

Analysis of the Problems and Causative Factors of the Mentoring Ability of Graduate Students in Higher Education

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Abstract: In recent years, the uneven quality of master's degree has attracted wide attention from all walks of life, and the postgraduate supervisor, as the primary responsible person of master's degree in education, has professional duties. The supervisors not only teach the students' professional knowledge and cultivate their talents, tastes and styles, but also directly influence the character cultivation and quality formation of graduate students. However, the problem of insufficient mentoring ability exists in postgraduate education today, and with the increasing number of postgraduates, the mentoring resources are obviously insufficient to ensure the quality of postgraduate education. In this paper, we study the current situation of supervisory ability of master's students in higher education and analyze the problems and causes of supervisory ability of master's students.

1. Introduction

Undergraduate training in higher education is not only a mission to nurture high-quality and innovative talents, but also an important guarantee to promote development from a human resource power to a talent power [1]. The university has made normative requirements for the establishment of cooperative relationship between teaching and supervision [2]. In master's training system, since master's education has been the highest level of education, the master's training system bears the burden of cultivating high quality human resources. The quality of postgraduate training will directly affect our future employment and survival from the perspective of enterprise efficiency, and the future competitiveness of our enterprises from the perspective of long-term national interests [3].

At present, postgraduate education method focuses on the development of "mentorship", in which the mentor is the main person responsible for the education and training of students, and the supervision, guidance and assistance of the mentor play a crucial role in improving the quality of postgraduate training [4]. The mentor is the most direct and important element related to the quality of students' innovation cultivation, in which the professional level, thinking method and creativity of the mentor will have a very important impact on the students' development [5]. The excellent

supervisory ability of graduate students is the key guarantee to cultivate students' innovative consciousness and high quality talents [6]. In order to improve students' innovative consciousness and talent cultivation quality, and to guarantee the continuous optimization and improvement of the supervisory ability of graduate students, it is necessary to ensure the timely detection of problems in the supervisory ability of graduate students, and to analyze and understand their causes for timely correction.

2. Full Text

The institution has promulgated the code of conduct for graduate student mentors, which makes specific requirements for the mentoring behavior of student mentors on eight levels, including doing a good job of education and leadership, conducting enrollment selection according to regulations, strengthening quality control of mentoring, regulating the scope of academic development, strictly abiding by academic professional ethics, maintaining the high reputation of student mentors, strictly regulating the system of fund utilization, and adhering to the bottom line of integrity and honesty. In strengthening the work of ideological cultivation, it highlights the two sides of the identity of student advisors, and requires student advisors to be teachers who guide both academic and life aspects of graduate students [7].

The quality of graduate students is the core and key of graduate training, which is related to the progress of a nation's spiritual civilization and the comprehensive national power [8]. The factors affecting students' innovation are mainly related to the level of supervisor training, research academic environment and students' initiative, while the level of supervisor guidance is not only a key factor affecting the cultivation of students' innovation, but also a decisive factor affecting the efficiency of supervising students [9]. The establishment of a scientific guidance system is an important way to improve the guidance level of instructors and a key link to improve the student guidance system, which can get rid of the "guidance inefficiency dilemma" and thus improve the efficiency of student talent cultivation. Therefore, the issue of mentoring ability is being investigated [10].

2.1. Problems of Mentoring Ability of Graduate Students in Universities

As the enrollment of graduate students has expanded in recent years, the problem of supervisor's ability to train will become more and more prominent. The problems of mentorship are mainly reflected in the following aspects.

2.1.1. Unclear Performance of Mentor Responsibilities

As a caring person who teaches and solves problems, the ancient Han Yu interpreted teachers as follows: "In ancient times, scholars must have teachers. The teacher is the one who teaches and solves problems". According to the national regulations, according to the specific reality of universities, each institution has explicit regulations on the profession of teachers, and these requirements, although the standards vary, cover almost all areas of professional teaching, thesis writing, practice, job search guidance, moral education, mental health, etc. for students [11]. Nevertheless, some supervisors may not be aware of their responsibilities in the process of supervising graduate students. This can be seen from the following two aspects.

