

**An Report Prepared for**

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# **The Quality Assurance System of Graduate Education in China**

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## Abstract

In the present report, the quality assurance system of graduate education in China is approached, through analyses and expositions, at three different levels: the State government level, the national association level and the level of higher educational institutions.

Much emphasis from the State government has been put, since the resumption of graduate enrolment in 1978 and the establishment of academic degree conferring system in 1981, on the quality of graduate education, and various measures have been taken to establish and complete the quality assurance system at the State level, which mainly include: 1. legislation requirements specialized for the practice of academic degree awarding and series of administrative regulations to implement them; 2. a particular national committee composed of high-level administrators and experts which guides the graduate education all over the country; 3. the national authorization system for degree-awarding institutions; 4. the system of State examination on the establishment of graduate schools; 5. regular assessments of degree- conferring units; 6. the annual evaluation on the excellent doctoral dissertations on the national basis; and 7. the overall control of the State over the size of graduate education in each institution concerned.

The efforts of professional organizations on the quality assurance of graduate education include: 1. the nationwide ranking of graduate education programs; 2. the assessment on the graduate education of each discipline of specialty.

At the level of higher educational institutions, quality assurance system of graduate education is established, in each institution concerned, in consideration of what is particular in their own case. Measures vary with the features of the institution, the characteristics of the discipline. The common measures for all the institutions include: 1. the basic requirement to establish a degree- conferring program; 2. the collective discussion and examination of experts on the curriculum, standards of teaching and the quality of degree dissertations; 3. the evaluation system of degree dissertations; 4. the requirements on the publications of graduate students during their academic studies; 5. the selection of supervisors; and 6. the assessment of quality of graduate education at the institution level.

It is shown in the report that graduate education in China is still developing rather than developed, and both the state and higher educational institutions have been constantly searching for and trying on effective measures and methods of quality assurance. Some of the measures introduced in the report are taken for consideration of the particular human and social environments of China.

A basic estimate on the quality of graduate education in China, as is shown in this report, is: as much importance has been attached to the quality of graduate education, and various efforts have been made on the establishment and improvement of quality assurance system, the quality of graduate education in China has been effectively safeguarded and the overall quality of graduate education is satisfying, matching on the whole the demands for high-leveled and well-prepared talents in the nationwide development of science and technology. The quality of graduate education

as a whole sees a desirable position at the master level, but somehow not so satisfied at the doctoral level.

Graduate education in China is enjoying a vibrant progress. We are confident to say that, with the priority given to it by the State government, with the rapid development of science and technology, and with the constant efforts by the higher educational institutions, China will definitely enhance, in the visible future, from a “scale recognized country” to a “quality recognized country” in graduate education.

## I. A Brief Introduction to the Graduate Education in China

Graduate education in China initiated in 1935. In April, 1935, the Chinese government then promulgated *The Degree Conference Regulations*. Yet, no substantial progress was made in the area, due to the incessant wars, and only 232 people had been conferred master degrees before October, 1949.

After the establishment of P.R. China, graduate enrolment started again in 1950, but as there was no regular and steady education system, graduate education suffered from a rather slow development. In the period between 1950 and 1965, the enrolment involved only a little more than 22,700 people. And in 1966, the so-called “Cultural Revolution” brought graduate education, as it did onto many others, to an unexpected stop.

In 1978, graduate education was resumed in China; in 1980, *The Degree Conference Regulations of P.R. China* went through all the legislative procedures of the People’s Congress; and in 1981, the State Council granted sanctions to *The Temporary Measures for the Degree Conference Regulations of P.R. China*. All these signified the gateway of graduate education in China to a healthy and steady way of development.

As the result of a development of nearly 30 years, now China claims 333 institutes with the authorization for doctoral degrees and 758 institutes with the authorization for master degrees. In 2005, the graduate enrolment was 325,000 out of 1,172,000 registered examinees; and in the same year, the on-campus graduate students outnumbered a million. Also in 2005, over 20,000 people were conferred doctoral degrees and over 200,000 people were conferred master degrees. From 1981 to 2003, 951,800 people were conferred master degrees; and from 1982 to 2004, 133,900 people were conferred doctoral degrees. All these show that China has emerged as one “scale recognized country” in graduate education. Figure 1 indicates the change in the graduate enrolment from 1999 to 2004.

