An Analysis on the Construction of the Comprehensive Quality Evaluation System for University Graduate Students

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Abstract—The construction of a comprehensive quality evaluation system for graduate students is of great significance to ensure the quality of postgraduate cultivating and promote the development of postgraduates. By comparing the differences of the comprehensive quality evaluation system of postgraduates at home and abroad, this paper explores the principles of constructing the comprehensive quality evaluation system of postgraduates, and finally studies the content of the system.

Keywords—postgraduate; comprehensive quality; evaluation system

I. INTRODUCTION

Postgraduate education belongs to the higher education in the national education sequence. China's self-trained postgraduates have become the backbone of implementing the strategy of rejuvenating the country through science and education, the leading figures in all walks of life, and the fresh force for economic and social development. With the development of science and technology and the continuous progress of society, talent of China's political, economic, cultural, military and other aspects is in increasing urgent demand. Therefore colleges and universities undertaking the task of talent training also pay more attention to the cultivation of comprehensive quality of postgraduates. In order to ensure the quality of postgraduate training and promote the development of postgraduates, we need to establish a set of scientific and standardized comprehensive quality evaluation system for postgraduates.

II. QUALITY AND COMPREHENSIVE QUALITY

In a broad sense, human quality is an internal, relatively stable physical and mental organization structure and its qualitative level formed and developed under the influence of acquired environment and education based on human natural endowment. The comprehensive quality of a person refers to his/her potential of knowledge, analysis and handling affairs. Seen from the broad definition of quality and comprehensive quality, the indicators of the comprehensive quality evaluation system must be diversified and comprehensive.

III. OVERSEAS AND DOMESTIC RESEARCH STATUS

A. Overseas and Domestic Research Status

The postgraduate education in developed countries has a long history and thus has rich experience. A great deal of research and practice has been carried out on the education quality evaluation and comprehensive quality evaluation of postgraduates and the cultivation of postgraduates should be based on reality. A relatively complete education quality evaluation system for graduate students has been established in the United States, the United Kingdom and other western countries and it has been widely applied in the education quality evaluation of all disciplines in China. In American education graduate students are required a lot of theoretical research and active and effective output of social services. Under the education mode of industry-oriented cultivation of practical talents, the comprehensive quality evaluation of postgraduates pays more attention to the investigation of practical ability, innovation ability, self-study ability, thinking ability, practical ability and other indicators. In German, the core of the cultivation of postgraduates is the adviser. Each adviser instructs one graduate student to conduct scientific researches and write research papers. With a relatively loose standard for enrollment, the German postgraduate education emphasize the goal of cultivating academic research talents and the relationship between teachers and students is a very important aspect of training link. Therefore, the comprehensive quality evaluation of German graduate students values the evaluation of supervisors, scientific research process and other indicators. Japanese graduate student education has the characteristics of "loose enrollment, strict Graduation" and an emphasis on teaching. Since the educating process is separate from degree awarding, the finishing of courses is not equivalent to get a degree. Therefore only postgraduates with original research results can get a degree. The comprehensive quality evaluation of Japanese graduate students attaches great

CLC number: G647 Document code: A
importance to the completion of courses and the evaluation of independent scientific research ability and other indicators. [1]

B. Status Quo of Domestic Research

In China, postgraduates are mainly evaluated according to the course examination in the first year of their enrollment, the opening report of the second year, medium-term examination and the thesis defense for the third year. These methods can be of some effect of supervision and stimulation, but the evaluation index system is incomplete and the investigation on the innovation ability, practice ability and physical and mental quality of postgraduates is quite few. In the investigation of qualitative indicators, some evaluation links are too subjective, which affects the impartiality and scientificity of evaluation, and is prone to problems such as equalitarianism and impression deviation. In addition, the evaluation of postgraduates is usually conducted in the end of the semester so it is hard for the appraisers to remember the long-term performance of the evaluated students. Therefore the evaluation is based on the vague impression and usually lags. Furthermore, the evaluation on graduate students overemphasizes common measures but neglect their individuation development. In the current evaluation system, in addition to the student cadre work can get different degrees of affirmation, most of the students' individual performance such as sense of collective honor, personal responsibility, dedication spirit and so on cannot be mentioned in the evaluation process. Although the evaluation of postgraduate students in China also attaches importance to the evaluation of advisers, the evaluation of advisers is often subjective and lacks of continuity and comprehensive evaluation indicators for reference.

IV. PRINCIPLES OF COMPREHENSIVE QUALITY EVALUATION SYSTEM FOR POSTGRADUATES

By comparing the research status of the comprehensive quality evaluation of postgraduates at home and abroad, and considering the problems existing in the evaluation of postgraduates at home, the author suggests that the following principles should be observed when formulating the comprehensive evaluation system of postgraduates:

A. The Comprehensiveness, Directivity and Operability of Evaluation Indexes

The indexes in the comprehensive quality evaluation system of postgraduates ought to include the comprehensive quality and ability that postgraduates should be evaluated according to. The knowledge, ability and quality of postgraduates should be investigated focused on the training objectives, from the basic connotation of comprehensive quality. Not only the course results should be paid attention to, the evaluation of practical ability ought also to be emphasized; not only the general development of postgraduates should be attached importance to, the individuation development should also be taken into account. As for some qualitative indexes, special methods such as analytical investigation and special investigation can be adopted for evaluation to enhance the operability of the indexes. In addition, different evaluation contents and forms should be adopted for graduate students with different disciplines, education backgrounds and research directions, so as to comprehensively reflect the overall quality of graduate students.