(1) From the aspect of guidance content

At present, the one-to-many supervisory method still exists, and due to the limitation of supervisors' energy and time, the guidance for graduate students is often limited to the guidance of professional fields and thesis [12]. Due to the single content and form, it is impossible to realize the

comprehensive training of graduate students in the real sense. As a result, students who need the most guidance from teachers at the early stage of their master's studies are often not guided by their supervisors, which directly affects the formulation of academic goals of postgraduates and makes them spend their first year in confusion, and also directly affects the cultivation of talents in the beginning of the second and third year of their studies and thesis writing. Quality [13]. Some students think: Although they are about to carry out the first year of their master's degree, but in the two semesters of the review process is not at all on the instructor assigned professional courses, and usually meet with the instructors are not professional matters, including the reimbursement of travel expenses, mail courier and other such personal matters. Some students said that they did not want to work only for graduation, but they expected to communicate and study with their supervisors about their studies, and simply accepting their supervisors' opinions and academic ideas prevented them from discovering and thinking about problems [14].

(2) In terms of frequency of guidance

The mentoring system differs from that of other developed countries in that it places special emphasis on evaluating the progress and scientific achievements of mentors [15]. Mentors spend most of their energy on writing research articles, completing projects, and evaluating awards. In addition, some supervisors have to take on administrative duties, and the heavy workload and non-professional work makes teachers spend less time teaching and raising students. However, for those students who are about to graduate, the most intensive contact with their teachers is during the period of thesis revision in the past three years of their academic history [16]. As teachers are usually busy with administrative matters, the frequency of meeting with students is also very small, and each contact time is not more than a week. Such a short period of time does not have a positive impact on one's studies.

2.1.2. Low Specialization of Dual Status Mentors

"Dual status" instructors refer to those who serve as instructors of both academic master's students and professional master's students [17]. The theory of teacher specialization states that teachers, as professionals, must have knowledge and expertise, while mentors of professional master's students must have the knowledge and expertise to mentor professional master's students [18]. Therefore, the training program of professional master's students is different from that of academic master's students in that academic master's students focus on theory, while professional master's students focus on practical and technical application. However, in terms of tutoring methods, tutoring contents and tutoring characteristics, although they are more specialized in academic master's degree, their tutoring for professional master's degree students is more at the primary stage of discussing while tutoring [19].

In an empirical study conducted by Dongqin Mei at University of N, the instructors of specialized masters were unable to guide the students' thesis or were not guided in the right direction because they did not have a good understanding of the academic direction and teaching content of specialized masters. In addition, because the instructors have to guide the academic masters, the time and energy allocated to the tutorials of the specialized masters students are also prone to the situation that they give less time or less frequently to the specialized masters students [20]. The lack of effective communication between instructors and graduate students, the lack of professional knowledge guidance and thesis writing for graduate students, and the inability to fulfill the duties of specialized master's tutors are all manifestations of the lack of professionalism. Therefore, the level of specialization of the tutors with "dual identity" is not high in the cultivation of students of the same major, and the lack of specialization of the students due to the lack of professionalism of the teachers themselves is also the main reason to limit the level of cultivation of graduate students.

2.1.3. Instructional Transfer Capability

The learning of professional knowledge is not only the basis for conducting scientific research, but also the basic requirement for graduate students. It is the most basic duty of a tutor to guide the professional knowledge of the graduate students, and in order to play his or her role well, the tutor has to keep exploring and learning himself or herself [21]. In practice, we will find that the teaching materials are old, less communication with students, stereotypical narration of textbook content, that is to say, the current content of our courses is not enough to explore research, discover the frontier, no innovation, no practical connection, lagging far behind the pace of science and technology and the times, reflecting some new theories and science and technology within the scope of the profession, especially in some specialized areas of the hot spots, key and still existing social In particular, some of the new theories and science and technology in the field of specialization, especially the hot spots, key points and still existing social debates in some specialized fields, the exploration and development of marginal disciplines and technologies, etc., are not reflected in the course content of our teachers in time [22]. In the aspect of teaching, the teaching instruction for graduate students is undergraduate, so that the differences with students are not taken into account, and there is no positive communication between instructors and students, so that students are not fully motivated to participate in the course, and thus the training of comprehensive quality education for graduate students is not achieved [23].

