

Reference on Evaluation Index System of Humanities and Social Science Research in German Universities*

Lihong Li

School of Humanities and Law
Northeastern University
Liaoning Radio and TV University
Liaoning Vocational College of Equipment and Manufacture
Shenyang, China

Wanbing Shi

Special Education Research Center
Nanjing Normal University of Special Education
Nanjing, China

Abstract—Exploring the evaluation index system of humanities and social sciences in German universities is of great value to improve the management of humanities and social sciences in China. On the basis of defining the core concept scientific research evaluation, university scientific research evaluation and university scientific research evaluation index system, this paper introduces and analyzes the scientific research evaluation index system of humanities and social sciences in German universities and further clarify the reference and enlightenment of German university humanities and social science research index evaluation system to China's scientific research evaluation, aiming to provide international experience for the construction of humanities and social sciences research evaluation index system in Chinese universities.

Keywords—German; humanities sciences in universities; social sciences in universities; science research index evaluation system; reference

I. INTRODUCTION

As we all know, the evaluation of scientific research in German universities began slightly later than that in Western countries such as the United Kingdom, France, and the United States, but the diversity and rigor of its evaluation are recognized worldwide. It is of great significance to analyze the characteristics of the evaluation index system of humanities and social sciences in German universities.

II. CORE CONCEPT DEFINITION

A. Research Evaluation

Scientific research evaluation is a kind of cognitive activity that uses scientific methods to judge scientific research activities and their input and output on the basis of certain scientific research objectives, to manage, supervise, predict and control scientific research activities, and to provide basis for decision-making.[1] Since the mid-nineteenth century, scientific research has become an

important part of modern science. [2] It provides information for management decisions of universities and research institutions, involving recruitment, personal promotion, research project funding, establishing, expanding or closing scientific research departments, and comparing research performance of individuals, departments, universities, and countries. [3] Scientific research evaluation is an important part of scientific research management.

B. University Research Evaluation

Since 1810, the University of Berlin has made scientific research a basic function of the university. The university's exploration and innovation of new knowledge and new technology has become the core competitiveness of the country's economic development and international competition. The evaluation of scientific research in colleges and universities refers to the use of scientific evaluation methods, evaluation procedures and evaluation indicators to conduct fair value judgments on the quality and efficiency of scientific research in universities, as an important management means to guide, motivate and standardize the development of scientific research in universities and the main resources for the allocation of university resources.

C. University Scientific Research Evaluation Index System

The evaluation index system of university scientific research mainly consists of six elements: evaluation subject, evaluation object, evaluation purpose, evaluation standard, evaluation method and evaluation system. The evaluation subjects include: academic community, academic books and periodicals institutions, social audiences, government and scientific research management departments, and third-party evaluation agencies; evaluation objects include: scientific research achievements, influence, and scientific research and empowerment; the evaluation purpose is to maintain "academic freedom", pursue the basic principle of "excellent quality" and realize "Pareto Optimality", and the information service required for the resource allocation of colleges and universities is a direct purpose as well as taking mobilizing the research enthusiasm of college teachers and stimulating their research potential, and then encouraging the output of high-quality and high-level scientific research results that contributes to social development as an indirect goal; the

*Fund project: the Education Project of National Social Science Fund "Research on the Evaluation System of Scientific Research performance of Teachers in Humanities and Social Sciences in Universities" (Project No.: BFA150043)

evaluation standard must adhere to the quality-oriented evaluation index design and assign weights; the evaluation method adopts “expert review” as the leading, “data measurement” as an aid to the method; the evaluation system includes the avoidance system, the evaluation procedure system, the evaluation cycle system, the social participation system, the supervision, the appeal and accountability system, and the third-party independent evaluation system.

III. INTRODUCTION TO THE SCIENTIFIC RESEARCH EVALUATION INDEX SYSTEM OF HUMANITIES AND SOCIAL SCIENCES IN GERMAN UNIVERSITIES

Since the 1980s, Germany has gradually developed and formed self-evaluation of the university's scientific research evaluation system complemented by the three parties of government agencies (German Federal Ministry of Education and Research), social third parties (German Science Council, German Research Association, University Development Center, Humboldt Foundation of Germany) and universities. The German Science Council (WR) is dedicated to the evaluation of scientific research performance in universities and research institutions in Germany.

