Reform of Practical Teaching and Cultivation of Innovative Talents in Colleges and Universities

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Abstract: With the progress of science and technology and the development of economy in our country, the society has a higher demand for talents, so the traditional mode of higher education cannot meet the needs of the society, and needs to be reformed accordingly. At present, colleges and universities have carried out practical teaching reform and innovative personnel training, aiming to improve the comprehensive ability of graduates and better meet the post requirements. Based on this, this paper starts with the significance of reform and innovation in colleges and universities, first analyzes the measures of practical teaching reform in colleges and universities, and then discusses the measures of cultivating innovative talents in colleges and universities, hoping to provide some reference for the improvement of the college education system.

1. The significance of reform and innovation in practical teaching in Colleges and Universities

Colleges and universities need to provide services for local economic construction, so their training of talents should be based on specialized talents, focusing on the direction of economic construction in this province, and the training of high-skilled talents should be based on local, forming independent characteristics. Therefore, the reform of practice teaching is particularly important, because the traditional practice teaching mode seldom combines with regional characteristics, the mode of the whole country is similar, and has no pertinence. At present, private enterprises in various regions need professional skilled personnel, so it is of practical significance to carry out teaching practice reform and cultivate innovative talents. Especially after the financial crisis, the talents needed by enterprises need not only solid theory, but also independent innovation ability and rich practical experience. To carry out long-term cooperation, it is of great significance for universities to develop innovative talents training and reform practice.

In recent years, China's regional economic development is unbalanced, there are more obvious differences in wages and salaries, such as the coastal areas of talent is too concentrated, resulting in difficulties in employment of local graduates, and inland areas, although there is a large demand for talent, but the outstanding graduates of key universities will not be. It is the first choice. In addition, although some graduates have a relatively solid theoretical basis, but their own practical ability is weak, the speed of starting work is slow, enterprise personnel training needs a large amount of investment in the early stage, which has caused irreconcilable contradictions between college graduates and enterprises. Therefore, in recent years, some local enterprises have begun to adjust the talent selection strategy, the practical ability and innovative consciousness of talent as the first choice. Based on this, colleges and universities should better meet the market demand, the use of practical teaching to cultivate innovative comprehensive talents, so as to meet the needs of society and improve the employment rate of graduates.
2. Measures for practical teaching reform in Colleges and Universities

2.1 Build an independent practice link

The traditional practice teaching mostly relies on the curriculum. To some extent, it takes practice as the supplement of the curriculum. Although it can combine theory with practice, it weakens the importance of practice to a certain extent. We should attach importance to this problem in the reform of practical teaching. First of all, we should separate the practical courses from each other and carry out the corresponding combination with this emphasis. Especially for the teaching of science and engineering, practice is very important for the whole teaching, so we can use the practice platform and comprehensive application links in series teaching content, so as to play a connecting role and improve students’ application ability. This measure can also improve teacher-student's cognition of practical teaching and optimize the quality of practical teaching.

To some extent, theory originates from practice and should also be applied to practice, so in the process of teaching in Colleges and universities, theory and practice are closely related. However, due to the drawbacks of traditional teaching, practice teaching has long been neglected by people, so colleges and universities are more to cultivate research-oriented talents, in the application of professional slightly inadequate. Based on this problem, it is necessary to optimize the allocation of practical teaching when carrying out practical teaching reform. To build an independent practical link is not to divorce practice from theory, but to let students find problems in practice, then think about problems, and finally apply the conclusions to practice. Through this process, students’ understanding of theoretical knowledge will be further deepened, and their practical ability has also been significantly improved.

2.2 Build a practice base

It is very important to establish the practice base in Colleges and universities, because the practice base is the main platform for students to practice learning, and it is also an important way for students to apply the theoretical knowledge they have learned to practice. At present, the practice base is mainly divided into two kinds, one is in-school training base, the other is out-of-school training base, the mode is mainly through School-enterprise cooperation. Through the establishment of practice bases, we can make practice teaching more flexible. Because through practical teaching, schools can understand the actual needs of society, students can also test their own ability through practice, and carry out more optimized career planning. Of course, the establishment of the practice base needs a large investment, which requires the school to make the necessary trade-offs, which can to a certain extent seek the help of the government and enterprises, through innovative cooperation model to obtain early-stage funds.

The practice base can not be formalistic, so it should be reflected in the teacher allocation and examination. Although many colleges and universities have perfect training bases, but the effect is not good, the essential reason is that students can not learn the knowledge from the practice base. Therefore, in the practice base of learning, to assess the learning effect of students, we can score from the learning ability, hands-on ability and teamwork and other aspects to improve the understanding of teachers and students. Especially for the off-campus practice base, we should introduce the enterprise management model to a certain extent, so that students can adapt to the working environment in advance, which is also conducive to optimizing the comprehensive quality of students and improving the employment rate of students.

2.3 Create a "double quality" teacher team

Practical teaching also needs teachers to guide students, which puts forward higher requirements for the teachers’ team, because practical teaching teachers not only need to have a theoretical basis, but also their own practical experience is extremely rich, so as to summarize its characteristics and defects according to students' practical ability, and then provide specialty for students’ progress. Professional guidance. To solve this problem, colleges and universities can employ skilled experts as practical learning instructors in society. Through cooperation and exchanges between teachers, they
can enhance the ability of the whole team. At the same time, they can know the needs of employing enterprises through experts, and speed up the construction of teachers’ team.

