

EMPOWERING FUTURE INNOVATORS: CAREER PLANNING EDUCATION TO CULTIVATE CREATIVE TALENT

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Abstract: Chips form the heart of computers and electronic devices, much like how innovative thinking and independent practical skills are the "core" of college students' talent and development. Fostering exceptional innovative talent within universities places a distinct emphasis on nurturing this essential "core." The effective cultivation of innovative thought and independent practical skills during a student's university years is akin to sowing seeds with far-reaching implications for their future careers. The impact of these cultivated abilities unfolds and thrives throughout their professional journey. In essence, the crux of cultivating outstanding innovative talent in universities centers on the creation of these invaluable "cores," while career planning education endeavors to bring forth the budding potential within each student. This duality serves as both the objective and intrinsic value of nurturing outstanding innovative talent and career education within university settings.

Keywords: Innovative talent, University education, Independent practical skills, Career planning, Talent development

1. Introduction

Chips are the core of computers and other electronic devices, and the innovative thinking and independent practical ability of college students are also like "chips", which determine their talent value and development efficiency. The cultivation of outstanding innovative talents in universities also focuses on creating the "core". If the innovative thinking and independent practical ability of college students are effectively cultivated during their university years, it will be like planting seeds, which will have a profound impact on their career, and their effects will be fully demonstrated in their career development process. In short, the focus of cultivating outstanding innovative talents in universities is on creating "cores", and their career planning education aims to generate "buds". This is the goal and value of cultivating outstanding innovative talents and career education in universities.

2. The Connotation of Career Planning Education Focusing on Cultivating Top Innovative Talents

Universities are an important base for cultivating outstanding innovative talents. The academic freedom tradition, scientific and humanistic spirit accumulation, disciplinary structure, educational atmosphere, and guarantee of human and material resources in universities can lay an important foundation for cultivating outstanding innovative talents[1-4].

Career planning education that focuses on cultivating outstanding innovative talents integrates in-depth guidance on career planning into the cultivation of outstanding innovative talents, enabling college students to more clearly connect their basic research and innovative practices during their university years with their own career development[5-8], industry market development, and socio-economic development, and solve the bottleneck of

vague goals and lack of motivation in the process of innovation practice, build an independent and innovative talent cultivation mechanism [9].

In addition, career planning education, which focuses on cultivating outstanding innovative talents, focuses on the career development path planning of innovative, autonomous, and practical talents. It further strengthens the connotation-based training model centered on improving talent cultivation capabilities, explores talent classification training of "hierarchical cultivation, autonomous interest, and differentiated practice", and continuously excavates talent internal power, enhances talent connotation, and shapes talent core.

Thirdly, career planning education that focuses on cultivating outstanding innovative talents can help guide college students to analyze and judge future career development directions, plan career development plans, control and avoid future career development risks, and enhance their confidence, endurance, and courage in engaging in basic research and innovative practices in disciplines and majors.

Fourthly, career planning education that focuses on cultivating outstanding innovative talents aims to build an outstanding innovative talent training mechanism that is in line with the characteristics of universities' own disciplines by combining scientific research, professional practice, and student career planning. By relying on disciplinary advantages, combined with factors such as social resources, location characteristics, and self-development, universities have formed a unique and innovative talent cultivation system in teaching systems, basic research, and scientific research practices.

3. A Career Planning Education Model Focusing on Cultivating Top Innovative Talents

The development mode of career planning education focusing on the cultivation of outstanding innovative talents revolves around the practical problems of cultivating outstanding innovative talents, combines the achievements and experiences of career planning and employment guidance in universities, "transforms work into achievements, and elevates experience into science", and constructs a comprehensive deep guidance mode for career planning, mainly covering theoretical support, team building, guidance forms, work content, requirements and standards Effectiveness evaluation and other aspects.

One is to build an education team structure of "brainpower and profession", and establish a work team based on "subject and professional teachers, with career planning education teachers as the core, and supplemented by the guidance of internal and external expert consultants". You can also invite outstanding alumni and cooperative units in the industry to provide career guidance as needed, to enhance its relevance and timeliness [10].

The second is to fully utilize the school's top innovative talent training platform, make full use of career planning deep guidance studios, university innovation practice bases, industry university research cooperation bases, etc., to provide strong hardware support and practical experimental venues for the development of career planning education for top innovative talent cultivation.

The third is to use the operating mechanism of "project based and rhythm based" to establish a "project based" cultivation method for cultivating innovative talents in different disciplines. Classified surveys, hierarchical discussions, and segmented construction should be carried out. At the same time, the rhythm of career education should be fully controlled, and segmented evaluations should be conducted on the basis of phased implementation.

Fourthly, we need to build a promotion model of "studio and internet", establish career planning studios and new media platforms, achieve resource sharing and online interaction, and develop and promote in-depth coaching and training courses for top innovative talents.

