

# Cultivation of top-notch talents in the field of electronic information under the background of new engineering

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**Abstract:** with the further promotion of higher education reform, the cultivation of high-quality top-notch talents in the field of electronic information in Colleges and universities has gradually been paid attention to. With the rapid development of China's electronic information field, the demand for top-notch talents continues to expand, which requires colleges and universities to deepen the reform of higher education, build a new top-notch talent training plan in the field of electronic information, integrate the educational concept of new engineering, and promote top-notch talent training guided by the needs of society and industry enterprises. Based on this, this paper will focus on the cultivation of top-notch talents in the field of electronic information under the background of new engineering.

**Key words:** new engineering; Electronic information; Top notch talents; culture

**Introduction:** at present, the electronic information industry has become an important strategic industry in China's economy, and the demand for high-quality talents has further expanded. At the same time, it also puts forward higher requirements for the cultivation of top-notch talents in the electronic information field. Therefore, in the process of cultivating top-notch talents in the field of electronic information, colleges and universities need to timely understand the talent needs of the society and industry, update the educational philosophy, promote teaching reform, and explore the training strategies for top-notch talents in the field of electronic information. Colleges and universities and teachers should fully deepen the reform of higher education, combine the education concept of new engineering, cultivate high-quality top-notch talents with good engineering technology, humanistic quality and innovation ability, and improve the scientific research technology level and innovative teaching ability of colleges and universities.

## 1. The significance of personnel training in the field of electronic information under the background of new engineering

### 1.1 The concept of new engineering

The construction of new engineering is a plan to promote the reform of Engineering Education in Higher Education in response to the new technological innovation and industrial reform, and to support innovation driven development. Due to the differences in local history, economy and industry, engineering education in different regions has different characteristics, and the construction and practice of new engineering are also different. In order to cultivate new engineering talents who meet the requirements of the times, colleges and universities need to reform and innovate the connotation, training objectives and training mode of traditional engineering in terms of emerging disciplines and interdisciplinary disciplines, so as to realize the transformation and upgrading of engineering education.

### 1.2 Practical significance of personnel training in the field of electronic information under the background of new engineering

Under the background of new engineering, the cultivation of top-notch talents in the field of electronic information needs to include new ideas, new requirements and new ways. The idea of engineering education should be implemented in education, students' practical ability should be cultivated, and engineering problems should be solved. At the same time, talents should develop humanistic spirit and innovative spirit in learning, so as to promote their all-round development; New technology refers to the combination of Internet information technology, big data, artificial intelligence, Internet and other technical means with the field of electronic information, and the cultivation of interdisciplinary technical talents with information vision. The talent cultivation of new engineering should innovate in the development, pay attention to the intersection and integration of disciplines, and cooperate with universities, education departments, industry and enterprise units to carry out collaborative education in the direction of the integration of production and education and the combination of research and learning, so as to explore new ways of talent cultivation.

## 2. The necessity of cultivating top-notch talents in the field of electronic information

First of all, the cultivation of top-notch talents in the field of electronic information under the background of new engineering can respond to the transformation and upgrading of the industry and meet the national strategic development needs. The electronic information industry has become China's economic pillar and strategic industry. The scale of the industry has gradually expanded, and it is in the forefront of all domestic industrial sectors. The current situation of China's industrial development has led to a gap in top-notch talents in the field of electronic information. The social demand in this industry is huge. Therefore, the cultivation of top-notch talents in the field of electronic information is not only the demand of industrial transformation and upgrading, but also the need of national strategic development

and economic and technological construction. Secondly, in terms of discipline construction, the research on the cultivation of top-notch talents in the field of electronic information is not developed enough, which does not match the important position of the electronic information industry in emerging industries. Colleges and universities need to adhere to the cultivation of top-notch talents in the context of new engineering, promote the reform of higher education, and promote the sustainable development of China's electronic information industry. Moreover, in the context of the current education reform, the cultivation of top-notch talents has become one of the key issues in the teaching reform of colleges and universities. Cultivating top-notch talents is not only the need for the development of national technical talents, but also the internal need to enhance the core competitiveness in the field of electronic information. Colleges and universities should guarantee the quality of higher education and cultivate high-level scientific research talents under the background of popularization of higher education.

