

Research on the Educational Mode of Chemical Talents in Colleges and Universities in the Era of Knowledge Economy

Xiao Sang

Zibo Vocational Institute, Zibo 255314, China.

Abstract: With the advent of knowledge economy, higher education has become the focus of continuous attention of all sectors of society. How to output more outstanding talents for the society in the new era has become a problem that many colleges and universities have been paying attention to and thinking about. Based on this, this paper will take the topic of "exploration and innovation of college chemical talents education mode in the era of knowledge economy" as an example to carry out specific discussion and analysis.

Keywords: Era of Knowledge Economy; College Chemical Talents; Education Mode; Measures and Methods

Introduction

The so-called era of knowledge economy refers to the fact that in the current social environment, the division of posts is becoming more and more detailed, and enterprises attach great importance to the degree of education and skill mastery of job seekers when recruiting talents, which leads to many people facing great difficulties in job hunting. In order to effectively address the employment demands of all units, colleges and universities must attach great importance to the reform and development of professional education models such as chemical engineering in the future, so as to cultivate more complex talents useful to the society and bring great impetus to the development of social economy ^[1].

1. Concept renewal: optimize education concept and present talent goal of knowledge economy

1.1 From knowledge instillation to innovation potential stimulation

The so-called teacher preaches, instructs and dispels doubts. This sentence emphasizes that the main value of teachers is to answer students' doubts and impart professional knowledge to them. However, under the new economic background, the role of teachers has changed significantly. In terms of teaching content, mode, and carrier, active innovation is needed, so as to better activate students' innovative potential and awareness, and make the classroom student-oriented. To truly highlight the basic concepts and requirements of quality education. In addition, in order to meet the needs of the development of the times, in the evaluation of teaching quality, teachers must also avoid the traditional wrong idea of "the higher the examination result, the better the learning effect", take the training of students' skills, innovative thinking, etc. as an important goal of daily teaching, and actively guide them to master learning methods and innovative methods in daily teaching.

1.2 From passive acceptance to active learning

The basic feature of the knowledge economy is that all kinds of information-based means are applied to all fields and industries in an all-round way. There are a large number of technical and professional talents based on the application of information networks in all fields. In order to meet the needs of the development of the times, colleges and universities also need to develop towards the direction of nationalization, popularization and professionalization in the training of chemical engineering professionals. Only in this way can we meet the recruitment needs of talents at different levels in the era of

knowledge economy, and then build a talent system with clear levels and rich types^[2]. In addition, colleges and universities need to update their learning concepts. In the past, college students often received knowledge in a passive way, and 60 years old has become the ultimate goal of many college students' examinations. However, in the era of knowledge economy, schools must build a new model in the dimensions of individual survival, development, competition, and innovation, so that students can integrate into learning with an active attitude, and internalize the concept of lifelong learning, We should improve our ability and level so that we can better meet the needs of social development.

1.3 From professional cultivation to compound development

According to the traditional education concept, the so-called knowledge refers to people's cognition of all kinds of things known, and the so-called "education" refers to the process of acquiring more knowledge. There is a certain deviation in this view. This concept of "mastering the past" can no longer be highly adapted to the current era environment, and it must not be limited to this in the future teaching process. Teachers of chemistry major in colleges and universities should lead students to explore new knowledge in a targeted way, look forward to the future, better explore more unknown things, and lay a solid foundation for subsequent knowledge development. For example, in the future education of chemical talents in colleges and universities, we must base ourselves on innovative thinking, guide students to understand the methods of acquiring new knowledge while mastering old knowledge, and promote the form of their new knowledge concepts.

2. Optimization of talent training mode: highlight the ability standard, innovation standard, and highlight the purpose and connotation of knowledge economy

2.1 Multi-angle presentation

In order to cultivate the ability of chemical engineering students and activate their innovative thinking, colleges and universities must comprehensively consider the students' current cognitive level, acceptance and the real needs of the social market, and combine the above aspects to carry out teaching according to their aptitude. Based on this, the training of chemical engineering talents in colleges and universities in the future must be based on the basic conditions of cultivating students' comprehensive quality and meeting social needs. In order to lay a solid foundation for the cultivation of comprehensive talents, we should carry out diversified innovative arrangements in many aspects such as the training mode and curriculum evaluation.