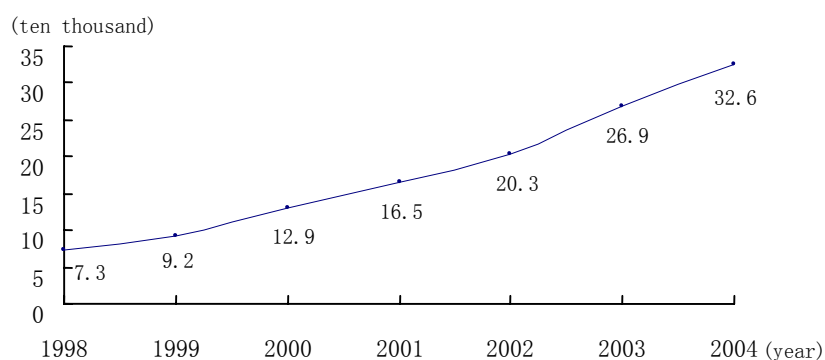


Fig.1 Graduate Enrolments from 1999 to 2004

## II. The quality assurance system of graduate education at the State level

Since the resumption of graduate enrolment in 1978 and the establishment of academic degree conferring system in 1981, the State government of China has

attached much importance to the quality assurance of graduate education, and taken various measures to establish the quality assurance system of graduate education at the State level.

These measures include:

### **1. Specialized statutes and series of administrative regulations to implement.**

*The Degree Conference Regulations of P.R. China*, which was legislatively adopted in 1980, and *The Temporary Measures for the Degree Conference Regulations of P.R. China*, which was granted sanction in 1981, are legal documents specially encoded for the graduate education of China, thus laying a solid foundation of policy to assure its quality. In *The Regulations* the goals of education for bachelors, master and doctors are explicitly defined. The requirements on the master degree are: 1. Solid foundation of basic theory and systematic knowledge in the discipline or specialty concerned; 2. Capability of independent academic research or technical work related to the specialty. The requirements on the doctoral degree are: 1. Solid and extensive foundation of basic theory, and systematic and profound knowledge in the discipline or specialty concerned; 2. Capability of independent academic research; 3. Capability of creative achievements in science or a particular technical area.

It is also stipulated in *The Regulations* that the authorization of degree conference to a higher educational or academic institution or discipline is decided and made public only with the proposal of the Academic Degrees Office of the State Council and the sanction of the State Council. In addition, such issues as the procedures of the oral defense and examination of the degree dissertations, the necessary establishment of a degree evaluation committee in each unit with the authorization of degree conference are defined in *The Degree Conference Regulations*.

In the development of graduate education, a series of regulations and directional documents have come successively from the Ministry of Education, the State competent department in charge of graduate education, thus offering necessary instructions to the implementation of graduate education and indispensable assurance for its quality.

### **2. Specialized academic institutions and organizations at the State level, composed of administrators and experts.**

The Academic Degrees Committee of the State Council, which has been established in accordance with *The Degree Conference Regulations*, is in charge of the procedures of degree conference, the disposal of key issues in graduate education, and measures taken to assure the quality of graduate education. The State Council is solely responsible for the appointments and removals of the director and the members of the committee. The position of the director is usually taken by the highest leader in charge of the administration of education of the State, and the memberships are usually assumed by the experts of top authority and the high-rank administrators on education in China. Presently the director of the committee is Chen Zhi-li, one of the State Councilors. The establishment and operation of the committee may provide evidence of the importance the State attaches to graduate education.

Subordinate to the committee are discipline evaluation groups in accordance with the division of disciplines, composed of renowned experts in the corresponding disciplines and put in charge of such nationwide issues as examination of applications for sanctions of degree conference authorization.

