A Comparative Study on the Elements of Recruitment System for Doctoral Students between China and America

Guohua Peng
Graduate School of China University of Geosciences, No. 29 Xueyuan Road, Haidian District, Beijing, 100083, China
pg@cugb.edu.cn

Abstract. As the starting point of doctoral training, the enrollment of doctoral students is the primary link to ensure the quality of doctoral training. Doctoral education in the United States has gradually become "the model of doctoral education in the world" and is called "international academic gold standard". In order to accurately grasp the similarities and differences between China and the United States graduate enrollment system, this paper will focus on the four major elements reflecting the characteristics of the enrollment system, namely enrollment plan, enrollment (application) conditions, examination (application) content and selection process. Through the comparison, finally put forward the reform proposal.

Keywords: China and the United States; Doctoral Candidate; Elements of the Recruitment System; Compare.

1. Introduction

Postgraduate education shoulders the important mission of high-level talent training and innovation and creation, is an important cornerstone of national development and social progress, and is the basic layout to cope with the global talent competition. Doctoral education is the highest level of academic education, which represents the level of talent training in a country, and is an important source of high-level innovative talents. It is of great significance to the construction of the national innovation system and the realization of the strategic goal of an innovative country.

As the starting point of doctoral training, the enrollment of doctoral students is the primary link to ensure the quality of doctoral training. With the expansion of the enrollment scale of graduate students in recent years, the enrollment system of doctoral students is also constantly changing. The country and many universities are constantly exploring effective selection methods, hoping to establish simple and efficient recruitment methods, and improve the selection mechanism of innovative talents.

The United States is chosen to compare China's doctoral enrollment system, not only because the American education is developed, but also because the doctoral education in the United States is also a rising star. Doctoral education in the United States has gradually become "the model of doctoral education in the world" and is called "international academic gold standard". With a long history of development, the American doctoral enrollment system has formed a relatively mature and stable enrollment model, and its successful experience has been used for reference by many countries in the world.

In order to accurately grasp the similarities and differences between Chinese and American graduate enrollment systems, this paper focuses on the four major elements reflecting the characteristics of the enrollment system, namely, enrollment plan, application conditions, examination (application) content and selection process.

2. Enrollment Plan

In the United States, the enrollment number is mainly determined by the university itself. Generally, the graduate school of the university and the department where the enrollment major is located jointly determine the enrollment number according to the laboratory, funds, the number of teachers and other factors. But in China, education is promoted and supervised by administrative agencies. The enrollment of doctoral students in China is directly managed by educational
administrative departments to regulate and control the doctoral education in China as a whole. The enrollment plan of doctoral students is an important indicator for macro-control at the national level. It can be seen that the Ministry of Education, which represents the will of the central government, plays an important role in China's doctoral enrollment system. Although each school organizes the exam and enrolls students on its own, the specific rules on how to organize the exam come from the Ministry of Education, which schools and majors can enroll students, and how many graduate students can enroll in each major, are under the ministry's jurisdiction. In addition, the requirements of Chinese universities for doctoral tutors are mainly reflected in academic qualifications. Generally, professors with strong academic ability are selected as doctoral supervisors; The college of the United States will nit ask doctoral director to must be a professor commonly, doctoral director reflects the characteristic that gives appointments system, the professor that has sufficient scientific research fund or associate professor ability enroll doctoral student. Nearly enough funds to recruit students, lack of funds no longer recruit students.

3. Registration Conditions

The registration conditions can be summarized into the following six aspects:

**Registration management system.** China and the United States have different registration conditions management systems. China's enrollment units according to the provisions of the Ministry of Education for enrollment, the provisions can be said to be the "bottom limit", the enrollment units can’t be lower than the requirements of the Ministry of Education, but can improve the registration requirements. In addition to the registration requirements of each admission unit, sometimes the department level will further increase the registration requirements according to the recruitment and admission situation of previous years, and narrow the range of possible enrollment objects. However, colleges and universities in the United States are not directly administered by the Department of Education and have the right to decide the conditions of enrollment according to their own conditions. In other words, due to the different management systems, the United States does not have the same level of national level, graduate school level, department and professional level as China.

**Ideological and moral assessment.** American colleges and universities do not require applicants to be ideological or moral. But China requires students to support the Communist Party of China (CPC)'s leadership, love China, Law abiding, moral integrity, and physical and mental health.

**Degree Requirements.** Bachelor's degree in the United States and master's degree in China, some universities can accept applicants with the same level of academic qualifications, but attach conditions to such applicants.