2.2 Comprehensive general knowledge

The requirements for talents in the economic era have changed greatly. In the new era, enterprises require job seekers to master professional skills, have innovative thinking, have perfect personality, and can better adapt to the changing external environment of society. Therefore, in the mode of training talents, teachers must change from professional to comprehensive quality, from general education to general education, Effectively connect chemical engineering with other disciplines to form an effective intersection between disciplines. In addition, in the teaching mode, colleges and universities also need to focus on the basic spirit of serving students, integrate the connotation of information technology into the interaction and communication between teachers and students, and actively set new models such as task teaching, project teaching, situational teaching, so as to further develop the potential of students^[3].

2.3 Characteristic mining

In the era of knowledge economy, the world has formed a small global village. How to make the competitiveness of playing higher education effectively and fully alive is what many scholars have been paying attention to, and finally reached the conclusion that "people have their own advantages". To achieve this goal, colleges and universities must combine the existing advantages of the university, tap the resources of the university, and carry out in-depth research on this, On this basis, we will provide students with scientific and characteristic guidance, so that they can achieve better development on the exploration of chemical engineering.

3. Structural integration: serve the economic and social development and respond to the talent demand of the knowledge economy

3.1 Build a lifelong diversified education system

The rapid development of the knowledge economy has brought a great change to people's learning mode, especially the interactivity and convenience of the network have brought a great impact on people's daily learning. Now people's learning is no longer limited to 45 minutes in the classroom, showing the characteristics of mobility, fragmentation and diversification. If every student can actively use the network, they can achieve higher quality knowledge absorption and internalization, At the same time, higher education has also changed from elite education to national education. Therefore, in the future, colleges and universities must actively build a diversified and lifelong education system based on such characteristics, provide students with an open platform of support, so that they can get more support in active learning, and achieve faster and more efficient personal development and growth on the basis of breaking through time and space constraints.

3.2 Optimize the hierarchical structure of higher education

It is often said that the economic foundation determines the superstructure, and higher education is the basic component of the superstructure, so higher education must maintain a high degree of consistency with the trend of economic development. With the comprehensive arrival of the information era, the chemical industry relying on science and technology is playing an increasingly important role. Whether it can give more added value to science and technology in its products has become the key to the future competition of many chemical enterprises in the race track. That is why in the future, colleges and universities need to combine the inherent needs of the changes in the chemical industry to achieve the hierarchical setting and arrangement of higher education, to ensure that the construction of high-quality international universities can meet the needs of high talents in the society. At the same time, it is also necessary to set up a number of online social universities to meet the recruitment needs of enterprises for basic talents in the form of general training.

3.3 Realize the deep optimization of chemical engineering specialty structure in colleges and universities

The main characteristics of the knowledge economy are characterized by openness, interaction, innovation and many other aspects. Therefore, the demand for talents will reflect the basic characteristics of "greater demand for complex talents". To meet the employment needs of the society, in the future curriculum design of chemical engineering specialty, colleges and universities need to do a good job in the deep optimization of the structure, so that students can achieve a vertical deep improvement.

4. Conclusion

To sum up, in the era and background of knowledge economy, if you want to meet the social demand for professional chemical talents, in the future, colleges and universities must actively explore and innovate the education model of chemical talents in colleges and universities, gradually form various scientific and reasonable teaching methods in further exploration, and continuously export leading or universal hierarchical talent reserves to the society.

References

[1] Pan MY, Xiao HT. The Evolution of Modern Higher Education Thoughts -- From the 20th Century to the Beginning of the 21st Century [J]. *Higher Education Research*, 2007 (8).

[2] Liu Q. On the Management of Higher Education in the New Economic Era [J]. *China Adult Education*, 2012 (21).

[3] Ou XJ. The Choice of Higher Education Development: from Developmentalism to New Developmentalism [J]. *Higher Education Exploration*, 2013.