## Research and Practice on Classification Training Model of Academic Degree and Professional Degree for Computer Graduate Students

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**Abstract.** At present, it is a challenge to train professional and degree graduate students with advanced professional skills in computer science. It is an important way to improve the level of graduate students in computer science to establish the training mode of full-time professional graduate students. By analyzing the training characteristics of full-time computer master's degree and academic master's degree, this paper explores the training mode from the aspects of curriculum setting, practical training and dissertation, so as to provide reference for solving the confusion in training and promote the healthy development of full-time computer master's degree education.

Keywords: Professional degree graduate education, Practice and innovation ability, Reform of training mode.

## 1. Introduction

With the deepening of the new round of scientific and technological revolution and industrial transformation, the international competition around high-quality talents and the commanding heights of science and technology is unprecedentedly fierce. General Secretary Xi Jinping stressed that it was necessary to further strengthen science education and engineering education, strengthen the independent training of top-notch innovative talents, and provide talent support for solving the problem of "stuck neck" in China's key core technologies. Professional degree graduate education is the main channel to train high-level applied talents. Since the implementation of professional degree graduate education system in 1991, the scale of professional degree graduate education in China has been expanding constantly. According to the "Decade of Mathematical Education" of the Ministry of Education in 2022, the enrollment rate of professional master's degree students in China has exceeded 60%, and the enrollment rate of professional doctorate students has reached 14.4% [1-3]. Vigorously developing professional degree graduate education has become the strategic focus of the reform and development of graduate education in the new era, which is of great significance to building a powerful country in education, science and technology and talent [4].

The "Professional Degree Graduate Education Development Plan (2020-2025)" points out that professional degree graduate education aims to improve the practical and innovative ability of graduate students, and has unique advantages in adapting to the increasingly refined social division of labor, specialization, and diversified demand for talents, and has become the main position of high-level applied talents training. Professional graduate education has a relatively independent education model, with the distinctive characteristics of the integration of production and education, which is a high degree of vocational and academic unity [5,6]. Therefore, in the new stage of development, facing a new round of scientific and technological revolution and industrial transformation, professional degree postgraduate education must intensify efforts to deepen the integration of industry and education, promote the in-depth docking of disciplines and majors with industrial needs, carry out reform and innovation in training concepts, training models, training mechanisms, and promote the organic connection of education chain, talent chain, industrial chain and innovation chain. To provide strong talent support for the transformation and upgrading of national industries and innovative development [7].

With the rapid development of computer technology, network technology, artificial intelligence technology and digital industrial technology, the social demand for computer talents not only remains high in quantity, but also has higher requirements in quality [8]. As a way for national higher education to cultivate advanced talents, computer graduate education is the basis for the continuous improvement of national competitiveness, the leading position of science and technology, the sustainable development of economy and the continuous progress of society. The cultivation of innovative ability of computer graduate students has an important relationship with the construction of an innovative society and an innovative country [9].

In recent years, the rapid development of graduate education in China has become a major country of graduate education in the world, and the demand for high-level innovative talents in all walks of life is more urgent, and the status and role of graduate education are more prominent. In order to further improve the quality of graduate education and stimulate the innovative ability of graduate students, the Ministry of Education, the National Development and Reform Commission, the Ministry of Finance and other departments have carried out top-level design of graduate education at the national level and issued a series of policies and guiding documents [10,11]. For example, the Opinions on Deepening the reform of postgraduate education issued in March 2013 pointed out that it is necessary to adhere to the road of concursive development, to service demand, improve quality as the main line, to promote the reform of training mode by classification, and to build a quality assurance system as the focus, more prominent service economic and social development, more prominent innovation spirit and practical ability training. It is necessary to pay more attention to the combination of science and education, industry and education, and opening up to the outside world, so as to provide strong support for improving national innovation and international competitiveness [12], and provide a strong guarantee for building a strong country with talents and human resources. The Opinions on Strengthening the Construction of the Quality Assurance and Supervision System of Degree and Graduate Education issued in January 2014 further strengthened the construction of the quality assurance and supervision system in the process of graduate education, and clearly pointed out that improving the quality of graduate education is the core and most urgent task of the reform and development of graduate education [13]. The "Opinions on Accelerating the Reform and Development of Graduate Education in the New Era" issued in September 2020 once again stressed that graduate education shoulders the important mission of high-level personnel training and innovation and creation, is an important cornerstone of national development and social progress, and is the basic layout of coping with global talent competition. To enhance the sense of mission and responsibility of postgraduate students, it is necessary to comprehensively improve their knowledge innovation and practical innovation ability [14].