### **3. The examination and verification system on degree-conference**

The examination and verification system on degree-conference in China also serves as one of the key measure to assure the quality of graduate education. It is stipulated in *The Degree Conference Regulations* that the examination and authorization come necessarily before decisions on the qualification of master or doctoral degrees conference of the higher educational and scientific research institutions, or the disciplines in which master or doctoral degrees are to be conferred.

It is stipulated in *The Principles and Methods of Examination on the Qualification of Degree Conference Units*, which is promulgated by the Academic Degrees Committee of the State Council in 1981, that certain basic conditions must be attained for the degree conference units on teaching staff, courses offered, fundamentals of candidate training, conditions for academic research and teaching, and framework of administration. The authorization and examination of degree conference are re-arranged in an overall plan of the State every two years. The procedures include: (1) Application from higher educational and scientific research institutions and submission of forms and supporting evidence; (2) Evaluation by the experts of the discipline by means of correspondence, organized by Office of the Academic Degrees Committee of the State Council; (3) Examination on the results of evaluation by experts, conducted by the disciplinary assessment group of the Academic Degrees Committee of the State Council; (4) Discussion and sanction by the general session of the Academic Degrees Committee of the State Council, and the publication of the results.

Since the publication of *The Degree Conference Regulations*, there has been ten general examination sessions, on the national basis, of degree conference. Presently, there are 333 units with the conference authorization for doctoral degrees, consisting of 266 higher educational institutions and 67 academic research institutions; and there are 758 units with the conference authorization for master degrees, consisting of 489 higher educational institutions and 269 scientific research institutions. The strict authorization and examination procedures have exerted great positive influences on the quality assurance of graduate education, the progress of discipline construction, and the promotion of teaching and academic levels. It can be seen from the above introduction that, even the scientific research institutions, with the passage of the examination procedures, can independently conduct graduate education and degree conference.

### **4. The system of State examination on the establishment of graduate schools.**

In the system of graduate education in China, graduate schools play a leading and exemplary role. Graduate schools are the professional faculty of graduate education, established by the State, with independent administrative functions, to

serve the economic construction, advancement of society and progress of science and technology, and education of high-leveled talents. They are the key bases for the education of high-leveled talents and the solution to cardinal problems of the State in science and technology, and represent the highest level of graduate education in China. In *The Temporary Rules on the Establishment of Graduate Schools*, promulgated by the former State Educational Commission, explicit provisions are found on the conditions of a higher educational institution for the establishment of a graduate school, and the functions of a graduate school. The most essential of these include: (1) the meticulous and rigorous academic discipline, the prevalent academic atmosphere, the positive academic prestige, the top position of overall strength and educational quality in higher educational institutions of China and considerable international reputation; (2) the graduates of a certain number and over a certain coverage of disciplines at both master and doctoral levels; (3) a whole array of academic leadership, core and team; (4) High levels of research and teaching, multitude of academic accomplishments and achievements, extensive international exchanges, and considerable contributions to the modernization of China; (5) High levels of undergraduate and graduate education, and highly positive feedbacks on the institution and its graduates; (6) the complete system, strict implementation and high level of administration in graduate education.

Since the beginning of trial efforts of graduate schools in 1984, sanctions from the State and Ministry of Education have been granted to 56 graduate schools(*See Appendix I*), which now account for 70% of the doctoral graduates and 50% of the master graduates. With the authorization from the State, graduate schools have independently done a lot of creative work on graduate education, especially its quality assurance, which has proved to be the model and a yardstick for graduate education as a whole in China.

##### **5. Regular assessments of degree-conference units.**

Regular assessments have been organized, guided and conducted by Ministry of Education in the degree-conference units since 2005, with the goals of effective supervision on the construction of various disciplines and the quality of graduate education, and the improvement of the quality assurance system. The assessments mainly cover: (1) changes with the academic staff since the authorization of degree conference; (2) the training efforts, especially on the quality of education; (3) academic achievements and discipline-related projects. Assessments come to each degree-conference unit every 6 years. In accordance with results of the assessments, the Academic Degrees Committee of the State Council will then decide among the choices of authorization renewal, reform within the prescribed duration and enrolment suspension – for units with some problems – or termination of authorization – for units with as such serious problems as to affect the quality of education.