Therefore, instructors, as knowledge transmitters, should always pay attention to the scientific frontier dynamics, new knowledge and other relevant achievements to be incorporated into the learning content in a timely manner, and convey relevant information to graduate students through discussions and daily interactions, in order to continuously enrich their professional knowledge, broaden their horizons, and stimulate their interest in research, analysis and problem solving. We will continue to enrich their professional knowledge, broaden their horizons, stimulate their interest in research, analysis and problem solving, and truly "broaden their foundation and inspire their thinking" in the transmission of knowledge [24].

2.1.4. Lack of Comprehensive Quality Cultivation of Graduate Students

In today's information condition, new information of all kinds is hitting colleges and universities like a tidal wave, and it has a great influence on the concept and behavior of students in colleges and universities [25]. The development of academic thinking and ability is the most important expression of students' overall quality, and it is also the biggest difference between graduate students and undergraduates.

Xue Tianxiang points out that the guidance of supervisors for undergraduates focuses on curriculum, academic teaching. In the master's education stage, supervisors mainly focus on the guidance of undergraduates in course research, thesis writing and professional skills [26]. In the master's education, the supervisor's responsibility has not been sufficiently paid attention to. It is the responsibility of every graduate student advisor to provide comprehensive training for graduate students. The supervisor should stand at the forefront of science, grasp the pulse of the times, and devote himself to improving the comprehensive quality of master students from all aspects, so that this group of talents can really contribute to the development of science and technology[27].

2.1.5. Lack of Innovation in Guidance

At present, postgraduate education is centered on the cultivation of innovation ability, and postgraduates engage in dissertation research or other scientific research activities, which is ultimately to use scientific methods to obtain new discoveries and new results[28]. The ability of innovation in guidance is the ability of the supervisor to continuously innovate in all aspects of

student guidance in the process of guidance. As most of the universities choose the "single tutor system" with strong focus on postgraduate education, the tutors teach students one-on-one with relatively clear authority and responsibility, thus creating a stable teaching environment, which has a considerable effect of guaranteeing the quality of talent cultivation and teaching for master's degree[29].

However, due to the inherent knowledge structure of the supervisor, the effect of supervision of graduate students is seriously affected to some extent, for example, other supervisors tend to rarely help and guide the graduate students in their daily study and research, which is not conducive to research innovation[30]. Therefore, it is not easy to carry out scientific research innovation, students should not only have the correct scientific research direction and planning, but also have a solid professional knowledge base and strong confidence in innovation. This requires graduate students to be familiar with research methods in specific research fields, to master relevant research techniques and tools, and to apply these techniques and methods to solve scientific problems[31].

2.2. Causes of the Problem

The reasons for the problems of supervisory ability of master's degree students are many and can be analyzed from the supervisor's personal, the relationship between the supervisor and the graduate student, and the management regulations of the university itself.

2.2.1. Instructors Have a Lot to Do

The reduction of the tutoring time of the graduate students and their frequent engagement in things that are not related to their specialties will interfere with the students' planned study time, which will change the interpersonal relationship between the teacher and the students and thus reduce the effectiveness of the education of the graduate students[32]. As a teacher, you should help and guide students properly, and not treat them as unpaid laborers for their own scientific research. According to the experts, the essential feature of student training is the development of research quality and innovation, and teachers should always be oriented to academic research, give full play to students' creativity, and pay attention to their long-term development in the process of guidance[33].

Since some supervisors or graduate students in graduate education do not view the relationship between them correctly, there is an undesirable tendency to regard the relationship between supervisors and graduate students as a kind of interaction for the completion of scientific research or dissertation, which is a by-product attached to teaching or scientific research, while ignoring the educational value of the teacher-student relationship between supervisors and graduate students for the cultivation and nurturing of individual spirit[34].

In some universities, the tutors have administrative duties in the faculty, so the tutors' time is taken up by administrative duties, resulting in less tutoring time[35]. Or teachers may be busy with other things and neglect the guidance of students, from which we can find that teachers do not pay much attention to the guidance of students and waste most of their time and energy in other aspects of work. Due to the fact that teachers are busy with many things, they do not pay much attention to the guidance of students, which leads to the ineffective guidance of graduate education and affects their ability to provide guidance[36].