In the new era, the state puts forward higher requirements on the quality of graduate education. Local colleges and universities bear more than 50% of the graduate education in the country, and the quality of their innovation ability training determines the overall quality of innovation and entrepreneurship education in Chinese colleges and universities [15,16]. Therefore, it is an important challenge for us to improve the cultivation of the research and innovation ability of computer science in local colleges and universities.

## 2. Current Situation of Computer Graduate Training

As an important subject in the field of information, computer science is characterized by strong theory, strong practice and rapid development. It emphasizes the need to master solid theoretical foundation and professional technical knowledge in mathematical analysis, logical reasoning, data structure, algorithm design, architecture and system software. There are also high requirements in practical aspects such as software compilation, system design and project development [17]. Moreover, the knowledge system of computer subject develops rapidly, the technology changes with each passing day, the industry grows continuously and the products emerge endlessly, which puts forward higher requirements and new challenges for the training of graduate talents. It has become an important task for universities to train high-level talents to train computer graduate students who meet the needs of social development in the new era, have innovative ideas, have innovative thinking and have innovative ability [18].

The innovation ability of graduate students in computer science is mainly reflected in the research and practice of scientific problems. They can use the knowledge they have learned, learn from predecessors or others' research experience, give full play to their innovative thinking, find and propose problems encountered in scientific research, analyze and summarize the problems with relevant theoretical knowledge, and verify the effect of problem solving through scientific experiments [19]. In turn, the ability to produce a series of original and practical results. The components of graduate students' innovation ability mainly include personal personality and thinking innovation ability, knowledge structure, knowledge reserve and knowledge application ability, ability to understand and analyze problems, ability to propose and solve problems, and ability to produce innovative practice and innovative results.

For computer science graduate students in local universities, the factors affecting innovation ability include the basic knowledge of graduate majors, the weak foundation of the accumulation process of humanities and social science knowledge, few opportunities for innovation ability exercise, insufficient academic research atmosphere, weak foundation of innovation training process, incentive mechanism for participating in scientific research, and the management system of graduate innovation research to be further strengthened. Some scholars believe that the primary reason for the poor innovation ability of graduate students is system and mechanism problems, including the dislocation of the government's macro-management and the internal training system of the school. The selection and training mode of graduate students is not conducive to the improvement of students' innovation ability,

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the government's financial investment is not in place, and the expenditure structure is also unreasonable [20]. Some scholars also believe that the low quality of students, relatively weak faculty and immature training mode are one of the important factors affecting the innovation ability of graduate students [21]. Reference [22] believed that innovation was generated on the basis of original knowledge. In order to improve the innovation ability of postgraduates, it was necessary to control the quality of students and select high-quality students with academic enthusiasm and profound academic skills for in-depth training. Reference [23] pointed out when constructing the training system of graduate students' innovative ability that in order to cultivate graduate students with innovative ability, it should start from the root and improve the selection system of graduate students to improve the quality of students is the basis for improving the innovation ability of graduate students, and the successful selection of graduate students with profound academic skills and strong academic interests is the premise for students to improve their innovation ability. Some scholars believe that personal quality and personal potential also play an important role in the cultivation of innovation ability, scientific research environment and academic atmosphere, tutor's guidance, designed experiment teaching and innovative practice [24].

To sum up, some factors affecting the cultivation of graduate students' innovative ability lie at the government level, such as the level of government financial investment. Local colleges and universities can seek financial support for graduate education from governments at all levels, but the national local financial budget is basically fixed every year. In some aspects of policies, such as the graduate enrollment selection and allocation mechanism, universities, especially local universities, are not able to make changes. Although some policies formulated in the enrollment selection and allocation can attract a small number of outstanding talents and play a leading and exemplary role, they do not improve the overall quality of graduate education. Some of them are in local colleges and universities, and even graduate students themselves, such as the infrastructure of local colleges and universities, experimental environment, teachers, students' internal characteristics and individual behavior characteristics [25].

#### 3. Problems and Challenges in the Training of Professional Degree Postgraduates

After more than 30 years of development, China's professional degree graduate education has made remarkable achievements, professional degree categories are continuously enriched, the scale of graduate training is continuously expanded, and the training mode is continuously improved, which basically meets the needs of high-level applied specialized talents in socialist modernization. However, in the face of the new requirements of the new era, the structure, quality and level of professional degree postgraduate education and industry needs can not be fully adapted, and there are still some problems to be solved in the process of professional degree postgraduate training.

