement of China's higher institutions. If things continue this way, the bottleneck of China's higher education development is difficult to break and it will come into a vicious cycle.

## CONCLUSION

From the perspective of higher education system all over the world, the American higher education system has become the most typical higher education system because of its early creation and long history. It is also an important part of the American higher education system. On the whole, although the America advocates freedom, but the development of American higher education and people cannot do without the attention of the government and the community, which also is an important basis for the rapid development of the American higher education system. It provides a good external environment to support the smooth and rapid development, continuous improvement of the higher education.

Although the American education system has many advantages, but there are many differences between China and America in political system and national condition, so if China copy the same policy or system of America, it is likely to cause "not acclimatize". Through the above analysis, it can be easily found that China's higher education system should integrate the advantages and positive aspects of American higher education system in the basis of China's national conditions, to improve China's higher education system. Only in this way, it can break through the bottleneck of the development of China's higher education, for which the Chinese higher education system should be improved in the following aspects:

- Enhance the independence of educational evaluation intermediary organizations in the evaluation of educational results;
- Improve the legal system, and actively guide the community to widely participate in the construction of higher education system;
- Transform government functions and avoid arbitrariness in higher education system;
- Focus on constructing the theoretical research of higher education system, and strengthen communication and exchanges with other countries in the world;
- Establish a perfect and diverse higher education system.

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