A. Research Objects

The German Scientific Committee (Wissenschaftsrat) has been establishing a scientific research evaluation program since 1980 and has integrated the characteristics of several evaluation systems. In 2004, a new concept of scientific evaluation and evaluation procedures were proposed, and a multi-dimensional scientific research performance evaluation system was established. In July 2005, the evaluation system entered the experimental stage, and in December 2007 and April 2008, the results of experimental evaluations in social sciences and chemistry were released. The results show that the system has operability and applicability both in the social sciences and natural sciences. In 2011, experimental evaluations in the fields of humanity sciences (English and American studies) and technical sciences (electrical engineering) were launched. The British "Times Higher Education" published "German Research Rating: Winning by Quality" in April 2013 to evaluate the significance of the scientific evaluation of the German Science Council for academic research. [4]

B. Practice of the Evaluation System of Social Science Research in German Universities

In June 2008, the German Science Council published a scientific evaluation report on the national sociology subject, which evaluated received scientific research results from the sociology discipline of 54 universities and 3 research institutes in Germany during the five years from January 1, 2001 to December 31, 2005.

1) *Evaluation subject:* The evaluation board of the sociology discipline is composed of 16 experts, who were jointly nominated and selected by the German Research Association (DFG), the Fraunhofer Association (FhG), the Helmholtz Association (HGF), and the Leibniz Association

(WGL), the Max Planck Association (MPG), the Association of University Conferences (HRK), and the German Social Science Federation (DGS). When selecting an evaluation expert, the regional coverage of sociology research and the international perspective of experts should be taken into consideration.

2) *Evaluation object:* Evaluation Board experts first defined the boundaries between sociology and other sciences by dividing sociology into 25 branches. These 25 branches include: general sociology and sociology theory, work sociology and industrial sociology, population sociology and immigration sociology, educational sociology, development sociology and anthropology, women's studies and gender studies, cultural sociology, land and agricultural sociology, media and communication sociology, medical and health sociology, social research methods, management sociology, political sociology, legal sociology, regional sociology, family age curriculum sociology, social welfare and social politics, social issues and management, social imbalances and structural analysis, sports and leisure sociology, urban and regional and state sociology, spatial sociology, technological and environmental sociology, economic sociology, and knowledge sociology (including language sociology). [5]

3) *Evaluation purpose:* It is important to trying to understand the overall development of the German sociology discipline, with a view to helping academic institutions to position themselves in the country's strengths and weaknesses, and to confirm whether this evaluation system and procedures can apply all social science research evaluations.

4) *Evaluation standard and evaluation index system:* Sociology subject evaluation board experts divide the sociology subject evaluation into three dimensions, research, young scholars training and knowledge transfer, and further subdivided into six measurable standards, specifically research quality, research impact and effect, research efficiency, promoting the promotion and development of young scholars, transferring knowledge to other areas of society, and promoting public understanding of science. The following “Table I” and “Table II” are the specific scientific evaluation index system for sociology.

TABLE I. DIMENSIONS AND STANDARDS OF EVALUATION

Evaluation dimension	Evaluation standard
research	1. Research quality
	2. research impact and effect
	3. Research efficiency
Promote the promotion and development of young scholars	4. Promoting the promotion and development of young scholars
Transfer of knowledge	5. Transferring to other areas of society
	6. Promoting public understanding of science

²¹. Source: Steering Group Report on the Pilot Study Research Rating in Chemistry and Sociology, [R/OL][2017-9-26]https://www.wissenschaftsrat.de/download/archiv/pilot_8893-08_steering-group.pdf, P14.