- 1. The improvement of innovation ability is disconnected from the shaping of family and national feelings.
  - What kind of people to train, how to train people and for whom to train people is the fundamental problem of education, and also the core topic of building an educational power. It is a strategic task to build a modern socialist country in an all-round way by adhering to the "double shaping" of knowledge transfer and value guidance, cultivating graduate students' feelings of home and country, and cultivating a large number of highquality innovative talents with both virtue and ability and the courage to take on the great task of national rejuvenation. At present, colleges and universities still have some shortcomings in the process of cultivating graduate students' feelings of family and country: (1) Under the utilitarian evaluation mechanism, colleges and universities pay more attention to the knowledge imparted and ability cultivation of graduate students, and pay less attention to the moral qualities such as the sense of responsibility and mission of graduate students. Some graduate students only focus on the study of their own professional knowledge, with a weak sense of social responsibility and a weak sense of mission; (2) In the face of the practical needs of the education of national feelings for graduate students, the resources of national feelings education in colleges and universities are relatively weak, only scattered in some courses and classroom teaching, and failed to form a perfect supply system; (3) The education methods of national feelings in colleges and universities are not rich enough, mainly through the theoretical learning of the first class, which is difficult to get close to the reality of students, and the depth of integrating ideological and political education into professional curriculum teaching and scientific research practice is not enough [26,27].
- 2. The training process is disjointed from the formation of practical innovation ability. The low integration of production and education and the lack of innovative ability to solve practical problems are one of the difficulties faced by professional degree postgraduates in the training process, which is mainly reflected in the lack of in-depth scientific research and practice in the field of engineering in the training process, and the ability to solve the problem of "bottleneck" of key core technologies needs to be improved [1]. The reason is that the talent training mode of school-enterprise cooperative education has not yet formed

fundamentally, and the phenomenon of disconnection between production and education and "two skins" is serious. First, the curriculum system and teaching content of colleges and universities do not match the actual needs of the industry, and the positioning of talent training is not accurate enough; Second, the enthusiasm of enterprises to participate in the school is not high, the responsibility and power of tutors inside and outside the school are not clear, the depth of cooperation and guidance integration is poor, and the teaching process is relatively disconnected from the production process; Third, the operation mechanism of the school-enterprise practice base is not perfect, failing to form a "training complex" with clear division of labor, close contact and coordinated operation, and systematic policy supply and incentive guarantee services are not in place.

3. There is a disconnect between academic research and innovative practice [28]. The "academic" tendency is serious, "professional" and "practical" characteristics are also the main problems in the training of professional degree postgraduates. Most of the professional degree graduates are keen to carry out research projects and publish academic papers in the university for the future needs of career selection and further study. Tutors are also accustomed to following the training mode of academic postgraduates, paying too much attention to the teaching of theoretical knowledge and neglecting the training of practical ability, which makes it difficult for postgraduates to master practical application skills and fail to meet the actual needs of industries and enterprises [29]. At the same time, the evaluation system of some colleges and universities is not perfect, paying too much attention to the assessment of theoretical knowledge and ignoring the evaluation of practical ability, which also promotes the tendency of academic degree programs and deepens the disconnect between academic research and the cultivation of innovative practical ability.

## 4. The Main Factors Affecting the Cultivation of Innovative Ability of Computer Graduate Students Analyze

## 4.1. Accumulation of Basic Knowledge Reserve

The accumulation of basic knowledge reserve includes four aspects: knowledge structure, knowledge system, knowledge acquisition and knowledge application. The courses offered at the postgraduate stage, in addition to further consolidating the foundation of the course, focus on the knowledge needed in the later research stage can play a role in filling the gaps. Knowledge structure (breadth of knowledge) mainly refers to the breadth of knowledge that computer graduate students have and should have, including basic theoretical knowledge, professional basic knowledge, professional knowledge, subject frontier knowledge, etc., as well as certain literature knowledge, artistic accomplishment, legal knowledge, philosophy knowledge and history knowledge. Knowledge in the field of computer science and a certain breadth of knowledge in the field of non-computer science, so as to ensure the diversity of ideas for solving problems in the later research and the depth of knowledge reserve for solving problems. Knowledge system (depth of knowledge) mainly refers to the complete knowledge system related to computer disciplines that graduate students should master, so that they can make full use of the basic knowledge and advanced technology in the field in the breadth and depth of research in the later stage [30,31].