The regular assessment of the degree-conference units serves as an effective spur as well as a supervision to the improvement of its quality, contributing to the fact that graduate education in China is enjoying a rapid growth.

## **6. The annual evaluation on the excellent doctoral dissertations on the national basis.**

Since 1999, the annual evaluation on the excellent doctoral dissertations has been conducted on the national basis, with the sanction and supervision of Ministry of Education and the Academic Degrees Committee of the State Council. Its goal is to introduce an incentive mechanism to graduate education, to enhance the shift of priority of attention to the quality of education, and to encourage the invention and innovation among the doctoral candidates. Each year, 100 doctoral dissertations are selected as “the excellent dissertations”, and about 700 doctoral dissertations have been chosen between 1999 and 2006, with handsome awards and honors to the writers and their tutors and follow-up funds to the oncoming research efforts.

## **7. The overall control of the State over the size of graduate education.**

Unlike the cases of many western countries, the size of graduate education is laid out in an overall plan by the State in consideration of the demands of development in economy and science and technology. The size of enrollment for each educational or scientific research institution is assigned on the same principle annually by Ministry of Education. It is decided in consideration of the overall strength and standard of each degree-conference unit and in doing so Ministry of Education assumes a protective control on the quality of graduate education.

### **III. The quality assurance at the level of graduate education as a profession**

For the betterment of graduate education, several professional associations and societies have been founded and have done some quite helpful and effective work. Some of these organizations are: Chinese Society of Academic Degrees and Graduate Education, Association of Chinese Graduate Schools, China Academic Degrees and Graduate Education Development Center.

Chinese Society of Academic Degrees and Graduate Education is the largest professional organization of graduate education in China, with 468 group members, including almost all the higher educational institutions that have a part with graduate education; Association of Chinese Graduate Schools is a professional organization for the deans of 56 graduate schools, providing a forum for discussions on the structure of graduate schools and the quality assurance in them; China Academic Degrees and Graduate Education Development Center is an intermediary organization with independent corporate body, and one of its functions is the provision of independent assessments and examinations related to graduate education, in accordance with demands and needs of the society. The principal responsibilities of the above organizations in terms of quality assurance of graduate education include:

#### **1. The assessment for the ranking of degree- conference units.**

An assessment was conducted from 2002 to 2004 on the ranking of the overall standard of 80 degree-conference units by China Academic Degrees and Graduate Education Development Center. The principal item indices include academic staff,



academic research, training of talents and academic reputations. The results released have had great impacts on practically all the educational institutions related to graduate education, and whether an institution can find itself among the first five positions of the ranking has become a very important indicator of development for any key educational institution in China. As in the ranking of the overall strength of the first-class disciplines the indices related to graduate education are of crucial importance, the assessment has in fact spurred the quality improvement of graduate education in China. Figure 1 given below shows the scores of the top ten institutions in the first-class discipline of mechanic engineering.

Figure 1 Scores of the Top Ten Institutions  
in the First-class Discipline of Mechanic Engineering

Degree Conference Units	The Overall Strength		The Indices							
			Academic Staff		Academic Research		Talent Training		Academic Prestige	
	Position	Score	Positions	Scores	Positions	Scores	Positions	Scores	Positions	Scores
Chinghwa University	1	93.3	6	87.98	1	100	6	81.95	3	98.54
Harbin Inst of Tech	2	92.5	3	93.86	2	94.59	4	85.12	4	97.71
Xi'an Jiaotong Uni	3	92.0	11	83.89	5	84.79	1	100	2	98.99
Huazhong Uni of Sci & Tech	4	91.8	1	100	12	78.31	2	97.73	1	100
Shanghai Jiaotong Uni	5	90.8	2	99.47	10	80.29	3	94.94	5	96.24
Zhejiang Uni	6	89.4	4	93.44	3	91.62	9	77.51	6	95.83
Beijing Inst of Sci & Tech	7	87.0	8	85.21	4	91.38	5	82.2	10	86.94
Beijing Inst of Aerospace Sciences	8	83.8	7	85.98	7	84.06	11	76.32	7	89.74
Jilin University	9	80.5	5	89.06	18	72.75	7	81.51	12	85.41
Dalian Inst of Tech	10	79.1	19	76.93	15	75.16	10	77.06	8	88.1