**Foreign Language Level.** TOEFL, IELTS, PTE, etc. This requirement is only for foreign students who do not speak English as their native language, and valid proof of foreign language proficiency. The foreign language certificates available in China include TOEFL, IELTS, CET-4, CET-6, foreign language proficiency tests organized by colleges and universities, etc.

**Professional or scientific research level.** For some universities in the United States, applicants are required to have a professional background related to the subject they are applying for. In China, some colleges and universities impose restrictions on the major, research field, level (or influence factor) and quantity of articles published by candidates in the master's stage.

**Standardized tests.** The GRE score is used in the United States. The LSAT or GMAT is used instead of the general GRE test when applying for graduate studies in law or business. Some colleges require applicants to submit the GRE professional test score. The total and partial GRE score requirements vary from university to university and major to major. But Chinese universities do not require standardized test scores.
4. The Content of an Examination

At present, there are two forms of unified examination and recruitment for doctoral students in China: examination and application. Most schools have adopted the application-assessment method. The content of the examination or examination room is mainly reflected in the following aspects.

**Organization of examination (application).** Colleges and universities in the United States do not organize exams; students are required to attend by a third party nonprofit education test center for America GRE and organized by the graduate management admission committee GMAT, etc., the organizers are non-profit institutions, there are no subordinate relations with any administrative organs in the United States, nor by a U.S. management of colleges and universities. Chinese universities have different ways of recruiting students in the open recruitment and application assessment. For students in the open recruitment, they usually take foreign language and professional courses. Generally speaking, the foreign language examination is organized by the graduate school, and the specialized course is organized by each enrollment college. Students applying for assessment are usually organized by the college.

**Examination (application) time.** American college students have the opportunity to take the test several times a year. The GRE general test, for example, consists of three parts: language, math, and analytical writing. It focuses on reading comprehension, logical reasoning, and analytical writing. The GRE is administered frequently and at different times, once or twice a month. The other examinations involved in the recruitment of doctoral students are generally similar, with monthly exams. Test scores are valid for more than one year, like the GRE for up to five years. Most schools in China do it once a year, in spring, in some schools twice, and in autumn and spring. A candidate's score is valid only for one examination in that year.

**The content of the examination (application).** American Language Proficiency: Students are required to submit scores on GRE, TOEFL and other tests that measure language proficiency. Professional knowledge: Take the GRE(Subject GRE) exam, which includes tests for specialized subjects such as biology and chemistry; Take the General GRE test; Professional exams such as the GMAT and the LAST Law School Admission Test. China generally has two aspects: language and professional knowledge. Language ability: The unified examination of enrollment is generally to participate in the unified examination organized by the school, and the application for assessment is generally to provide results that prove foreign language ability, such as CET-4, TOEFL, IELTS, etc.; Professional knowledge: Unified examination of students A type of examination by each enrollment unit subordinate departments, mainly to test students on the mastery of relevant subject knowledge. Applicants are generally asked to provide published articles, patents, projects, etc., that demonstrate their research ability.

5. Comparison of Selection Processes

**Qualification interview:** The interview process is not required at American colleges. And the interview can be carried out through a variety of forms, such as network, telephone, face to face, etc., the implementation of balance interview. In China, the interview is a necessary part. According to the enrollment requirements of the Ministry of Education and the university, the college generally conducts the qualification examination, and the graduate school of some universities is responsible for the qualification examination of the applicants for special programs. Generally, the form of balance is implemented.

**Purpose of the interview:** The purpose of interviews in both China and the United States is to better understand the characteristics of students, to examine the academic potential of students, and to communicate with students in language, so that teachers can get a direct impression of students and understand a variety of information that is difficult to reflect in written materials.

**Interview content:** Is for the interview to examine the student's academic potential, the reason for a PhD, the understanding of this professional doctoral programs, the reason Why student choose this doctoral program, the future research plan, on which topics are most interested in. Sometimes they
ask questions about the scientific developments in their own discipline to test whether they know
enough about the development of their own discipline.

**Way of interview:** American teachers and students are often in a two-way communication process.
In many cases, the interview is not only for teachers to select students, but also a process for applicants
to observe and choose schools. There is no specific time for the interview. China revolves around
"students speak", "teachers ask", "students answer" three steps, and does not set the link of students
to inquire, and the general interview time is not less than 30 minutes.