The optimization of teachers’ team cannot be accomplished overnight. On the one hand, schools introduce professional teachers from society for guidance, on the other hand, teachers in school should learn and communicate regularly. This is the key to improve the overall quality of teachers’ team. At present, our colleges and universities have done little in this respect, mainly reflected in less communication between teachers and society, so the real double-qualified teachers are very scarce, unable to provide students with the most effective education.

3. Measures for training innovative talents in Colleges and Universities

3.1 Optimize personnel training environment

China's economic strength is constantly improving, so the society has put forward higher requirements for the quality of talent, students need to have the ability to innovate independently, can be a perfect combination of theory and practice. Therefore, in the process of training innovative talents, we should change the mode, focus on optimizing students’ practical ability, and encourage students to carry out independent innovation according to the people-oriented policy. In the arrangement of courses, it is necessary to coordinate effectively and combine theory with practice perfectly. Especially in the personnel training program, we should pay more attention to the training of Vocational skills, through modular teaching methods to students at different stages of ability training, only in this way can students provide a loose teaching environment, so that students’ ability to maximize the development. Teaching assessment should also be innovative. We should no longer evaluate the students’ learning quality with simple scores, but also introduce a comprehensive evaluation model to comprehensively evaluate the students' various abilities. This measure can also provide students with a better platform to show themselves, for the promotion of students’ comprehensive literacy has a positive significance.

3.2 Exploration of innovative teaching methods

Teaching methods are directly related to the quality of teaching. Under the premise of the new curriculum reform, the traditional education methods no longer meet the current actual needs, so we must carry out targeted reform. Combining with the actual situation of our country's colleges and universities, the assignment of teaching tasks must be reasonable, and the teaching methods should be optimized and innovated. In the teaching process, we can enrich the teaching mode by discussing teaching, self-learning teaching, encouraging teaching and heuristic teaching, and establish a teaching system with students as the main body.

College students already have a preliminary knowledge reserve, can independently explore problems and thinking solutions, so in the teaching process should be more student-oriented, let students learn independently, so as to optimize their innovative ability and cultivate better comprehensive quality. Nowadays, many colleges and universities in China have explored innovative teaching methods. Especially for students of science and engineering, they encourage students to find problems in practice, and then to think and solve problems independently. Teachers are more likely to guide students and assist students. This model can be very suitable for the current society. Talents are also popular among enterprises.

3.3 Strengthen the combination of research and teaching

In the process of College teaching, teachers’ research projects can be brought into the classroom, so that students and teachers can explore and analyze problems together, which can effectively improve students' awareness of independent innovation, but also conducive to enhancing students’ enthusiasm for classroom learning. For scientific research, students can sign up for teachers’ projects independently and form a learning model in which teachers lead students to make progress together. In the process of teaching in Colleges and universities, the teaching time will be limited by the
classroom, and the use of instruments and equipment is also very limited. Therefore, schools can set up scientific and technological innovation projects, open all kinds of equipment and instruments, equip professional instructors, so that students can improve their hands-on ability and be more active in continuous practice. Think about problems and adopt innovative ways to solve them. This can not only enrich the extracurricular life effectively, but also cultivate students' pragmatic ability.

For the combination of scientific research and teaching, school-enterprise cooperation is a very effective way, which can be used as a bridge between enterprises and colleges, but also can be better scientific research results into practical applications. At present, many colleges and universities have carried out the mode of school-enterprise cooperation, which has played a positive role in promoting the actual effect. In this way, the employment rate of graduates has been significantly improved, and students' enthusiasm for learning has been greatly mobilized, which has played a positive role in optimizing the entire teaching system.

3.4 Change the way of assessment

Under the traditional mode of education, college students are assessed by scores as an important criterion. Obviously, this kind of assessment method is no longer suitable for the training of innovative talents and the reform of practical teaching. Therefore, it is necessary to optimize the assessment method and evaluate the students’ abilities from many aspects. Especially for practical teaching, it involves many aspects, such as operating instruments, hands-on ability, thinking ability and teamwork. Therefore, the assessment content must be diversified, students can be encouraged according to the score system, students’ daily performance can be valued, students should be encouraged to carry out scientific and technological innovation and as an additional sub-item of the assessment, which will play a role in promoting the teaching effect of students.

Innovative talent training not only needs to break the traditional education model, but also needs to be combined with the current social needs of innovation, so as to find problems and solve problems in continuous practice, and ultimately realize the optimization of talent training. The reform of the education system in Colleges and universities in China has achieved initial results. The mode of practical teaching and personnel training has set up a preliminary system. In the follow-up development, we need to continue to improve, in order to provide society with more quality personnel.

4. Conclusion

Education in Colleges and universities can provide social support for talents, which is the motive force for sustainable development of society. With China's economic transformation and social structural transformation, the quality of talent requirements is higher, so colleges and universities must break the traditional mode of education, in order to meet the needs of society. At present, the reform of education system in Colleges and universities mainly focuses on the reform of practice teaching and the cultivation of innovative talents. Therefore, this paper puts forward three measures in the reform of practice teaching, namely, building independent practice links, building practice bases and building a team of double-qualified teachers. It also puts forward the optimization of the cultivation environment for innovative talents in Colleges and universities. It is hoped that these measures will provide some suggestions for the optimization of the personnel training system in Chinese universities.

References


