

## Research on the impact of higher education professionalization on specialized master education development

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**ABSTRACT:** This paper described the connotation and correlation that higher education and its professionalization have in social basis, education hierarchy design, and higher education carrier. It discussed two major problems that China is facing while developing its higher education professionalization—the ‘excessive emphasis’, and the ‘excessive overlook’. This paper also described the situation that specialized master education is experiencing under the background of complex and profound changes happening in the connotation of higher education professionalization: on one hand, the number of student enrollment is increasing in successive years and the range of subject category is also well expanding; on the other hand, no thorough understanding of professionalism has been established and further improvement is required in the emphasis on practical ability. Based on the above situation and background, this paper introduced the ‘1-3-3-4 Cultivating Mode’ as an idea for specialized master reform, aiming to make the cultivating mode of specialized master education more scientific, reasonable and orderly.

**Keywords:** higher education; professionalization; postgraduate education; specialized master

### 1 HIGHER EDUCATION AND PROFESSIONALIZATION OF HIGHER EDUCATION

In the definition set by UNESCO (United Nations Educational, Scientific, and Cultural Organization), higher educational institutes include all comprehensive universities, normal colleges, technical colleges, and other institutes aiming at providing service programs, such as training or learning, for people after they finish secondary education. Professionalism is corresponding to the technicality in higher education. It aims to cultivate students the abilities they need to have in professional application and technical practical work. It also helps promote the transformation from knowledge to productivity. As technicality aims to cultivate students the abilities they need to have in professional theoretical research and also takes the social responsibilities of knowledge creation and knowledge production, it is corresponding to professionalism.<sup>[1]</sup>

The relation between higher education and its professionalism can be explained from the following aspects:

#### 1) From social basis

Higher education is high-level education in our education system. As higher education is both advanced and professional, it is not only advanced based on its professionalism; but is also the high synchronization of obvious division in educational content and social division. Further deepening of social division can lay solid social foundation for higher education and replenish new connotation. Elaborate social division can generate new technological paradigms so as to further enhance the modularization of science and technology. However, technical scale with larger capacity requires more complex technical framework for integration and compatibility. As a result, the recombination and integration inside higher education can further help maintain the strong interaction and coordination between higher education and external society.

#### 2) From education hierarchy design

Throughout the hierarchy design of higher education of each nation, they all basically contain four hierarchies in junior college education, undergraduate education, master education, and doctor education. The objectives and scale of each hierarchy get higher

gradually. The distribution structures of knowledge, technology and theory contained in each hierarchy are different from each other. The strength of professionalism evolves from weak to strong. However, in view of the ultimate usage of knowledge, technology and theory, the higher education of each hierarchy is the description and characterization of the theories and technologies required in some industry or area based on social division, aiming to help educated individuals obtain skills and technical abilities needed in their future career.

### 3) From the carrier of higher education

Another distinguishing feature of higher education is the division education taking professional major as its carrier. To a certain extent, majors can be regarded as the fundamental organizational forms of higher education. The educational relation between higher education and social professions is kept through professional majors. Professional education is the pre-determination of educatee's future occupation range and can provide the most vigorous production factors for the development of each occupation under social division condition. The technicality of higher education can promote the spreading of occupational activities and help create technologies. Occupational activities and technologies supplement each other. The former provides the sources of knowledge and technologies for the latter while the latter provides the destinations of knowledge and technologies for the former.

Transition in the connotation of modern social profession asks for higher and more comprehensive requirements on practitioners and leads to new changes in profession areas. There are several distinct characteristics in the transition as follows:

1) More emphasis on applicant's innovation and thinking on the new science and technology theories in his profession. Scientific and technological development leads to higher proportion of brainwork in working fields, and thus makes it necessary for higher education to help students maintain their fundamental understanding and thinking of the general scientific principles of each profession.

2) More emphasis on applicant's 'soft power'. Instead of only focusing on applicant's hardware strength, current employers also pay great attention to applicant's software quality, such as entrepreneur spirit, responsibility, interpersonal relationship, and occupational loyalty.