Knowledge acquisition (knowledge renewal) refers to the ability of graduate students to acquire new knowledge and skills on the basis of existing knowledge and skills, and they should gradually learn to self-renew knowledge, gradually accumulate experience and continuously improve skills [32]. Knowledge application (combination of theory and practice) refers to that postgraduates can apply the knowledge they have learned to solve and analyze problems, effectively correlate the knowledge they have learned with the practical problems they have encountered, summarize the logical relationship of the problems, establish mathematical models of the problems, and flexibly apply the knowledge they have learned.

#### 4.2. Internal Academic Exchange and Collaboration

Internal academic communication and collaboration mainly include four aspects: tutor guidance, project participation, group discussion and interactive communication, aiming to form a good academic atmosphere within the research group and provide an internal supporting environment for the cultivation of innovative thinking and improvement of innovative ability of graduate students.

As the first person in charge of postgraduate study and research, tutor's guidance plays a crucial role in cultivating postgraduate's innovative ability. Due to research needs, graduate students and supervisors have close contact with each other in terms of space and time. The supervisor and the graduate students in the research group not only have to conduct problem consultation and group discussion, but also carry out problem analysis and individual guidance. They not only have short-term face-to-face communication and get along with each other, but also get along with each other in the same laboratory or laboratory for subject research and scientific experiments for a long time. Even tutors and graduate students are closely connected, get along day and night, and become a community of destiny for the common goal [33].

Project participation refers to postgraduate students participating in scientific research projects under the responsibility of their tutors. Whether it is longitudinal research on basic computer theories, computer application research combined with enterprises, or pre-research on frontier fields of computer science, it has high requirements for postgraduate students' theoretical basic knowledge, practical ability and innovative thinking ability. Through participating in the subject research, he can systematically learn the research route and method, and exercise his innovative thinking ability [34].

In addition to the regular face-to-face guidance of the supervisor to the graduate students, the group discussion also includes the group discussion on project research and project progress held by the research group, which is also the most important work in the daily affairs of the graduate students. Among them, the general program and implementation process of the project, the stage summary of the project research, the research objectives of the next stage and other common problems encountered in the research, solutions and channels can be studied and discussed through group discussions. The supervisor will grasp the general direction, and other teachers and students in the research group will express their opinions and constantly revise and improve the specific implementation steps of the project research and development and the research content. Interactive communication refers to the interaction between supervisors and graduate students, and between graduate students and graduate students. In addition to regular face-to-face guidance and group discussions, for personality issues, graduate students need to communicate with their mentors in a timely manner, or communicate and collide with other students.

Due to different personal visual perspective, research space or early focus, some problems may be easily solved for others, so the common problems found through communication can be communicated and negotiated with a wider group of people in the group discussion. Once a major problem is encountered, the tutor's research group can take the lead to establish a project through pre-research, and strive for departments at all levels Research funding to support researchers to conduct more in-depth research.

#### 4.3. External Scientific Research Environment Support

External scientific research environment support mainly includes four aspects: external academic exchange, interdisciplinary research, scientific research funding support, and incentive and reward system, as shown in Figure 4. The purpose is to focus on the research and development of the graduate students in the research group, strive for a good external supporting environment in the external hardware environment, external software environment, external policies and systems to improve the training of innovative thinking and innovation ability of graduate students. External academic exchange refers to the way that postgraduates go global through introduction, carry out multi-level, multi-channel and multi-dimensional academic exchanges with outside counterparts and outside industries, invite industry experts to make academic reports and academic lectures, organize excellent postgraduate students to hold academic forums, participate in relevant academic conferences at home and abroad, and inspire postgraduates' scientific research ideas through academic exchanges Expand innovative thinking to draw sources, absorb the strengths of a hundred schools of thought, make up for their own shortcomings, and draw inspiration for innovation in the scientific research environment of a hundred flowers blooming and a hundred schools of thought competing. Interdisciplinary discipline refers to the interdisciplinary integration of graduate students with other disciplines. For example, computer science is not only related to engineering disciplines such as artificial intelligence, software engineering, electronic information, control discipline, communication engineering, electrical engineering, mechanical engineering, but also to science disciplines such as physics, mathematics, optics, system science, medicine, management, literature, history and philosophy Disciplines are related, so it is necessary to combine the subject field and research direction of graduate students to selectively and moderately cross disciplines with highly related disciplines. The purpose of cross disciplines is not simply to cross disciplines. Instead, it is necessary to find the common characteristics and approaches of research from different disciplines, and find and learn from different methods of innovative thinking in different disciplines to solve problems and innovative thinking inspiration of the discipline [35,36].