4. The System Composition of Career Planning Education Focusing on Cultivating Top Innovative Talents

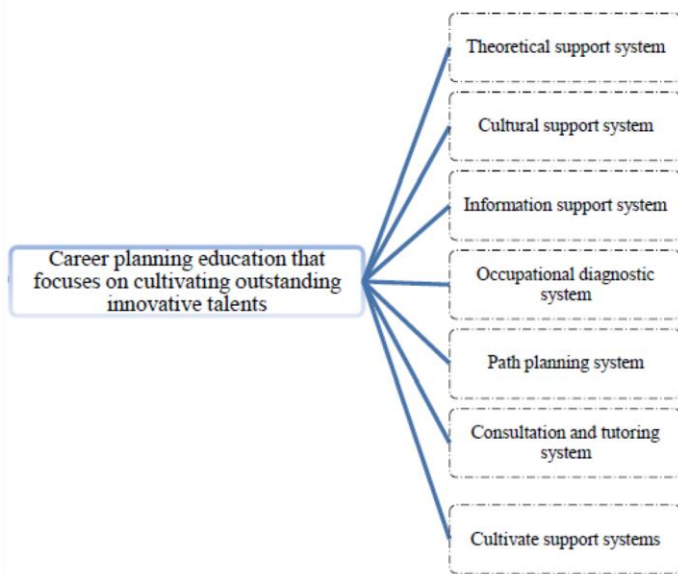


Figure 1: The System of Career Planning Education Focusing on Cultivating Top Innovative Talents Career planning education that focuses on cultivating outstanding innovative talents mainly consists of theoretical support system, cultural support system, information support system, career diagnosis system, path planning system, cultivation support system, and consulting and counseling system.

Specifically, it mainly includes the following 7 aspects, see figure 1 [11-12].

(1) **Theoretical support system.**

One is to organize experts, scholars, and career education practitioners to comprehensively apply professional knowledge such as sociology, psychology, innovation and entrepreneurship education, human resource management, and actively explore the theoretical basis for cultivating outstanding innovative talents. The second is to cultivate career planning teachers for college students with disciplinary and professional backgrounds, exploring the characteristics and laws of career development and career planning in different disciplines and majors.

(2) **Cultural support system.**

To create a cultural atmosphere for career planning education, the following requirements should be met: firstly, to encourage value integration. Fully respect personal development goals, while guiding college students to adjust their personal goals according to the needs of industry strategic development and achieve value integration. The second is to encourage independent choice. Within a reasonable range, choose suitable innovative ability cultivation and career planning methods based on one's personality and hobbies. The third is to encourage development demands. We should fully respect college students' career achievement as an important goal in their career planning, and encourage and support their career development demands.

(3) **Information support system.**

Career development is not only an individual matter for college students, but also an important component of talent cultivation in universities. Universities should provide career counseling for college students and help them obtain various information necessary for formulating career plans. The main function of information support systems is to provide information on the future career development of innovative talents in different disciplines and professional fields, helping them determine practical career goals, which is the fundamental condition for effective career management.

(4) **Occupational diagnostic system.**

The main function of the diagnostic system is to help college students accurately understand their career anchor through a series of scientific evaluation techniques. The American management scientist E. H. Schein proposed the "career anchor" theory, which reflects the reasons why people are truly willing to engage in a certain profession and consider it as their lifelong career destination, where they anchor and settle down. According to the perspective of the "career anchor" theory, the choice of career direction, success in career, and career anchor are closely related. Through the process of establishing a career anchor, on the one hand, it helps college students identify their personal career aspirations and success standards, prompting them to integrate their career with a complete self-view, deepening their industry identification and career belonging while meeting their own career needs; On the other hand, universities can also obtain correct feedback on the process of helping college students determine career anchors, so as to provide targeted, reasonable, effective, feasible, and smooth career guidance for college students' career development [13].

(5) **Path planning system.**

Career path planning is the core subsystem of the career planning system. Career path planning is the most important part of an organization participating in the career development of its members and achieving career goals. The career path of college students is an objective description of their chosen career field and goals, indicating their general or ideal career development path. It analyzes the development path and ability reserves in future careers, with the aim of cultivating a wide range of abilities to meet the requirements of future positions or other positions. For example, in the current career development environment in China, a single career path has become increasingly difficult to adapt to the requirements of the times. It is urgent to design multiple career paths to broaden career development paths and achieve "win-win" personal and organizational goals.

(6) **Consultation and tutoring system.**

A scientific and complete career planning consultation and guidance system should be improved in terms of technical equipment, content setting, and case reserve. There are many techniques used in career counseling, and different techniques can be used based on different career development issues to help and guide college students to solve career planning problems, mainly including psychological testing, diagnostic techniques, scenario simulation, discussion techniques, communication training techniques, behavior shaping techniques, etc. At the same time, in terms of content setting and case reserve, it is necessary to develop training courses for deep tutoring, form a compilation of deep tutoring results and a deep tutoring case library, and continuously improve the pertinence and effectiveness of career counseling and guidance.

(7) **Cultivate support systems.**

Universities should strengthen career education and training, as well as track and cultivate them in a targeted manner, based on the disciplinary and professional characteristics of cultivating outstanding innovative talents. The cultivation support system for college students' career development should include the following two aspects:

firstly, a high-quality curriculum system. In terms of the curriculum system, it is necessary to implement unified arrangements and standard implementation, as well as focus on classifying and involving subjects and majors. In the design of the curriculum outline, it is necessary to combine theory with practice, focus on ability cultivation, highlight the characteristics of cultivating outstanding innovative talents, and focus on improving the professional development ability of college students in the industry field. The second is practical training. Improve effective practical training models such as scientific research practice, social practice, and employment internship, to help college students broaden their horizons and increase their abilities in job training [14].

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