**Admission:** American schools or colleges independently make enrollment plans and submit the
list of proposed admissions to graduate schools for qualification review. Admission results are
determined based on four aspects, including graduate entrance examination scores, expert
recommendation letters, undergraduate or graduate GPA and scientific research proposals. The
Chinese school will redistribute the enrollment plan issued by the state, and the college will determine
the proposed enrollment list according to the enrollment quota of the tutor and the ranking of the
grades, and report it to the graduate school. Review and coordinate by graduate school. For candidates
who participate in the open recruitment examination, the final score will be calculated by adding the
results of the preliminary examination and the second examination (including the written examination
and interview results of business courses) according to the proportion; For candidates who participate
in the application selection system, the final score is weighted by the three parts of "foreign language
level, professional knowledge and comprehensive ability".

**Process Assurance:** The United States has established a representation channel, where applicants
can file complaints or take legal action if they think the admission process is unfair. Schools form a
panel of experts to investigate, evaluate and arbitrate. Chinese graduate schools and discipline
inspection departments of the university formed inspection teams to inspect the school's assessment
process; The College has set up an enrollment supervision team to supervise and coordinate the
enrollment of disciplines; Set up a telephone and email to report violations of enrollment, and accept
complaints and suggestions from applicants and graduate supervisors.

6. The Referential Significance of American Doctoral Recruitment System

Through the analysis of the elements of the Chinese and American doctoral recruitment system, it
can be found that there are still some problems in China's doctoral recruitment system, and colleges
and universities need to improve from the following aspects.

6.1 Delegating Power and Taking Full Responsibility

Doctoral supervisors are the main body of doctoral training, and their departments are the main
undertakers and operators of doctoral training, both of which should have practical responsibilities
for the quality of doctoral enrollment and training. The essence of the "application for assessment"
system is to decentralize the autonomy of enrollment, so that each enrollment unit and supervisor can
formulate enrollment policies, select training objects and research collaborators according to the
characteristics of their own disciplines, research needs, guiding energy and financial status. On this
basis, the school only retains the most basic right to establish and review the application qualifications
and the right to supervise the process. At the same time, we should further clarify the responsibility
of supervisors and doctoral training units for the quality of doctoral training, and formulate a
reasonable reward and punishment mechanism to standardize their enrollment behavior. In particular,
the vast majority of doctoral students in China are supervised by a single supervisor, the supervisor
is undoubtedly more responsible for the doctoral enrollment and training quality than the training unit.
"Delegating power and taking full responsibility" allows supervisors and training units to "take the
lead and take the responsibility" in the enrollment, which is not only the key to the flexibility of
doc toral enrollment, but also provides the power for the enrollment subject to actively control the
quality of enrollment.
6.2 Improve the Admissions Process

i. Establish a two-way understanding and selection mechanism between teachers and students. The existing doctoral enrollment in China is often one-sided assessment and selection of applicants, applicants are in a passive position, easy to blindly start the doctoral research career under the circumstances of insufficient information and ill-considered. In order to optimize the allocation of resources, it is suggested to increase the two-way understanding and selection mechanism between teachers and students in the interview and the selection of tutors.

ii. Improve the letter of recommendation system. Recommendation letters have important reference value in the admission review of doctoral students in the United States. Doctoral programs often have specific requirements on the process, recommender, content and form of recommendation letters. Domestic universities have fewer requirements on recommendation letters, and the content and form are mostly determined by the referees themselves. With the development of Chinese society and the establishment of credit system, the recommendation letter should be given due attention. The standard recommendation letter process, recommendation person, content and form are also the lowest cost reform attempt.

iii. Promote the establishment of third party standardized ability test. GRE and other standardized proficiency tests in the United States provide an important reference for doctoral programs to understand the comprehensive quality of applicants. Because the organizer is a third party, it can avoid the fairness concerns caused by the enrollment units directly. However, its mature testing system consisting of basic ability test and subject test has won wide recognition from applicants and admissions units. The current written test in the enrollment of doctoral students in China tests the basic knowledge of the subject rather than the comprehensive ability, and the enrollment unit has brought many concerns about fairness. If universities can promote the establishment of standardized postgraduate ability test in our country, it will be of great benefit to enhance the reliability of doctoral enrollment.

iv. Improve the diversion system in the training process.

The enrollment of doctoral students is an integral part of the screening and diversion of doctoral students, and the diversion system in the training process provides opportunities for the recruitment of doctoral students to check and fill the gaps. Therefore, we should attach great importance to the diversion system represented by the doctoral qualification examination.

References

[1] Zhao Hongjun, Chen Wei, Chen Qianming. Selection of doctoral enrollment system in the context of "elite education" --Thinking and Exploration on the "application assessment system" of doctoral enrollment [J]. Graduate education research, 2015, 05:31-35.
