

# Construction and Practice of High-level Application-oriented Talents Training Teaching System in the New Era

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**Abstract:** The application-oriented talent training system should build a big framework based on the purpose of talent training, and fill in the details according to the actual situation and specific needs of the school. In today's era, application-oriented talents training is a new requirement of the society for colleges and universities. Application-oriented talents should not only have certain strength in professional skills and practice, but also need noble morality as a base. Only in this way can they be truly beneficial to national construction. This paper discusses how to construct the teaching system of application-oriented personnel training and puts forward some practical strategies.

**Keywords:** New era; Application-oriented talents; Teaching system

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Teaching practice is the key link of application-oriented undergraduate education, which determines the quality level of application-oriented talents. <sup>[1]</sup> Higher education has been developing towards a healthy and sustainable direction and has made corresponding achievements, but there is still a large room for improvement in application-oriented personnel training. Application-oriented talents not only contain knowledge, skills and practical ability, but also have noble morality and professional dedication, so as to make greater contributions to the construction of the country and society and create greater value. The development of higher education level is inseparable from the establishment of teaching system. Nowadays, the country and society are desperate for applied talents in the new era, but college education has not met the needs of talent training. Therefore, colleges and universities should establish a new teaching system based on applied talents education, or carry out innovation and reform of the existing teaching system.

## 1. Current situation and problems of application-oriented talents training in colleges and universities

### 1.1 Teaching status

The cultivation of application-oriented talents in colleges and universities requires the establishment of an open, independent and innovative practice platform and the construction of a hierarchical and whole-process practice teaching system. At present, many colleges and universities have made construction and innovation in related aspects. Traditional colleges and universities teaching process, as a result of the teaching idea obsolete, and a lack of relevant facilities so in terms of the practice teaching does not reach the designated position, nowadays, many universities have already started to entrepreneurship lab, virtual laboratory, professional lab experimental sites such as construction, in order to strengthen the practice teaching of colleges and universities to provide the perfect facilities, improve the students' practical learning opportunities. The traditional university practice teaching form and content are not rich enough, in order to improve this situation, the university strengthened the adjustment and improvement of laboratory practice teaching, in order to carry out better open, design, comprehensive practice teaching, strengthen students' innovative spirit and practice ability. In addition, colleges and universities have made greater efforts in practice base construction and school-enterprise cooperation.

### 1.2 Problems existing in the construction of teaching system for application-oriented talents training in colleges and universities

Admittedly, colleges and universities have made some achievements in the construction of teaching system for application-oriented talent cultivation in recent years, but there is still a certain distance from our requirements for talent cultivation in colleges and universities. There are still some problems in the construction of specific system and practical teaching practice:

(1) due to reference the past in the aspect of teaching mode in colleges and universities is the education pattern of the former Soviet union, the education mode has been unable to meet the needs of modern society construction in our country, although in recent years, our university has been in the colleges and universities as well as the practical teaching system construction and constantly

improve, but so far, still not fully meet the demand of college teaching.

(2) the practice teaching for the influence of applied talents training is huge, only will be implemented in practice teaching, the students can gain practical ability raise, in the process of practice teaching, universities should set up specialized management institutions, now the basic all to set up specialized management institutions, and equipped with professional management, However, there are still problems in the implementation of management, and how to strengthen supervision is an important problem to be solved.

(3) applied talents cultivation is inseparable from the practice teaching, is also inseparable from the theoretical teaching, in order to achieve the high quality talent output target, to establish the perfect education system, teaching system in colleges and universities now ubiquitous imperfect situation, or too theoretical teaching, or improvements in practice and teaching excessively, lead to irrational proportion of practice teaching is too high, This problem hinders the development of applied talent training.

To sum up, college of applied talent training of establishment and improvement of the teaching system is very important for the competitive edge of the school, so far, still exist in the construction of practical teaching system in colleges and universities management system is imperfect, lack of management institution, teachers need to be strengthened, the practice teaching content too little proportion, the practice place is relatively lack, and so on, all need to be settled as soon as possible.

## **2. How to complete the construction and practice of practical teaching system**

### **2.1 Optimize experimental teaching in class**

In practical teaching in colleges and universities classroom teaching experiment is a very important part of, can organize students autonomous experimental operation, to improve the students' practical operating experience and ability, then the students' innovative spirit and experiment skills, thinking ability can be strengthened in the process of classroom experiment, can effectively promote the improvement of teaching quality as a whole. There are also some problems in traditional in-class experimental teaching. For example, teachers usually arrange corresponding experimental teaching according to the course content, but ignore the relationship between experimental teaching and subject system planning, which leads to the limitation of improving students' problem-solving ability. In addition, there is a single form of experimental teaching content and disjointed with theoretical teaching.