2.2.2. Instructors' Lack of Personal Attention to Students

The work scope of mentors mainly includes teaching, research work and student guidance, and since mentors mainly focus on research work and teaching tasks, they have relatively little time to provide guidance to graduate students[37]. Because of the reduced time, it is inevitable that

students' communication in life and emotions will be neglected, and it is often difficult to grasp the two roles of educator and servant in the process of practicing as a student, and role-playing conflicts will occur[38].

At present, the tutors' guidance to graduate students is mainly in the following four aspects: firstly, the guidance of course study, secondly, the guidance of project or experiment, thirdly, the guidance of thesis selection or writing, and fourthly, the guidance of students' personal life[39]. Through the survey, it is found that, in these four aspects, the tutors often guide the graduate students in "research projects or experimental progress", followed by "thesis selection or writing progress" and "problems encountered in course study". "The least frequent is "problems in personal life or career planning". In general, the tutors are more concerned with the learning tasks than the students themselves.

2.2.3. Rapid Development of Graduate Education

In the past decade, graduate education has shown a breakthrough growth in scale, the scale of postgraduate education has shown a breakthrough growth. Postgraduate education has closely served the strategic deployment of the 'Four Orientations', continuously improved the structure of disciplines and specialties and the structure of talent training, and delivered more than 600,000 doctors and 6.5 million masters to the main battlefield of economic and social development by more than 800 postgraduate training units nationwide, providing strong talent support for the development.

This is mainly due to the fact that, for one thing, modern economic society has a strong demand for highly skilled personnel. Today's society is an information and technology-based economy, and the demand for talents is higher, and more high-level talents are also needed. At present, there is a shortage of high-level talents, and there is a great demand for current society[40]. Secondly, to solve the educational needs of individuals, thus driving economic and social development. For higher education, in the past, many students gave up the opportunity to access higher level education at the beginning because of the insufficient supply[41]. With the increasing demand for higher levels of education, the implementation of a master's degree expansion policy is catering to a growing number of people. In an era of cognitive certainty about the future, personal investment in education is the largest and ideally the most rewarding investment in terms of duration and willingness. Thirdly, it will increase the export of graduate students from universities and reduce the burden of employment. In the mass enrollment of master's degree, a large number of undergraduates were enrolled, after which a large number of undergraduates were laid off upon graduation, and it is urgent to find various ways to solve the problem of layoffs of those with high education[42]. The expansion of undergraduates has created an outlet for them. Dr. Yang Dongping explained that the main reason for the expansion of undergraduates is the expansion of undergraduates in colleges and universities. The number and magnitude of undergraduate enrollment expansion is rare. Since students need to find a way out, they need to use undergraduates to divert. Therefore, the expansion of graduate students is only a passive phenomenon to accommodate the emergence of[43]. Fourth, the group of "graduate school" continues to grow.

2.2.4. Inadequate Mentorship Evaluation Mechanism

Another difference between mentors and other teachers is the mentoring method, which is basically a "one-way communication" between the mentor and the student, similar to the mentor-apprentice teaching model[44]. The mentoring method is usually through regular or irregular meetings, phone calls and letters, and other network communications, but not formal and regular lectures. Therefore, the research students should be the starting point and the destination of

the evaluation of the supervisor, and the situation and quality of the postgraduate supervision should be a major component of the evaluation of the supervisor[45]. However, at present, the evaluation of graduate student supervisors in many institutions is "research-oriented", and the supervisors' scientific research strength and research results are highly demanded, while the students' contribution to and effectiveness of the supervisors' graduate student guidance are not paid attention to, so the supervisors' guidance status has a very low proportion in the evaluation index of graduate student supervisors[46].

Each institution has a corresponding assessment of master's supervisors, but the current assessment is still unsound. For example, the evaluation system focuses on the evaluation of the professional standard of tutors but ignores the evaluation of their professional ethics, the evaluation of the academic standard of tutors but ignores the evaluation of their education level, the evaluation of the personal evaluation of tutors but ignores the evaluation of the quality of postgraduate education and teaching, the implementation of the disciplinary mechanism of tutors but ignores the establishment and implementation of the incentive mechanism[47]. As a result, the phenomenon of postgraduate supervisors being too eager to achieve success in the process of supervising postgraduates is created, which has an impact on the quality of postgraduate training.