### **3. Analysis of top talent training strategy in the field of electronic information under the background of new engineering**

#### **3.1 Update the educational concept and create a good atmosphere**

The educational idea is the educational viewpoint and educational goal formed by the educational participants in the process of carrying out educational activities according to the educational phenomenon. Educational philosophy plays a guiding role in the cultivation of top-notch talents in the field of electronic information, and plays a role in standardizing educational activities to a certain extent. In the professional teaching in the field of electronic information, the previous educational and teaching philosophy will restrict the development of teachers and the improvement of teaching quality. Therefore, teachers need to update their educational philosophy in time, and put the guiding ideology of talent cultivation. The educational principle and direction should be standardized and innovated to make it more in line with the requirements of personnel training in the field of electronic information. First of all, updating the concept of education can make the cultivation of top-notch talents in the field of electronic information have clear guiding ideology, educational principles, grasp the specific direction, nature and task of talent cultivation, and realize the ideological guarantee of top-notch talents cultivation in the field of electronic information. On the issue of defining the concept of education, the university should grasp the training direction of talents from a macro perspective, keep in mind the important task of cultivating top-notch talents in the field of electronic information, and combine the experience of other colleges and universities with the latest development trend of education and teaching theory in the process of establishing the guiding ideology, so as to improve students' comprehensive development, spiritual level and moral cultivation, so that students can identify with the school's top-notch talent training concept, which is convenient for the development of top-notch talent training. Secondly, in the process of designing and establishing the educational concept, the school should adhere to the concept of providing broad space and good atmosphere for the cultivation of top-notch talents, so that top-notch talents can grow in an open, inclusive and free environment and reap better teaching effects. Specifically, creating a good academic atmosphere helps students establish their ideals and beliefs, and form their interest and enthusiasm for scientific research, which is reflected in the educational philosophy. Teachers need to improve students' practical skills and innovation ability, ensure the quality of students in the cultivation of top-notch talents, and focus on training students' thinking ability, comprehensive skills, knowledge structure, basic quality, etc. Promote the construction of a good learning atmosphere and provide guidance for the education work of the college.

#### **3.2 Improve the construction of teachers and emphasize the strength of Teachers**

In the practice of top-notch talent cultivation program in Colleges and universities, the status of teachers is more prominent. Colleges and universities should ensure that the level of teachers in the process of top-notch talent cultivation is always at a high level, which can effectively meet the needs of student development and scientific research, and cultivate top-notch talents in the field of electronic information for colleges and universities. As the main person in charge in the process of cultivating top-notch talents, teachers play an important role in the whole process of students' enrollment, education, scientific research and guidance. Teachers not only need to pay attention to the knowledge level and quality of talents, but also need to guide their scientific research, care about their daily life, moral cultivation and other aspects, and implement the fundamental educational task of cultivating morality. Stipulating the scope of teachers' responsibilities and rights can promote their sense of responsibility in the cultivation of top-notch talents. Only by clarifying teachers' rights can teachers give full play to their abilities and clarify their responsibilities in the process of making training plans. Secondly, in the process of cultivating top-notch talents, teachers should encourage and guide students to participate in scientific research practice and guide students' thesis writing. Therefore, teachers' professional teaching ability needs to be more prominent. Teachers should improve their own practical experience under the background of new engineering, actively promote talent training, and solve the problem of teacher resource structure in the past teaching process. Specifically, teachers should improve the phenomenon of emphasizing theory over practice in engineering education, and ensure the integrity of professional knowledge system structure, through experience, practice. Touch the professional practice in the field of electronic information, mobilize students' initiative and practice enthusiasm, and highlight the cultivation of talents' engineering practice ability. Moreover, teachers should actively improve their own level, adhere to the combination of professional level and practical

skills, and develop to double qualified teachers, research leaders and backbone teachers. Teachers should innovate teaching methods in the cultivation of top-notch talents, improve their practical teaching level and technological innovation ability, contact the electronic information industry, integrate the latest technological development and new situation of the industry into the teaching construction, and improve the quality of top-notch talents cultivation. Finally, colleges and universities should increase investment in the construction of teachers' team, select excellent teachers with rich teaching experience and management experience, establish a teaching team with optimized structure and distinctive professional characteristics, increase the investment in scientific research funds, attract top-notch talents to participate in R & D activities, and cultivate their practice and innovation ability.