TABLE II. EVALUATION INDEX SYSTEM

Evaluation standard	Evaluation angle	Evaluation index
I. Quality of research	1. Output quality (Y ¹)	Qualitative: 1. Submitting publication (X ²) (representative work) 2. List of publications (Social Science Information Center (IZ)) 3. Self-identification of its own strengths and weaknesses 4. Supplementary research information
	2. Peer evaluation	Quantitative: 1. Number of articles published by peer-evaluated professional journals (SSCI, SCI ³ , AHCI, CSA) absolute (X) and relative 2. Background information: The number of published articles in professional journals (SSCI, SCI, AHCI, excluding CSA) absolute and relative. Qualitative 1. List of third party fund items 2. Background information (quantity of all publication categories, absolute and relative): monographs, anthologies, selections, magazines; selection of papers, reviews
II. Research impacts and effects	1. Publishing activities (Y)	Qualitative: 1. The total number of publications 2. Number of articles published in peer-evaluated professional journals (SSCI, SCI, AHCI, CSA) 3. Background information: Number of articles published in peer-evaluated professional journals (SSCI, SCI, AHCI, CSA)
II. Research impacts and effects	2. Third party funds	Quantitative: 1. Total amount of third party funds 2. Number of scientists funded by third parties (X)
	3. The influence of research activities	Quantitative: 1. Number of non-German publications 2. Number of publications except the journal of sociology (SCI, AHCI, SSCI, CSA not including sociology)
	4. Research reputation	Qualitative: 1. Research awards 2. As an academic member in a research institution
III. Research capabilities and efficiency	1. Evaluation Standard II impact on the labor force	Quantitative: 1. The absolute number of publications (X) 2. Number of articles published by peer-evaluated professional journals (SSCI, SCI, AHCI, CSA) (X) 3. Total amount of third party funds (X) 4. Status of individual third party funds (X) 5. Number of non-German publications (X) 6. Public publications outside the journal of sociology (X)
IV. Promoting the promotion and development of young scholars	1. Doctoral student	Quantitative: 1. Number of scholarships for doctoral programs (X) 2. Number of doctoral degrees awarded 3. Background information: The average number of doctoral scholarships for each professor and the number of doctoral degrees awarded Qualitative 1. List of structures for the granting of doctoral degree programs 2. Completed doctoral thesis and nomination list
	2. Cultivation of young researchers	Quantitative: 1. Postdoctoral fellowship and number of young researchers team leaders 2. Appointment of young researchers (X) Qualitative 1. Self-identification and evaluation of "training and guidance of young researchers" 、 2. List of employed young researchers
V. Knowledge application	Research results applied to services	Quantitative 1. Total amount of third-party funds from federal ministries, companies and associations Qualitative: 1. List of external offices of scientific research institutions 2. Service, collaborative research and expert consultation 3. List of products for future research (non-publications), such as databases and software 4. Participation, and accompanying benefits 5. Self-identification and evaluation of research application and service

¹ Y refers to the main relevant evaluation angle among the evaluation standard.

² X refers to the primary consideration in the evaluation criteria, and other indicators are subordinated under different situational conditions.

³ SCI (Scientific Citation Index) refers to the natural science citation index database edited and published by the National Institute of Scientific Information (ISI); SSCI (Social Sciences Citation Index) social science citation index database; AHCI (Arts & Humanities Index) humanities and art citation index database, The three databases are the three core databases of the National Institute of Scientific Information (ISI); the CSA (Cambridge Scientific Abstracts) Cambridge Science Citation Database.

Evaluation standard	Evaluation angle	Evaluation index
VI Promoting public understanding of science	Further education and knowledge diffusion	Qualitative 1. Trainee list 2. Measures to describe other knowledge diffusion 3. Articles other than professional journals (papers, journals, and other media articles)

a. Source: Pilotstudie Forschungsrating Soziologie Abschlussbericht der Bewertungsgruppe [R/OL][2018-4-11]

b. <https://www.wissenschaftsrat.de/download/Forschungsrating/Dokumente/Grundlegende%20Dokumente%20zum%20Forschungsrating/8422-08.pdf>

The scientific research evaluation index system of sociology subjects focuses on the evaluation of scientific research output quality and scientific research publishing activities, among which used 9 items as a quantitative index for key evaluation of the number of published professional journals (SSCI, SCI, AHCI, CSA), the number of third-party funded scientists, the absolute number of publications, the total amount of third-party funds, the status of individual third-party funds of teachers, the number of non-German publications, the number of publications outside the journal of sociology, the number of scholarships for doctoral programs, and the appointment of young researchers, etc. At the same time, the submitted publications (ie., representative works) are used as the main qualitative evaluation indicators. The sociological subject evaluation index system includes 12 research evaluation angles and 39 specific quantitative and qualitative evaluation indicators, which are related to the value judgment of the performance of sociology research in colleges and universities with four characteristics. The quality of the first scientific research output and scientific research and publication activities are all evaluated using qualitative indicators. The second is to use the background information of university teachers' scientific research and publication work as an index of qualitative evaluation. This shows that Germany pays attention to the continuity and coherence of university teachers' scientific research work, and pays attention to the accumulation of scientific research results. The third is to pay special attention to the cultivation work of the promotion of young scholars by college teachers. The assessment indicators are divided into two aspects: the cultivation of doctoral students and the training of young researchers. The fourth is to mark only the evaluation angle of key evaluations and the indicators of key investigations, with no specific weights being given.