3) More interest in versatile talents and more challenges for specialized talents. In fact, positions in many fields do not require personnel to receive vocational training within a particular range or of certain content. In some cases, no special occupational qualification is needed. Besides specialized knowledge and skills, modern economy is in great need of personnel with universal talent.

## 2 CURRENT SITUATION OF HIGHER EDUCATION PROFESSIONALIZATION DEVELOPMENT IN CHINA

With increasingly closer relations between knowledge and economy and between knowledge and society, higher education which is regarded as social 'knowledge base' starts moving to the center of society and establishing its legal status by actively and extensively engaging in social activities. People constantly hesitating between liberal education and specialized education and between individual freedom and social need start to show two opposite kinds of consciousness and practice. The same situation also exists in our current higher education where two extremely different kinds of development situation have occurred.

1. Excessive emphasis on 'professionalism' with rigid and one-sided understanding of the 'professionalism' in higher education. In modern society, higher education has become one of the social industries. It is playing an outstanding role in providing high-quality talents for modern society. However, there are many problems in current higher education. Firstly, in order to cater social needs, design of major and curriculum is short-sighted and hasty. It mechanically inserts too much working content in teaching. Secondly, during curricular implementation, no authentic professionalism can be reflected. As a result, few knowledge and technology can be studied further or deeper in lessons and thus lead to failure in reaching original teaching objectives. At last, the reflection of 'professionalism' in teaching evaluation is very one-sided and simple. Some universities only pay attention to graduate's employment rate and signing rate. They not only indirectly encourage students to forge employment; but also make it easier to destroy the purity and holiness of education.

2. Insufficient understanding of the attribute of 'professionalism' in higher education. Academic tradition is defended tenaciously and disgust or even contradiction against 'professionalism' is generated. Although higher vocational education has obtained great attention and achieved certain development nowadays, in most people's mind, vocational colleges are still not good choices for education. In the meantime, vocational colleges are ashamed of their professionalism and strive to be like research universities. This single mode of talent cultivation has become a very important reason for why current undergraduates are hard to get appropriate employment. Adler, an American educator in 20<sup>th</sup> century, once asserted, "To include all kinds of vocational training in college curriculum is a misuse of colleges. The proper places for vocational training are work units instead of schools [2]."

### 3 THE ADVANTAGES AND CHALLENGES THAT SPECIALIZED MASTER TALENT CULTIVATION FACES UNDER THE INFLUENCE OF HIGHER EDUCATION PROFESSIONALIZATION

Under the general trend of professionalization development in higher education and the driving force of pressure caused by difficult employment situation for postgraduates, specialized master has sprung up everywhere as a new thing. In order to meet the tide of professionalization in higher education, cultivation of student's academic research ability is not put in the first place in establishing the training objectives of specialized master. Instead, professional practical ability is set as the orientation. Specialized master education attaches more importance to practice and application. After more than twenty years of construction, specialized master education has grown out of nothing and developed from small-scale to large-scale. Now, it has formed a large scale and left important influence. In view of scale, the annual average growth of the enrollment for specialized master is almost 33% with extensive contained range in recent 5 years. Moreover, the annual growth will reach 50% of the total enrollment in 2015. Specialized master education has accomplished rapid development in scale and classification in China. As an up-rising star in education industry fit in with modern development, specialized master education contains late-mover advantages which cannot be neglected.

(1) The training mode used in specialized master emphasizes more in practicability which can better accord with the requirements of higher education professionalization.

As higher education is widespread today, it is not a reachless dream for most ordinary people. Plenty of undergraduates and postgraduates have emerged like mushrooms after rain under the implementation of the reform and opening-up policy. With the introduction of increased university enrollment and cancellation of distribution policy, the growth rate of higher education institution's operation ability is far behind that of expanded enrollment. Scholars with no real academic competence can no longer hide among high-degree talents. The concept that high educational degrees may not lead to high competence has been around. Under the overall background, more and more employers stop putting degree and scientific research level in the first place. Instead, they start to pay more attention to practical working ability. The cultivation objective of specialized master is to cultivate high-level practical talents. It lays emphasis on pragmatic spirit and directly aims to serve for employment at the beginning of design. This objective can well fit the selection focus of employers and fully manifest the professionalism features in higher education. Based on the above, it can be clearly explained that the original intention of

specialized master development is the production of historical background.