B. Full Range and Continuity of the Evaluation

The comprehensive quality evaluation system of postgraduates should run through the whole process of postgraduate training, and each training stage should have strict provisions and scientific indicators. Through this system can graduate students at each stage of cultivation be supervised and stimulated and have an accurate positioning and understanding for their study, scientific research and social work in previous stage. In addition, the comprehensive quality evaluation of postgraduates should be a continuous process rather than a separate evaluation and summary of each training stage.

C. Diversity and Scientificity of Evaluation Methods

In the selection of evaluation methods, different evaluation methods should be used according to the characteristics of the evaluation objects. The evaluation index should be stratified and classified. And it should be integrated and refined so that scientific evaluation methods should be adopted according to different evaluation object and investigate different character group with focus.

D. The Diversity of Evaluation Subjects

The current postgraduate evaluation subject is mostly the teaching administrative department of cultivation units, which neglects the evaluation of the society, advisers of postgraduates and the individual postgraduates. The ultimate goal of postgraduate education is to cultivate high-level professionals for the society. Therefore, both the employing units and the scientific research cooperative units should become the important subjects of postgraduate evaluation. Social evaluation is mainly carried out when postgraduates participate in social practice and work with scientific research partners. It mainly evaluates the application ability, practical operation ability, learning ability, teamwork ability, communication ability and other aspects of postgraduate professional knowledge. Since the adviser has the best understanding of a graduate student's scientific research ability, learning ability, innovative spirit and teamwork, the role of the adviser should be highlighted in the comprehensive quality evaluation of postgraduates. After accepting the evaluation results of each evaluation subject, graduate students carry out self-evaluation according to their own situation. Self-evaluation promotes graduate students to take the initiative to find their own shortcomings, actively take measures to improve themselves, adjust the direction of growth, and constantly improve and manage themselves.

V. CONTENTS OF THE COMPREHENSIVE QUALITY EVALUATION SYSTEM FOR POSTGRADUATES

On the basis of the comparison of the comprehensive quality evaluation of postgraduates at home and abroad and
the principle of establishing the evaluation system, this paper puts forward the following contents of the comprehensive quality evaluation system for postgraduates.

A. Ideological and Moral Quality

It refers to the basic qualities in terms of ideology, moral behavior, political attitude, legal and discipline quality and so on that conform to the characteristics of the times, including political quality and moral quality. The evaluation of political quality should include the examination of political attitude, political study and the honor of the party and the youth league and the evaluation can be conducted by the party branch and youth league branch where the graduate students are; Moral cognition, moral emotion and moral behavior should be included in the evaluation of moral quality and this index can be scored by the graduate class, team or individual.

B. Study and Scientific Research Quality

It refers to the standards that postgraduates should lay a solid theoretical foundation through systematic course learning and have certain scientific research ability through scientific research activities and the guidance of advisers. It includes two parts of evaluation of course learning and evaluation of scientific research ability. The indicators involved in the investigation should include academic performance, participation in various academic activities, published papers, concentration, patents, scientific research projects and scientific and innovation competitions. Such indicators are easy to quantify and have high operability.

C. Social Practice Ability

The participation of postgraduates in social practice activities includes their positions as various student cadres and other social positions, their participation in company internships and their cooperation with relevant scientific research institutions. Such indicators should be investigated by student cadres, advisers and employers.

D. Physical and Mental Quality

Graduate students should have both a healthy body to bear the pressure of heavy study and scientific research, and graduate students should have a healthy body to bear the pressure of heavy study and scientific research, but also should have a healthy psychological quality. This psychological quality includes a positive and optimistic attitude towards life, a wide range of interests and hobbies, good adaptability, a certain degree of self-control, coordination and anti-frustration ability.

E. Innovation Capability

It refers to the comprehensive embodiment of the innovative quality, creative ability and innovative skills of postgraduates engaged in innovative activities and it is a comprehensive ability of thinking action motivation and cognitive guidance practice, with the ability of development, creation and exploration. The evaluation of innovation ability should include four aspects: innovation knowledge, innovation quality, and innovation thinking and innovation practice. Some domestic scholars use the group eigenvalue method (GEM) to identify the primary evaluation index of postgraduate innovation ability and select the evaluation index system of postgraduate innovation ability. [2]

VI. CONCLUSION

This paper analyzes various aspects of the comprehensive quality of postgraduates, compares the differences in the evaluation of the comprehensive quality of postgraduates at home and abroad, discusses the shortcomings of the evaluation system of the comprehensive quality of postgraduates in China, and puts forward four principles for the establishment of the evaluation system of the comprehensive quality of postgraduates. According to the present situation of postgraduate training in China, a comprehensive quality evaluation system including five items of ideological and moral quality, learning and scientific research quality, social practice ability, physical and mental quality and innovation ability is put forward. In the actual evaluation process, the focus of future research falls to how to develop a reasonable evaluation method to investigate the comprehensive quality of graduate students, according to the characteristics of different disciplines and training objectives by using a more scientific method.

REFERENCES