In order to improving the quality of practice teaching in colleges and universities, colleges and universities should further strengthen the construction of practice teaching, teachers should be in the teaching grope and practice, and actively learn from the advanced experience of other schools or teachers, make the practice teaching and theories teaching links between more closely, for example in the teaching can take advantage of the "experiment module + experiment platform" concept of system building. According to this concept, each laboratory is an independent experimental platform, and teachers are encouraged to divide experimental teaching into several organic modules according to the actual content of experimental teaching. Such experimental teaching can meet the experimental operation and learning needs of students of different levels and majors. In the process of module division, teachers should adhere to the systematic method of division. For example, the experimental module should include both the teaching part of basic experimental skills and the part of comprehensive experimental skills, so as to achieve the organic connection between the part and the whole. In the process of module setting, we should not only meet the step-by-step implementation of single module, but also meet the organic adequacy of multiple modules. In a word, we should pay attention to the system of experimental teaching in module setting. Finally, the experimental platform built by colleges and universities should be able to carry out experiments of different module contents, which can be carried out independently as an experimental platform, or closely linked with other experimental platforms to carry out larger scale and more complete joint experiments.

### **2.2 Strengthen the components of extracurricular practice system**

In order to truly strengthen students' practical ability and cultivate more application-oriented talents, we should not only strengthen the construction of experimental teaching system in class, but also strengthen the construction and improvement of extracurricular practice system. Extra-curricular experimental teaching is the supplement and extension of in-class experimental teaching. Only when in-class experiment and extra-curricular experimental teaching advance harmoniously, can the teaching effect be better. Extra-curricular practical teaching is of great help to enhance the ability of college students to adapt to social posts. The main content of the system is to train students' ability to solve problems, and to complete the standard between students' ability and the requirements of front-line posts in the society, which is a strong support for the cultivation of practical talents in colleges and universities.

In class in the process of experiment teaching, the teachers will generally detailed analytical experiment principle for students, for students to prepare in advance the experimental equipment, set the experimental process, and personally led the student to carry on the experiment, the students in the teaching process of experiment skill has improved, but for the their thinking and problem solving skills to help more limited, Therefore, extra-curricular experimental teaching is needed as an effective way of supplementary experimental teaching to help students improve their application ability. In extra-curricular experimental teaching, teachers will adopt an open attitude to experimental teaching. In the process of experimental teaching, teachers will determine the experimental direction for students, but will not make too much and detailed guidance on experimental methods and procedures. In the course of extra-curricular experimental teaching, students have the opportunity to independently design experimental projects, and teachers do not participate in the design process too much. In this process, teachers only play the role of guidance and approval. After the project design is reviewed, students can independently design the scheme, methods and steps, and teachers will give appropriate guidance and approval to students' scheme. After the approval, students can start their own experiments. Relative to the class in the experimental teaching system, the extracurricular practice teaching system is not only a breakthrough is also a kind of supplement, extracurricular practice teaching system of component implements the in-class experiment teaching in colleges and universities to outside the extension of the experimental teaching, to provide the students with the perfect practical teaching, improve practice teaching effectiveness, promote students application ability, Enhance the value of students' professional ability and enterprise work adaptability.

The main value of applied talents is reflected in their rich theoretical knowledge as a foundation, and strong practical ability to

solve practical problems and create industrial value. Such talents can only be exported through systematic education. In order to build a scientific and reasonable curriculum system, we need to combine theoretical knowledge, in-class experiments and extra-curricular experiments organically. Teachers should establish a teaching system that combines theory with in-class experiments and extends in-class experiments to extra-curricular experiments. Theoretical knowledge is in-class experiment theory instruction, in-class experiment is validation of the theory of knowledge, and extracurricular experiment for in-class experiment is an extension of the extracurricular experiment besides contain professional test, also including industry application test, the experiment can improve students' thinking ability, practice ability, problem-solving ability and professional ability of value creation, for students to graduate office.

### **2.3 Give full play to the laboratory teaching function**

Colleges and universities should properly increase investment in the construction of practical teaching system according to the actual situation. In the construction of the practical teaching system, it is necessary to build an appropriate amount of laboratories, purchase relevant instruments and equipment, and maintain and manage the laboratories, etc., and each experimental teaching will produce new experimental costs, which need the support of funds. College students' innovation and entrepreneurship projects, discipline competitions and laboratory opening all need a large amount of financial support. The government and schools should pay attention to this and give certain financial support to ensure the smooth completion of the practical teaching system.

Laboratory in has the important role in the applied talent cultivation system, in order to make the laboratory can play more features in the teaching system, head of the laboratory of schools and teachers, and teachers shall formulate detailed regulations regarding the use of the laboratory, and make clear a regulation after professor in a certain part of the theoretical knowledge in a timely manner to carry out related experimental teaching. Teachers should complete scientific experiments, technology development and production experiments according to the actual needs. In the process of laboratory construction, colleges and universities should focus on the specialty characteristics and needs of the school, and carry out joint experiments with other institutions, in order to give full play to the greater functions of the school laboratory.

In order to further strengthen the practical function of the laboratory, the university should do a good job in the productivity and relevance of the laboratory, and complete the docking with the actual production process. Only do a good job in the first laboratory construction system design, in order to rely on the system for the actual construction of the laboratory, the implementation of new blank, transformation of the existing, comprehensive development; For the school to carry out scientific research, experimental teaching, technology development, production experiments and other work to provide a strong backing and strong support. In the construction of the teaching system of talent cultivation, first of all, the function of the laboratory should be able to meet the experimental teaching needs of the school, and secondly, the experimental cooperation with other schools and other institutions should be included in the system, which requires some transformation and improvement of the laboratory, so that it can meet the cooperation conditions with other laboratories. Generally speaking, the school laboratory should be able to connect with the laboratories of other colleges and relevant enterprises organically. Therefore, the school needs to strengthen communication with partners, learn from the strengths of others, and make the laboratory function construction more advanced and perfect.