In addition, through cross-learning and communication in interdisciplinary fields, graduate students can understand and master the knowledge and skills of different industries, fields and disciplines, which can further optimize the knowledge structure of graduate students and clarify their learning and research ideas. Under the investment of sufficient scientific research funds and the design of appropriate incentive and reward system, the research enthusiasm of postgraduates can be fully activated, the comprehensive utilization efficiency of the knowledge learned can be improved, and the independent innovation ability of postgraduates can be enhanced.

### 4.4. Individual Potential Characteristics

External factors play an auxiliary and promoting role, and some personal characteristics play a crucial role in improving the innovation ability of graduate students. The thinking characteristics of individual potential are whether the thinking habits and thinking modes of graduate students to the problems in academic research belong to the default reception type, the review and criticism type, the conformist type, or the active exploration type. Different thinking habits and thinking modes will affect people's attention to the problems. Innovation often comes from the critical reception, which not only needs to confirm the basic status quo of the current problems, but also needs to establish Innovative ideas to solve problems. Behavioral characteristics refer to the ability to solve problems, whether it is bold and quick, or slow and lazy. Personality traits are the confidence and ability to face problems, to go forward without fear of difficulties, or to shrink and avoid difficulties. Therefore, clarifying the characteristics of individual potential, promoting strengths and avoiding weaknesses can provide positive momentum for research and innovation [37].

### 4.5. Academic Achievement Verification

The verification of academic achievements mainly includes the application and participation of scientific research projects (including vertical topics and horizontal projects), the publication of academic papers (including journal papers and conference papers), intellectual property rights (invention patents, utility patents, software Copyrights), etc. Academic achievement is not only an important index to assess the innovative ability of graduate students, but also to promote the direction of postgraduate efforts. Through the application and research of vertical topics, we can understand and master the current situation at home and abroad in the frontier of the discipline, gain insight into the latest research trends in the discipline, lead the research direction of the discipline, and provide a high-level platform for the cultivation of graduate students' innovation ability, so as to solve the problem of how to combine theoretical research with practical application, and solve the problems in practical engineering projects. The research and development, transform the theoretical and technical advantages into the ability to solve practical problems, exercise the practical practical ability and technical application ability of graduate students, and transform the knowledge advantages mastered by graduate students into ability advantages and innovation advantages [38].

The periodic results or final results of the research can be verified by publishing journals and conference papers, and corresponding intellectual property rights can be obtained through invention patents, utility patents, software Copyrights, etc. At the same time, the research should be summarized. For example, by publishing academic papers to be reviewed by peer review experts, the problems and deficiencies in the research can be found, and the bias caused by poor consideration can be corrected in time, and the innovation ability and quality of graduate students can be further improved by iterative updating and spiraling.

# 5. Training Characteristics of Full-time Computer Professional Master's Degree Students

### 5.1. Training Objective

The training goal of full-time computer master's degree graduates is to master the solid basic theory and broad professional knowledge in the field of computer technology, master the advanced technology and modern means to solve engineering problems, have innovative consciousness and the ability to independently undertake engineering technology and engineering management work, and cultivate high-level and composite computer technology and management talents.

## 5.2. Training Object

The training target of full-time computer master's degree graduates is fresh undergraduates. Due to their limited experience, they have to find jobs after graduation, so they do not have a deep understanding of the complexity of society and do not know the relationship between their future work and knowledge, so that their learning consciousness is not clear. The understanding of knowledge comes more from the thinking of the accumulation of original classroom knowledge, and they are more concerned about whether the diploma and the knowledge they have learned can bring benefits to their future job hunting [39].

#### 5.3. Training Mode

Since most tutors in colleges and universities do not have relevant practical experience, full-time computer master's degree graduates, mainly fresh undergraduates, do not have work experience, and professional guidance in practice requires tutors with sufficient work experience and guidance ability to assist them. The dual tutor is conducive to professional degree students not only to study for a degree, but also to strengthen the close connection with the actual needs of employers, and to combine talent training with enterprise technological progress.