5) *Evaluation method:* From the analysis of the above indicator system, it can be concluded that Germany's scientific evaluation of sociology is based on peer-evaluated and multi-dimensional research evaluation methods based on qualitative and quantitative. The core standard for the evaluation of scientific research in sociology in Germany is the quality of scientific research. Because of the diversity of published works in sociology and the shortcomings of the data obtained, the evaluation process is based on the various forms of the German Social Science Literature Database (SOLIS) and Cambridge Science Citations. The database (CSA), because of the incomplete data, is mainly based on the peer review method of peer experts.

6) *Evaluation results:* In June 2008, the National Science and Technology Research Evaluation Report were published, which published and analyzed the results of scientific research performance evaluation of the sociology

subject. The evaluation results are divided into 5 levels, excellent, good, fine, passing, and failing.

C. *Research and Evaluation Practice of German University Humanities (British and American Studies)*

In July 2012, the German Science Council reported an evaluation report on the evaluation of national British and American science research. The report evaluated the results of scientific research performance obtained by 60 universities in Germany during the seven years from January 1, 2004 to December 31, 2010. This is the first scientific evaluation report published by the German Research Council.

1) *Evaluation subject:* Establishing the Anglo-American Research Evaluation Board. Experts come from the evaluation board of the methodology and sociology discipline.

2) *Evaluation object:* The experts of the Anglo-American Research and Evaluation Board divide the Anglo-American study into four branches: English linguistics research, English literature and cultural studies, American studies (including cultural geography, media studies, spatial studies, language and literature studies) and English subject teaching methods, which define the research areas and boundaries of British and American studies.

3) *Evaluation purpose:* Through evaluation, it can be understood that the overall development of British and American research in German universities is to help universities to locate their own advantages and disadvantages in the country, further standardize and guide their development, and confirm whether this experimental evaluation system, evaluation procedures and indicator system can be effective.

D. *Evaluation Standard and Index System*

The scientific research evaluation standard of the humanities (British and American Studies) include the four standards of scientific research quality, prestige, research possibilities and the transformation of research results, with particular emphasis on scientific research quality and scientific research reputation, 9 evaluation perspectives, 29 qualitative and quantitative evaluation indicators to specifically evaluate. First, among the 29 evaluation indicators, 8 indicators are quantitative evaluations, and the rest are qualitative evaluations. The quality of scientific research includes qualitative evaluation of output quality, which requires 3 masterpieces, excerpts of no more than 50 pages, and a list of publications for qualitative evaluation; all evaluation indicators of research evaluation standard are qualitative evaluations; this evaluation criterion uses qualitative and quantitative evaluation index. It can be seen that they focused more on qualitative peer review. The

second is to attach importance to the cultivating and training of the new forces, accounting for 9 of the 29 evaluation index systems, accounting for 31% of the total indicators, showing the importance attached to the training of new forces. The third is to use facilities and networks as an

evaluation perspective based on the characteristics of language research including three qualitative evaluation indicators. The fourth is the angle of evaluation, but there is no specific weight value. (See “Table III”)