## 2. The assessments on the training of degree-based specialty-related graduates.

There are 12 professional disciplines focusing on graduate education at the master level, the largest of which are engineering and business administration. Each of these has an instruction committee of its own on the national basis, whose responsibility it is to take the lead of and organize the nationally based assessments of the specific discipline concerned. These are mostly qualification assessments, but some also offer a ranking. Figure 2 given below shows the positions of MBA in Harbin Institute of Technology in the ranking based on the assessment of the

discipline conducted in 2001. Incidentally, the assessment of engineering and architecture is being conducted for the moment of the speech.

Figure 2 Positions of HIT in the Qualification Assessment of MBA

Items Scores	Teaching Facilities	Teaching Staff	Administration of Teaching	Organization of Teaching	Effects of Teaching	Featured Teaching	Total
Scores	87.50	87.87	84.63	87.94	90.90	84.26	87.60
Highest Score of the Item	95.58	93.60	96.18	93.69	94.60	94.81	94.81
Lowest Score of the Item	82.39	79.47	78.90	74.19	81.23	79.26	80.88
Position	13	15	20	11	2	19	13

#### IV. The Quality-Assurance Measures of Graduate Education at the Level of Higher Educational Institutions

The mode of graduate education commonly taken in China is one of two phases: “course-study + degree dissertations”. The duration for a master degree is 2-3 years, with 1.0-1.5 years for course study and 1.0-2.0 years for the degree dissertation; the duration for a doctoral degree is 3-5 years, with 0.5-1.0 year for course study and 2.5-4.5 years for the degree dissertation.

The quality assurance system is established in every degree-conference unit, in accordance with the general regulations and rules of Ministry of Education and the Academic Degrees Committee of the State Council and in consideration of the specific conditions of the unit. Measures taken vary with the overall features of the institutions, the nature of the discipline, and the locality of the institution. Here the case of Harbin Institute of Technology may serve as an example for the illustration of some of the measures in quality assurance, which are common to all institutions. The measures consist basically of 6 aspects.

##### 1. Requirements on the overall standard of each discipline.

The basic unit in the graduate education of higher educational institutions in China is the discipline (or specialty). Only when the overall strength of a certain discipline has attained the standard set up by its institution and the State can the institution give permission to the discipline to apply for the authorization of degree-conference; and only when its application has gone through the procedures and got the authorization from the State can enrolment and educational endeavor start in the specialty concerned.

The basic conditions for authorization of the conference of master degree are: (1) academic staff of a sufficient number in appropriate intellectual and age structure, including a minimum of 4 professors and/or associate professors; (2) a solid

foundation of academic and scientific research, with a minimum of 2 stable and distinctive specialties; (3) rich and successful experiences in and high quality of undergraduate education. The basic conditions for authorization of the conference of doctoral degree are: (1) academic staff of a sufficient number in appropriate intellectual and age structure, with an appreciate lay-out of academic titles and academic standard advanced domestically in the similar disciplines; a certain number of professors below the age of 60 and a certain number of staff members with doctoral degree. (2) an extensive range of interactions and a solid foundation of academic and scientific research, with a minimum of 3 stable and distinctive specialties marked by outstanding features and obvious preponderance; (3) rich and successful experiences in, and high quality of, graduate education; (4) laboratories and other facilities specifically designated for graduate education.

Requirements on the overall strengths set a criterion of advanced standards for each discipline which starts to prepare itself for graduate education, and lay a solid foundation for the oncoming endeavors.