(2) As the cultivation period of specialized master is shorter, it is more suitable for the fast pace and high efficiency in nowadays society.

At present, China is executing nine-year compulsory education. In legal dimension, adolescents need to receive at least 9 years of education to enter workplace. However, in view of the actual education situation in China, most adolescents can receive education for more than 9 years. The number of students who can go for bachelor degree, master degree or even doctor degree after graduating from high school is increasing year by year. The schooling length of academic master is generally 3 years while that of specialized master is 2 years in most cases. For adolescents who choose to study for master degree, it is obvious that specialized master with shorter schooling length has higher cost performance if they plan to learn a professional skill for future work instead of being keen on scientific research. Contemporary social economy is in rapid development with conditions and trends changing quickly. In this complex and changeable social formation, time is definitely precious treasure for most job seekers. What they pursuit the most is sufficient time with rich accumulated working experience. As specialized master has shorter schooling length, it can offer more practice chances to students and thus can help them make more reasonable career plans.

(3) As the examination difficulty of specialized master is generally lower, it can help alleviate the students' pressure.

The original intention of specialized master cultivation is not merely cultivating "technicians". Although specialized master education pays more attention to practical working ability, it does not neglect the evaluation of professional quality and theoretical knowledge. There's no doubt that the screening test of specialized master is easier than that of academic master. It can help select professional talents with certain theoretical knowledge. At present, the difficulty of selection test for specialized master is slightly lower than that for academic master in most universities and colleges, conforming to the original intention of specialized master selection and the actual situation of social needs.

However, the specialized master education in our country is not well developed and hasn't been completely accepted by the society. According to a survey conducted by the Academic Degrees & Graduate Education Research Center of Beijing Institute of Technology, the overall satisfaction of graduate education among specialized master students is 61.9% which is lower than that among academic master students<sup>[3]</sup>. Currently, many people still have doubt about the quality of specialized master cultivation and hold higher acceptance to academic master education. The

existence of this phenomenon is not only related to some unhealthy development trends in current higher educational professionalism; but is also related to the imperfection in the cultivation scheme for specialized master.

Currently, there are two challenges for cultivation of specialized master.

1) Excessive cultivation on theory, insufficient cultivation on practical application, and lack of practical ability training together have led to the disjunction between the training objective and the positioning of specialized master. As a result of path dependence, 'simple transplantation' has been applied in generating specialized master education based on academic master education. This simple transplantation is mostly reflected in the specific details of training. The problem of excessive training on theory but insufficient training on practical application is very obvious. In the enrollment for specialized master, interview occupies a low proportion and the pertinence is weak, resulting in lack of examination on student's practical ability. In the training mode for specialized master, theoretical teaching is too much while practical teaching is not enough. Moreover, insufficient introduction and use of social tutor and lack of practical experience among teachers at school have directly influenced the application orientation and quality of specialized master cultivation.

2) In specialized master cultivation, the understanding of professionalism is rigid and one-sided. Firstly, in order to cater social needs, design of major and curriculum is short-sighted and hasty. Working content is regarded as teaching content. Secondly, teachers are loaded with multiple tasks. They not only teach academic master students; but also cultivate specialized master students. However, many teachers are lack of practical working experience. As a result, they have a smattering of knowledge about how to cultivate students with enough practical experience. What they can teach are still theories and knowledge written in books. Lastly, the reflection of 'professionalism' in teaching evaluation is very one-sided and simple. Some universities only pay attention to graduate's employment rate and signing rate instead of cultivating practical ability.