### **3.3 Promote teaching reform and cultivate innovative talents**

The training process of top-notch talents needs the reform of innovative teaching methods of the University. Starting from the talent selection mechanism, talent knowledge structure training, curriculum teaching reform and other aspects, we should build a high-quality top-notch talent teaching platform. First of all, in the selection mechanism of top-notch talents, whether the selection of innovative talents is reasonable and standardized is related to the quality of talent training. Therefore, it is necessary to reform the enrollment mechanism to control enrollment and selection. For the selection of innovative top-notch talents, it is necessary to broaden the recruitment channels, break the geographical restrictions of the region where colleges and universities are located, change the previous talent flow mode between colleges and universities in the same region, expand the cooperation with colleges and universities in other regions, and break through the obstacles of talent exchange. Colleges and universities should set up more flexible enrollment policies, treat the recruitment of talents with an open eye, and control the quality of talents at the same time. Secondly, the university should constantly improve the knowledge structure training program for top-notch innovative talents in the field of electronic information to promote their all-round development. In terms of optimizing the knowledge structure of top-notch innovative talents, teachers require top-notch talents to build a hierarchical and structured electronic information professional knowledge system with a certain knowledge reserve. First, in the cultivation of top-notch talents in the field of electronic information, the construction of knowledge structure is the basis for the development of top-notch innovative talents. Second, in the cultivation of talents' ability structure, teachers should pay attention to the development of their thinking ability, knowledge reserve ability, innovation ability, coordination ability, etc. top innovative talents need to have the ability to think independently, know how to flexibly use knowledge, contact learned knowledge and new knowledge, play its maximum role, and accumulate experience in the process of application, Get creative development.

### **3.4 Deepen system construction and improve policy guarantee**

In the process of top-notch talent cultivation in Colleges and universities from the perspective of new engineering, it is necessary to improve the quality assurance mechanism of talent cultivation with multi-party participation, build a perfect system construction, and form a top-notch talent cultivation security structure with the participation of education departments, colleges and universities, society and other aspects. First of all, in the education sector, the cultivation of top-notch talents in the field of electronic information is the key to national economic construction, social progress and technological progress. The promotion and guidance of the education sector can effectively ensure the improvement of the cultivation quality of top-notch talents. In terms of policy guarantee, planning development direction, management guidance, etc., the education department needs to grasp the training quality of top-notch talents on the whole, and can issue relevant policies according to the actual situation of the development of colleges and universities and the demand for talent training, so as to ensure the smooth progress of the top-notch talent training plan. Education departments should clarify their own functions, give universities the right to cultivate top-notch talents, and provide overall directional guidance to play a value leading role. Secondly, colleges and universities, as the main position for cultivating top-notch talents, need to play a leading role under the protection of policies, realize the innovation of training mode, ensure the optimization of curriculum structure, improve the construction of tutor team, and promote the cultivation of innovative talents. Colleges and universities should adhere to the basic requirements of the management system, formulate the management system of training programs, teaching management, teaching reform and other links, flexibly use the combination of production and learning, research and application in scientific research, practice and other aspects, expand the talent training channels of electronic information majors, develop students' innovation and cooperation ability, and build a practical practical practical teaching system.

Summary: the cultivation of top-notch talents in the field of electronic information is a long-term education strategy for the future development of the electronic information industry. Colleges and universities shoulder the important task of cultivating top-notch talents. Improving the education level of top-notch talents in Colleges and universities affects the improvement of the quality of education in Colleges and universities and the quality of talents in the national industry, which is of great significance. Therefore, colleges and universities should clarify their own tasks, update the educational concept, deepen the system construction, improve the teaching staff, promote the construction of scientific research culture on campus, create a good learning atmosphere for top-notch talents, and promote the improvement of their innovation ability. Colleges and universities and teachers should pay attention to the cultivation of top-notch talents, make good use of teaching resources, actively innovate teaching methods, and devote themselves to the cultivation of top-notch talents, so as to contribute more to national construction and deliver more top-notch talents with high quality.

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