## **2. The collective examination and evaluation of experts on the quality of course schedules, standards of teaching and the quality of degree dissertations.**

The practice of collective examination and evaluation of experts in every phase and on every key point of graduate education has been commonly adopted in higher educational institutions of China. For example, the course schedule and the requirement on teaching of graduate education in each discipline must be subject to the collective discussion and decision of the experts in the corresponding discipline. Though tutorial system is practiced in the phase of dissertation writing, such key points as the dissertation proposal, the mid-term review, pre-oral defense, and oral defense of any dissertation are all to go through the examination, discussion and evaluation of the expert group of the discipline. Chart 2 and Chart 3 given below show respectively the procedures, in the writing of master and doctoral dissertations, in which the collective examination and evaluation of experts are involved.

## **3. The examination of degree dissertations.**

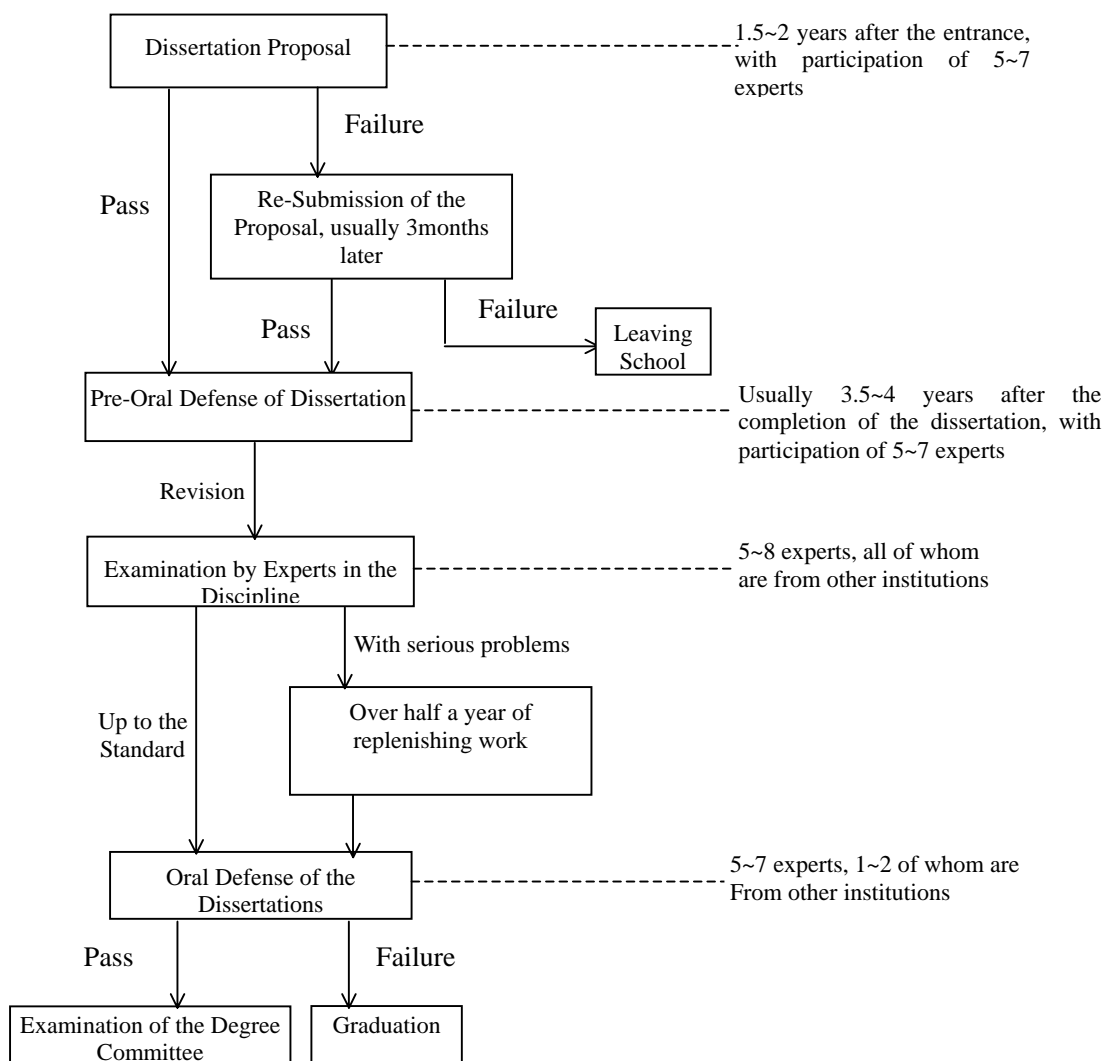
Unlike the practice in many western countries, there is a Degree Evaluation Committee in every unit of graduate education in China, responsible for the quality of graduate education and also of the degree dissertations of the discipline. The committee is composed of 20-30 professors and the head in charge of graduate education of the institution, concentrating on the standard of creativity and inventiveness of the dissertation.