#### 4 HOW TO DRAW ON ADVANTAGES AND AVOID DISADVANTAGES WHILE ENSURING THE HEALTHY AND GOOD DEVELOPMENT OF SPECIALIZED MASTER CULTIVATION

##### 4.1 *Professionalization and technicality shall supplement each other*

Although specialized master originates from America, the discussion on the current development strategy for

specialized master in our country cannot be divorced from the actual situation of our education. According to the *Interim Procedures for Approval of Specialized Master Degree Structure* regulated by Ministry of Education of China, only institutions with authorization to issue normal master degrees are qualified to apply for specialized master degree accreditation. In other words, current institutions in our country cannot separate specialized master education from academic master education. Therefore, the educational pattern of full-time specialized master is connected to the fixed educational pattern of academic master. This binding situation of "academic & specialized master patterns" offers no benefit for the cultivation and development of specialized master education. Academic foundation can provide theoretical basis for specialized cultivation while specialized cultivation can provide reference and orientation for academic development. As a result, specialized master cultivation cannot go to extremes. For higher education, both professionalism and technicality shall be combined for further development. No emphasis shall be given on any pattern at the expense of the other.

##### 4.2 *Establish the practical capacity factors for specialized master and make the cultivation target clear.*

Without any doubt, cultivation of practical ability is more important than that of any other ability in specialized master education. Cultivation of practical ability combines various factors in physical power, intelligence, and psychology. It is manifested during the process of solving problems. In the cultivation of practical ability, special practical ability and circumstantial practical ability are the most important ones.

Special practical ability refers to the special practical ability required in solving a special problem. The power that specialized master students acquire by reading plenty of knowledge related to specific applications belongs to special practical ability. It is the practical ability brought by practical knowledge, including the ability to acquire professional knowledge and the ability to put the professional knowledge into practice.

Circumstantial practical ability is the core competence in solving a problem and also an important constituent in practical ability. In view of this, circumstantial practical ability for specialized master students can be divided into six parts: recognition ability, analytical ability, strategic decision-making ability, communication and coordination ability, leadership, and summarizing ability. All these abilities can help an individual complete the process of solving a problem. Circumstantial practical ability is the key to tell a specialized master student's quality. Besides, it is also the soft power which is hard to cultivate <sup>[4]</sup>.

### 4.3 *Establish reasonable cultivation mode.*

The content contained in practical ability is rich. The system established around practical ability cultivation must be comprehensive. To build the cultivation pattern centered on practical ability, specific design can start from training objective, curriculum system, teaching method, and guarantee system [5]. For this reason, a cultivation pattern of “1-3-3-4 cultivation pattern” which means “one objective + three modules + three methods + four guarantee measures” to cultivate practical ability required in specialized master education can be made.

#### 4.3.1 *One objective*

One objective is to set the cultivation of practical ability as the core objective, and to further define and refine it. Most institutions cultivating specialized master students in our country usually set various aspects of content as their cultivation objectives, including internationalization, innovation, and practicability. However, they always neglect the main objective: cultivation of practical ability. Therefore, emphasis shall be given on the focal point in cultivation objective. Practical ability shall be set as the core cultivation content.

#### 4.3.2 *Three modules*

Three modules refer to the basis module, professional knowledge module and soft skill module designed according to the specific content of the practical ability required in specialized master education of which the curriculum setting puts cultivation of practical ability at its core. There're big differences of teaching mode and evaluation mode among these three modules. All these modules are designed on the basis of the three sub-abilities in practical ability: general practical ability, professional practical ability, and circumstantial practical ability. They can cover all the content in cultivation of practical ability. Basis module is mainly for improving student's basic abilities, including fundamental courses such as basic values, professional ethics, fundamental vocational knowledge, politics, English, and social responsibility. Professional knowledge module refers to the specific professional knowledge of each major. It is designed for cultivating professional practical ability. Soft skill module is designed for cultivating circumstantial practical ability which is the core of practical ability in specialized master education. It emphasizes that students shall be able to master the skills and capabilities of solving specific practical problems.