## 6. Innovation of Full-time Computer Professional Degree Master Training Model

#### 6.1. Setting Up a Reasonable Curriculum System

The postgraduate curriculum setting is the overall course setting and arrangement around the postgraduate training goal. Since the graduates have a clear choice of future career, the concept of "career" is very vague, so in the course setting process, we should start from this reality. According to the order of the formation of vocational consciousness and vocational ability training, the courses related to "occupation" are set up step, paying attention to the basic, practical and selective. The specific setting can be divided into four parts: public degree course, basic degree course, professional degree course and elective course. The public degree courses mainly focus on foreign languages stipulated by the state, and the emphasis is added to professional foreign languages, and the method for recognizing professional foreign language credits is clear, that is, the translation of scientific research papers, technical documents or technical manuals of more than 10,000 words; Published (or accepted) a translation of more than 10,000 words; Publish (or accept) one academic paper in an international conference or journal in a foreign language. Basic degree courses are mainly mathematics courses, object-oriented technology and algorithm design and analysis, with the purpose of enabling students to build a basic knowledge system and master the theoretical basis and basic methods of computer science. Professional degree courses, including computer software, computer hardware, information security and computer applications, are designed to enhance students' professional knowledge and reflect the latest academic achievements and technological developments in the computer field. Elective courses mainly include information retrieval, management and international cooperation courses, which are designed to broaden students' knowledge and enhance their ability to analyze and solve problems [40].

#### 6.2. Strengthen the Combination of Basic Theory and Applied Knowledge of the Course Teaching Mode

Reasonable curriculum structure plays a vital role in cultivating compound and applied talents, and the choice of teaching mode is the most important. Excellent teachers with strong engineering background and chief engineers of large computer enterprises can be invited to give relevant courses. According to the characteristics of computer majors and graduate students' own characteristics, flexible and diverse teaching methods can be adopted, such as thematic discussion, heuristic, participatory, academic discussion, on-site research, simulation training and case teaching [41]. The teaching should take the cultivation of students' practical application ability as the standard and the combination of theory and practice as the main line. It should not overemphasize the study of theoretical knowledge, but pay more attention to practice and application, so that students can carry out more on-board practical operations to enhance their professional practice ability and the ability to solve practical problems [42].

## 6.3. Strengthen Practical Training to Comprehensively Improve the Practical Ability of Full-time Professional Degree Students

Professional practice is an important teaching link, and full and high quality professional practice is an important guarantee for the quality of full-time professional graduate education. Strengthening the strength of practical links is the main means to make up the gap between the graduates and the students with work experience. Schools should provide and guarantee the conditions for practice, establish engineering training platforms, science and technology funds for graduate students, and carry out various science and technology competitions, pay attention to absorbing and using various social resources, establish joint training bases, and actively promote the close connection between the training of professional degree graduates and the actual needs of employers, so as to deepen the understanding of vocational knowledge and cultivate their professional abilities.

### 6.4. Comprehensively Improve the Quality of Theses for Full-time Professional Graduate Students

The thesis is an important symbol to measure the knowledge level, practical skills, research ability and training quality of professional degree postgraduates. The thesis topic should be directly derived from the actual production or have a clear engineering background and application value, and have a certain technical difficulty and workload, the form of the dissertation can be varied. It can adopt technological research, technological transformation, technological promotion and application, engineering design and implementation, research and development of new processes, new materials, new products and new equipment, basic application research, pre-research topics, etc. The dissertation topic selection should start no later than the end of the second semester, and the proposal report should be completed in the third semester. When the thesis work is about halfway through, the faculty or subject Department will arrange for an interim inspection of the research report. The dissertation of the degree applied for, and the qualified candidate can organize the defense. Through the dissertation work, the purpose is to enhance the ability of postgraduate students to comprehensively apply the theories, knowledge and methods of their major or related majors to research and solve practical problems [43-45].

## 7. Conclusion

In short, as a new training mode, full-time professional degree master needs us to constantly explore its education law, according to its characteristics, fully learn from the international advanced practice of professional degree graduate education, fully reflect its engineering characteristics, establish a scientific and standardized personnel training system and excellent personnel training mode and mechanism, to achieve its "comprehensive, coordinated and sustainable" development.

## 8. Conflict of Interest

The authors declare that there are no conflict of interests, we do not have any possible conflicts of interest.

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