The evaluation system of graduate students in developed countries such as Europe and the United States has the advantages of science, system and diversity, and has formed a multi-level evaluation framework including student evaluation, industry evaluation and faculty evaluation. The formation of a measurable supervisor-led innovation assessment system with multi-dimensional and diversified subject evaluation, oriented to innovation in talent cultivation, will provide an important guarantee for building a high-quality professorial team and establishing an innovative talent cultivation system[48].

2.2.5. Mentoring Styles Received by Graduate Students

At present, in the teaching system of postgraduate students, there are three methods of supervising postgraduate students, such as "only one supervisor", "two supervisors inside and outside the university", and "group guidance by supervisors"[49]. For example, our university adopts a full-time cultivation method for doctoral students majoring in architectural design and civil engineering, in order to realize a two-way mentoring system inside and outside the university. The supervising teachers of the university are mainly composed of engineering professors with the above-mentioned positions of associate senior level appointed by the degree committee of Liaoning University of Technology, and the supervising professors of the professional degree committee of the university are also employed. It is required that the supervisors of graduate students both inside and outside the university should be senior scientific and technical personnel of construction companies or architectural design units, and they should have the professional and technical titles of associate senior or associate senior in the discipline field. To play the role of mentor of graduate students inside and outside the university, especially to improve the practical ability and innovation of graduate students[50].

The different methods of supervising graduate students affect their level of understanding, their professional vision and their comprehensive ability. In postgraduate training and education system, although the talent cultivation mechanism of "supervisor in charge, supplemented by a supervisory group" is adopted, in the realistic talent cultivation process, many master's students are under the responsibility of one supervisor for three years[51]. Although this guidance method has its advantages, it is not conducive to the long-term development of students' professional and academic abilities for some master students in science and technology[52]. Since the demand for complex is increasing, and there are more and more courses with strong interdisciplinarity in the process of postgraduate education, the knowledge and energy of one professor are very limited, therefore,

while implementing the system of professorial responsibility, professors with different professional backgrounds, knowledge structures and research tendencies can jointly supervise postgraduate students. In this way, students will be able to receive higher education in multiple specialties and improve the breadth, depth, and academic standards of their expertise [53-58].

3. Conclusions

With the vigorous development of postgraduate higher education, as well as the strategic economic development and social progress, the demand for quality of postgraduate talent cultivation is also increasing, which enhances the development awareness and leadership ability of master's supervisors and further promotes the development of postgraduate higher education, which is an important center of the current reform and construction of postgraduate higher education.

The following problems exist in the supervisory ability of master's degree students: (1) The responsibility of the supervisor of graduate students is not clear, and the supervisor pays little attention to the students in terms of the content and frequency of supervision, which affects the research practice of students; (2) The "dual identity" of graduate student supervisors in colleges and universities will have a significant impact on the teaching style and quality of graduate students. (3) The single professorship of graduate student supervisors is not conducive to the acquisition of knowledge and the overall improvement of students' professional skills, and cannot take into account the differences among each student. (4) The comprehensive quality of graduate students will lack the original attention in the process of cultivation, and academic thinking and innovation as an important embodiment of comprehensive quality will be neglected. (5) Because of the different knowledge structure of each graduate supervisor, following their own academic research in research guidance is not conducive to the innovation of graduate students in academic aspects.

This report will focus on the causes of the problems of mentoring from three levels: (1) As the enrollment of graduate students continues to expand, the expansion of student size will cause further weakening of the mentoring function of graduate students. The current situation of "research-oriented" mentoring of students in schools makes the mentors lack the financial energy to support the training, and the recognition of student training is getting lower and lower. (2) In the actual research, there is a strong administrative atmosphere, and student supervisors and schools are neglected in the research, unable to lead the development of research standards and assessment. The school's supervisor evaluation is based on the supervisor's own professional level and research results. The assessment is based on the supervisor's own professional level and research results, and does not focus on the teacher's training results. With the expansion of postgraduate students, institutions do not want to stop recruiting teachers because their training results do not meet the requirements, and the teachers' training results basically do not meet the requirements, which makes the evaluation formal. (3) At the level of university administration department. All the policy documents issued by the Ministry of Education related to the evaluation of instructors believe that the evaluation results of university teachers can only be used as a basis for motivating or punishing teachers, and expect to enhance the motivation of instructors' research with the help of incentives or discipline to the outside world, while ignoring the internal motivation of teachers.

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