After the oral defense, the dissertation has to be submitted to the Degree Committee of the institution before the conference of degree.

The presence of the Degree Committee and its examinations are effective measures for quality assurance, bringing more attention and efforts from the candidates and their tutors to the quality of dissertations.

## **4. The requirements on the publications of graduate students during their**

**academic studies.**



**Chart 2 The collective examination and evaluation of experts in the process of doctoral dissertations**

To provide a yardstick for measurements of the dissertations, it is required by many institutions that graduates must come up with publications during their studies. For a master candidate, a thesis in any of the core journals, but for a doctoral candidate, there must be the publication of a thesis or theses in journals that are referred to in EI or SCI. In Harbin Institute of Technology, the requirement for a doctoral candidate, the minimum is 3 theses, including at least one that is published in the source journals of EI or SCI. As a matter of fact, the average per-person publication has been over 5 theses in recent years. At the level of master degree, there are no definite requirements, as the duration has been 2 year for a master candidate; yet about 40% of the master candidates reinforce their application of oral defense with publication of one or more theses on some academic journals.

Regarding the necessity of publication for a graduate student during his/her study, views vary greatly among experts and educators. Indeed, this practice has effects on

both sides. There has also been much discussion on the issue in Harbin Institute of Technology, ending in the agreement that advantages outweigh disadvantages in the case of publication requirement for a doctoral candidate.

### **5. The selection of supervisors.**

In all the higher educational institutions, there are explicit and definite requirements on the qualification of tutors. The essential items include: Tutors of master candidates should be associate professors and have the master degree, and tutors of doctoral candidates should be full professors and have the doctoral degree. In addition, there are definite requirements on the publication of academic theses, research projects, sums of funds on scientific research, and some other aspects. Based on requirements like these, selection of tutors is conducted once each year. Only those who are successful in the selection can be graduate tutors, followed by a registration of enrolment once in two years. Take for example the case of Harbin Institute of Technology. The requirements or conditions for a doctoral candidate are: (1) Publications: an average of one thesis annually in the last three years in the source journals of EI, SCI or other journals of international prestige; (2) Projects: In charge of or as a core member of key projects at the State or provincial/ministry level; (3) Funds for scientific research: In charge of or as a core member of key projects at the State or provincial/ministry level, or in charge of such key projects as projects of state science funds. Tutors on basic research have an average of 10,000 yuan or more per person on the research in the last 3 years; and tutors on technical or applied research have an average of 100,000 yuan or more per person in the last 3 year.