TABLE III. EVALUATION INDEX SYSTEM FOR BRITISH AND AMERICAN RESEARCH EVALUATION

Evaluation standard	Evaluation angle	Evaluation index
I. Quality of research	Output quality	Qualitative: 1. Masterpieces (3 masterpieces per professor, excerpts no more than 50 pages) 2. List of other publications (monograph; selection, selection, magazine; selection of papers, comments)
	2. Output quantity	Quantitative: 1. The number of scientific publications (monographs; selection, selection, magazines; selection of papers, comments)
II. Reputation	1. Results	Qualitative: 1. Scientific recognition and reward 2. Visiting scholar
	2. Activities	Qualitative: 1. Publishers, magazines and serials 2. Evaluation experts and activities 3. Publishing the membership of the board of directors 4. Academic Office 5. Learn membership
III. Possibility of research	1. Third party fund	Qualitative: 1. Third party fund project Quantitative: 1. Third party funds expenditure 2. Number of partners in third party financing
III. Possibility of research	2. New Forces	Qualitative: 1. Granting a doctorate 2. Obtaining university qualifications 3. Structural PhD program / alumni 4. Recognition and reward Quantitative: 1. Number of projects awarded to doctoral degrees 2. The number of doctoral students and the number of doctoral programs 3. Number of existing doctoral degrees 4. Number of doctoral students who enjoy third-party financing 5. Number of doctoral and postdoctoral funds
		Qualitative: 1. Facilities (collection room, archives, digital database, corpus) 2. Network 3. Meeting
	3. Facilities and network	Qualitative: 1. Facilities (collection room, archives, digital database, corpus) 2. Network 3. Meeting
IV. Transformation of research results	1. Personal conversion	Qualitative: 1. Suggestions for further study and further education 2. Cooperation and part-time
	2. Knowledge transformation	Qualitative: 1. Public relations and media 2. Research products and teaching materials

a. Source: Bewertungsmatrix für das Forschungsrating Anglistik/Amerikanistik (Stand: April 2012) [R/OL][2017-9-26]

b. https://www.wissenschaftsrat.de/download/Forschungsrating/Dokumente/Bewertungsmatrix_ANAM.pdf

E. Evaluation Method

The evaluation of scientific research in the Anglo-American study uses a qualitative and quantitative combination of peer-evaluated methods based on quantitative to examine 8 quantitative indicators and evaluate 21 qualitative indicators.

F. Evaluation Results

In July 2012, on the website of the German Science Council, two reports on the evaluation results of the Anglo-American study were published. One report describing the subject evaluation report of the subject development, each of which is divided into nine evaluation levels, excellent,

excellent - very good, very good, very good - good, good, good - passing, passing - failing, failing. The other report is the general report of the Anglo-American research evaluation, which analyzes the background, development status, evaluation process and evaluation results of the British and American research in Germany.

IV. ANALYSIS OF THE CHARACTERISTICS OF THE EVALUATION INDEX SYSTEM OF HUMANITIES AND SOCIAL SCIENCES IN GERMAN UNIVERSITIES

The German scientific committee's research evaluation procedures for universities and scientific research institutions define the research branches of the evaluated subjects

according to the characteristics of the disciplines. The evaluation standard and evaluation index systems are determined by the experts of the evaluation board, and the evaluation methods and evaluation results are publicly announced. The evaluation cycle of humanities and social sciences in German universities is relatively long, generally taking 5-10 years as the cycle of scientific research evaluation in universities. Humanities and social science research use different research evaluation index system.

A. The Common Point of the Scientific Research Evaluation Index System of Humanities and Social Sciences in German Universities

The first is the combination of quantitative and qualitative, with qualitative peer evaluation as the main evaluation index. Reading masterpieces is an important process and step for peer evaluation in social science and humanities scientific research evaluation. The second is to pay special attention to the quality of research. The third is to list the cultivation of young scholars as one of the important indicators. Ulrich Schmoch et al. pointed out that research training is the intermediate output of research activities. But it is crucial to maintaining the structure of the scientific community. [6] The fourth is that scientific evaluation procedures, methods and results are all disclosed.

B. The Difference Between the Evaluation Index System of Humanities and Social Science Research in German Universities

First of all, the social science research evaluation index system emphasizes the application of its research results and social services, which is closely related to the research fields and research issues of social sciences. The scientific research evaluation index system of the humanities emphasizes the impact on individuals and the impact on knowledge transfer. Secondly, the social science research evaluation index system emphasizes the social influence and research efficiency of the research results, but the evaluation index of the scientific research evaluation index system has not been evaluated. Third, the social science research evaluation index system emphasizes the background information of various scientific research results, but the humanities science does not have this indicator. Although the social sciences use a five-year scientific evaluation, the review of various background materials actually lengthens the evaluation period, taking into account the long time required for social science research to affect society.

V. REFERENCE AND ENLIGHTENMENT OF GERMAN UNIVERSITY HUMANITIES AND SOCIAL SCIENCE RESEARCH INDEX EVALUATION SYSTEM TO CHINA'S SCIENTIFIC RESEARCH EVALUATION

The research on the evaluation index of scientific research indicators in Chinese universities started late, and the evaluation of scientific research indicators of humanities and social sciences in colleges and universities did not form a system. China can learn advanced experience and absorb lessons from the practice and development of scientific research evaluation in Germany.