In the laboratory construction system equipment equipment work occupies an important position, is the main component, colleges and universities can according to the professional needs of the school and laboratory functional needs to buy equipment and distribution of scientific demonstration, in order to achieve the best play of the test function through equipment construction and improvement. In the process of instrument and equipment purchase and distribution should be based on the principle of teaching as the main, scientific research as the auxiliary, adhere to the principle of urgent first and slow, step by step implementation, but also need the docking between laboratory equipment and enterprise equipment.

### **2.4 Improve safeguards**

Practical teaching is an important link in the construction of economic management specialty in colleges and universities, which is related to the goal and quality of talent training.<sup>[2]</sup> In general colleges and universities, the construction of practical teaching system is mainly responsible by the leadership group centered on the president. The president is responsible for teaching, the vice president is responsible for knowing the work, the Office of Academic Affairs is responsible for organizing the work, and the implementation work is generally carried out by the secondary colleges. The construction management group composed of the above departments should pay attention to the construction of practical teaching system so as to effectively promote the construction work. To ensure the successful completion of the practice teaching system, construction management team shall first set up perfect feedback mechanism, such as establishment of college, the school practical teaching system construction supervision team, the monitoring group members shall not stand in the highlands to the conductor, but should go deep into the first-line teaching work, teaching listening, teaching guide and supervise the work, We will comprehensively understand the construction of practical teaching system in colleges and universities.

In addition, colleges and universities can also carry out supervision teaching evaluation, peer teaching evaluation, student teaching evaluation and other activities, feedback from different levels of the current practice teaching situation of colleges and universities, check the shortcomings of the existing teaching system from multidimensional, and targeted improvement and perfection; It is an effective way to promote the process of relevant work to formulate and improve the assessment standards for the construction of practical teaching system, which is conducive to double consideration of the process and results of system construction, and ensures the progress and quality of teaching system construction. Standardized management of experimental teaching process is an effective method to improve the progress and quality of system construction. Good norms and supervision system can effectively supervise each link in the construction work.

How to build the ability of the team is directly related to the quality and function of the practice teaching system construction, so colleges and universities should pay attention to strengthen the development of the construction team. In general colleges and

universities, the Teaching affairs Office is responsible for the construction and management of the specific teaching system. The Teaching affairs Office is divided into practical teaching and laboratory management. The practice teaching discipline is mainly responsible for the construction of extracurricular practice teaching system. The experimental management department is mainly responsible for the management of the laboratory and the organization and management of experimental teaching in the class, which complement each other and advance harmoniously. In the process of constructing the practical teaching system of each secondary college, a team composed of the vice president, the director, the laboratory technicians and the laboratory teachers is also responsible for checking and participating in the construction. For colleges and universities, only by constantly strengthening the management team and construction team can we ensure the smooth completion of the construction of college practice teaching system. In this regard, colleges and universities can take regular training, learn from other schools advanced management experience, construction experience and other ways to improve the comprehensive ability of school management team.

### **2.5 Strengthen experimental ideological and political education**

With the transformation of China's higher education from elite education to popular education, more and more local colleges and universities aim at cultivating applied talents.<sup>[3]</sup> In today's society, what we need is not only practical talents, but practical talents with both moral integrity and ability. Only with noble morality and correct stand can students' practical ability become meaningful. Otherwise, no talent with strong ability can give full play to its own value. Students' ideological values are formed in the process of continuous education and influence, and college education plays an irreplaceable role in the development of students' ideological and political development, so we can not ignore moral education and ideological and political education in the process of carrying out practical teaching. Experimental teaching content also contains certain ideological and political elements, so teachers should fully explore the ideological and political elements before carrying out experimental teaching, in order to integrate ideological and political elements into the experimental teaching process.

### **2.6 Strengthen professional ethics education**

Talents with noble professional ethics can play a greater role in the future work, create greater value. After entering the job market, students will face more pressure due to the difference between the enterprise system and the school system. At the same time, there will inevitably be contradictions between individual students and enterprises as a whole, as well as contradictions and competition with colleagues. If students do not have enough professional ethics as support, they may not be able to solve these problems correctly, or even go to extremes and cause irreparable consequences. Therefore, it is necessary to incorporate professional ethics education into the practical teaching system of colleges and universities. In the process of experimental teaching, teachers can subtly integrate professional ethics education to improve students' professional ethics.

## **3. Conclusion**

Applied talents in the new era need to be cultivated according to the scientific and perfect practical teaching system. In order to achieve this teaching goal, colleges and universities should establish a perfect experimental teaching system in and out of class, increase investment and strengthen ideological and political education and professional ethics education, improve students' application ability and make them have both moral integrity and ability.

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