### **6. The assessment of quality of graduate education at the level of the institution.**

The period since 1999 is one rapid development of graduate education in China, which is indicated in the statistics of graduate enrolment. The size of graduate enrolment in 2004 was 4.47 times as much as that in 1998. The ever enlarged enrolment has brought new challenges and new issues for the quality assurance of graduate education. One of the favorable changes was the enormous increase of funds on scientific and academic research in higher educational institutions during the five years, coming from both the State and the institutions themselves. Take HIT again for an example. Funds on scientific and academic research increased from 273 million yuan in 2000 to 1 billion and 70 million yuan in 2005, an increase of almost 4 times. An unfavorable change is that the sizes of teaching staff and teaching resources have not increased in proportion to the scale of students. Faced with the conditions, higher educational institutions have to take new measures to assure the quality of graduate education. Some key institutions, including Harbin Institute of Technology, have started the practice of assessments on the quality of graduate education within their own institutions. Systems of assessment indices have been established and explanatory notes provided, as the result of a joint efforts by experts and administrators, which serve as the framework and yardsticks of the assessments. Such assessments are conducted with schools or faculties as the units of assessments, and consist of two principal parts: The self-assessments of each school or faculty and the

on-spot assessments by the experts within each institution. The assessments by experts are based on the self-assessments of each school or faculty and all the supporting files concerned, and on feedbacks from the graduate students through various interviews and discussions. Such assessments generally come once in every 3 years, and all staff members and students of the institution related are accessible to the results of the assessments, and these results are to be important indices for the distribution of enrolment quotas and funds on teaching to each school or faculty in the oncoming years.

The assessments within higher educational institutions play an effective and multi-functional role in finding the problems or weak points in the quality of graduate education, in enhancing the quality consciousness of teaching staff and administrators, and in improving the quality of graduate education.

## V. Some Basic Estimates of the Quality of Graduate Education in China

Though hindered by a delayed start, graduate education in China is having a rapid development in recent years. Benefiting from the emphasis and priority from the State government, the profession of graduate education and higher educational institutions, the quality assurance system has been in the process of construction and improvement since the beginning of graduate education in China, and that has provided an effective guarantee for the quality of graduate education in China. The overall quality of graduate education in China can on the whole meet the demands of that for high-leveled and well-trained talents in economic construction and development of science and technology in China. At different levels of graduate education, distinctive characteristics demonstrate themselves.

It is worth mentioning, before any further discussion, that graduate education of China is still developing rather than developed, and therefore its quality assurance system is under construction and improvement all the while, some of the measures being temporary, set within the bounds of time, location and discipline, and some others are taken for consideration of the particular human and social environments of China. The State government, the profession and the institutions concerned in China have been searching for and trying on more effective measures and methods to provide quality assurance for graduate education.

### **1. The averagely satisfactory quality at the master level.**

The durations of graduate studies at the master level are 2-3 years, considerably longer than the duration of 1-2 years in most western countries, and as the mode of education is one consisting of two phases of “courses + degree dissertation”, many master candidates already have had parts in the projects of their tutors, often ending, among other things, in publication of academic theses. The lengths and the mode both contribute to the desirable quality of graduate education at the master level. In spite of the fact that employment turns out to be more and more of a headache for those who have completed their undergraduate studies, master-degree holders still fall far short of supply, revealing the popular approval of graduate education.

## **2. Gaps at the doctoral level between ours and the average international standard.**

At the doctoral level, gaps still exist between ours and the average international standard, as is shown in the lack of inventiveness, as its evidence, in doctoral dissertations. Generally speaking, much technical innovation and improvement, but little original invention and brand-new academic idea are found in them. Various causes account for such dissatisfaction, including the relatively low average level or standard of scientific and academic research in China, the inevitable problems accompanying the developmental phases, and some inadequacy of the tutoring staff and the checking influence of the traditional Chinese culture.

## **VI. The Prospect of Quality Assurance of Graduate Education in China**

Graduate education is enjoying a vibrant and rapid development in China. The emphasis of graduate education, as is explicitly ruled by Ministry of Education, will be on the improvement of its quality. The convention of the State Council held on May 10 this year also gave a special mention that the development of education shall be guided with a realistic, scientific philosophy, and the emphasis shall be on the improvement of its quality; the priority shall be the establishment and completion of the quality assurance system. With such emphasis from the State government and with the persistent endeavors of professional and non-professional people in graduate education and higher education in China, our graduate education will see a constant improvement of its quality and quantity, and China will definitely enhance, in the visible future, from a “scale recognized country” to a “quality recognized country” in graduate education.