#### 4.3.3 *Three methods*

Three methods refer to the case teaching method, situation simulation method, and action learning method introduced into teaching process and set as the main teaching methods in specialized master education. They have changed traditional teaching methods and

significantly cut down the proportion of mere knowledge teaching. In case teaching method, both compilation of local cases and application of case teaching method are given great importance to. While using this method, the proportion of cases in teaching and the proportion of local cases shall be ruled (or suggested) in teaching scheme. Situation simulation teaching method is an experiential teaching method. It starts from practice and focuses on to-be-discussed special topics, aiming to improve student's ability in solving problems by simulating certain situations. Action learning method is to solve existing problems or to complete tasks in practice through mutual assistance among group members. It emphasizes on group learning and “learning from actions”, so as to reach the learning objectives through actions and rethinking.

#### 4.3.4 *Four guarantee measures*

Four guarantee measures mean to provide guarantee in cultivation of practical ability from student selection, teacher selection, course assessment, and graduation assessment. Four guarantee measures involve the entire cultivation process from entrance to exit and none of the four can be separated. Together, they can provide the basic guarantee for practical orientation of the teaching modes. Student selection is an important basis to cultivate elite students. In student selection guarantee, the assessment will be focused on student's common practical ability and circumstantial practical ability during school admission selection. Common practical ability and special knowledge ability are the requirements for access. In teacher selection guarantee, dual-teacher system shall be truly implemented firstly. Detailed regulations on the proportion, recruitment, teaching, and student guidance of practical tutors must be set to avoid teachers turning into “vases”. In course assessment guarantee, practice-oriented course assessment system shall be established. It can turn the mere written test assessment mode into a stereometric course assessment system combing written test, oral test, and project report. In graduation assessment guarantee, we should move student's learning attention to ability, especially improvement on practical ability, through the guiding role of graduation assessment.

### 4.4 *Promote the reform on the path of cultivation mode*

#### 4.4.1 *Promote the educational reform of specialized master based on academic master education*

The establishment of the cultivating mode for practical ability shall inherit the advantages contained in academic master cultivation, conducting teaching reform centered on practical ability cultivation. There're certain value contained in the academic master cultivating modes for logical thinking, inductive learning ability and literal expression that specialized master

education can refer to. The strict learning style and good interaction between teachers and students are necessary for specialized master cultivation. However, as the core of specialized master education is practical ability cultivation, the most important part is to change teaching content and cultivating mode. The theoretical property in teaching content shall be dramatically reduced. For teaching method, more teaching methods aiming to cultivate practical ability, such as case-based teaching and simulation teaching, shall be applied to replace the original teaching method which mainly focuses on lecturing.

#### 4.4.2 *Promote the reform in specialized master management system*

In order to carry out a cultivating mode with practical ability as its core, a good management system is necessary to support it. On one hand, a good leading team is needed, including the principals for universities, departments, and specialized master education centers. Leaders in universities and departments need to attach importance to the establishment of specialized master and strongly support it. Persons in charge of education centers need to understand the significance of cultivating practical ability and develop firm leadership. Moreover, management levels must pay great attention to recruit and select administrative staff and well manage the process.

#### 4.5 *New themes in occupational area shall be reflected in the cultivation of specialized master.*

In current occupational area, not only “practical skills” and “practical technical knowledge” are the themes in discussion, so “general abilities”, “entrepreneur spirit” and “occupation loyalty” in a larger range are. All these new themes shall be timely reflected in school

curriculums and lead them to a more “occupational” direction. Furthermore, from the connotation transition in contemporary vocation, modern economics is in greater need for talents with common abilities. Common knowledge education is of vital importance. We cannot emphasize on teaching professional knowledge and neglect the higher requirements that current job market has on specialized master students. More and more employers are looking for graduates with strong adaptive capacity, good communication ability, and excellent contingency skills. Habermas once said in his work, “There are two totally different forms in cultivating people. One is through work or labor; and the other is through communication. However, both forms are equally important. One form cannot be transformed into the other.”<sup>[6]</sup>

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