In the German university humanities and social science research evaluation index system, the use of quantitative and qualitative peer evaluation. It guarantees the core position of the academic community's subjective power in scientific research evaluation, and the experts are recommended by several famous German research institutions and recognized peer review institutions, and are publicly selected worldwide. It must be pointed out that the academic community of Germany maintains academic freedom and the pursuit of scientific development and discovery of truth in the historical accumulation, which makes its peer evaluation high quality. At the same time, the rigor and comprehensiveness of its procedures and systems also make the German scientific research evaluation system guarantee the academic quality and development direction of scientific research evaluation in German universities. However, China's academic community has no deep academic freedom and persistence in scientific research, and its self-discipline is "sloping." [7] This also stems from the fact that the evaluation mechanism of peer experts in China is still not perfect, and the construction of evaluation systems such as publicity system and feedback system needs to be strengthened.

In the German universities, the humanities and social sciences are used to classify and evaluate the scientific evaluation index system. German university research evaluation subject selects experts to set up a special committee for disciplines. The experts of the committee set the evaluation index system corresponding to the corresponding disciplines from the research performance of the disciplines, and rationally control the scientific evaluation process to avoid the evaluation management of convergence. Although in China's "Opinions on Further Improving the Evaluation of Philosophy and Social Science Research in Higher Education Institutions", the Ministry of Education clearly pointed out that "it is necessary to establish and improve the classification evaluation standard system. It is also necessary to target different evaluation objects such as personnel, projects, institutions, and achievements, different subject areas such as humanities and social sciences, different research types such as basic research and applied countermeasure research, and different forms of research achievements such as papers, books, textbooks, research reports, popular reading materials, and non-paper publications etc., so that it can establish and improve a classification evaluation standard system that conforms to the characteristics of philosophy and social sciences"[8]. But up to now, the scientific evaluation and management of humanities and social sciences in China's colleges and universities still basically adopt single evaluation standard and index system, and even use the scientific research evaluation index system of natural science to evaluate. This situation needs to be improved.

Germany attaches great importance to the cultivation of young scholars in the evaluation index system of humanities and social sciences. Such an evaluation index system will inevitably lead German university professors to pay attention to the cultivation and development of young researchers, to cultivate future researchers for the literate humanities and social science research, and to carry forward the cultural

functions of colleges and universities. This is worth learning from.

VI. CONCLUSION

In summary, there are many merits in the evaluation index system for humanities and social sciences in German universities. Although there are some drawbacks, such as the lack of designated weights, how to effectively learn the advanced experience of humanities and social science research evaluation in German universities is a major research topic that needs to be explored in depth.

REFERENCES

- [1] Tang Huijun, University Research Evaluation System and Application Research [D] Changsha: Hunan University, 2006: 9-10 (in Chinese)
- [2] Peter Andras. Research: metrics, quality, and management implications[J]. Research Evaluation, London: Oxford University Press,20(2),June 2011:90-106;
- [3] Geuna. A and B R Martin. University research evaluation and funding: an international comparison [J]. Minerva, 2003(41): 277-304;
- [4] Zhang Zhe, The Evaluation System Should Reflect the Strengths and Weaknesses of Academic Institutions - Interview with Rena Lange, Head of Research at the German Science Council [N] Chinese Social Sciences Today, 2013-2-25. (in Chinese)
- [5] Pilotstudie Forschungsrating Soziologie Abschlussbericht der Bewertungsgruppe [R/OL][2018-4-11]
- [6] Ulrich Schmoch, Torben Schbert, Dorothea Jansen, Richard Heidler and Regina Von Gortz, How to use indicators to measure scientific performance: a balanced approach, [J]Research Evaluation, 19(1),March 2010;
- [7] Shi Wanbing, Cao Fangfang, On the Subject Power Allocation and Its Operating Mechanism of Scientific Research Evaluation of University Teachers in Social Sciences [J] Journal of Northeastern University (Social Science) , May, 2017: 316 (in Chinese)
- [8] Ministry of Education of the People's Republic of China, A Summary of the Institutional Documents of Modern Universities with Chinese Characteristics [M] Beijing: Educational Science Press, 2013: 174. (in Chinese)