# **Exploration and Practice of Quality Education for Undergraduates in Private Applied Undergraduate Colleges Based on TOPCARES**

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Abstract: The comprehensive implementation of quality education is the strategic theme of the national education reform and development, and a strategic measure to train high-quality talents. The implementation of quality education is not only the requirement of the times to implement the party's educational policy, but also a scientific judgment and an inevitable choice made on the basis of a full insight into the world situation and future development of talent requirements. Based on the educational philosophy of TOPCARES methodology, this article constructs a TOPCARES integrated quality education talent training model, focusing on the analysis and discussion of quality education from the "six teachings" thinking.

**Keywords:** TOPCARES, Applied Undergraduate, Quality Education

#### 1. Introduction

Talent training is the core of the work of colleges and universities, and the party and the state have always attached great importance to talent training. The 18th National Congress of the Communist Party of China clearly pointed out that higher education should focus on who to train and how to train and establish a central position in talent training. Institutions of higher learning must fully implement the party's educational policy, regard the establishment of morality as the fundamental task of education, comprehensively implement quality education, deepen comprehensive reforms in the education field, focus on improving the quality of education, cultivate students' sense of social responsibility, innovation, and practical ability, and cultivate morality. A socialist builder and successor who develops intellect, physical and aesthetics in an all-round way[1].

Under the background of the era of emphasizing the concept of quality education, Chengdu Neusoft College has innovatively constructed the "TOPCARES integrated quality education talent training model" on the basis of the traditional philosophy of academic education and education, and borrowed from the educational concept of TOPCARES methodology. "Student comprehensive development" as the center, with "six teaching theories" (in which direction to teach, what to teach, how to teach, who to teach, what to teach, and how to teach), emphasizing student professional education and quality education In addition to the cultivation of professional ability and quality, it also pays special attention to the openness and innovation of students' thinking, innovation ability, values and personal professional abilities, student attitudes and habits, communication and expression, teamwork ability, and the cultivation of a sense of responsibility, so that students can use The comprehensive quality ability of the learned knowledge to control social practice [2]. This article takes the TOPCARES quality education reform of Chengdu Neusoft University as an example to discuss the training model of quality education talents for college students, hoping to benefit the training of quality education talents for private applied undergraduate colleges.

### 2. Optimize Training Objectives, Implement Educational Reforms, and Solve the Problem of "in Which Direction to Teach" Quality Education

#### 2.1 Innovate educational concepts and build a TOPCARES quality and ability index system

The school has innovated and constructed the TOPCARES quality education integrated training goal with the characteristics of private applied undergraduate colleges, and formed the TOPCARES

quality education talent training ability system suitable for the development of Chengdu Neusoft University students (Table 1), which includes 8 first-level Ability indicators (T, O, P, C, A, R, E, S), 25 second-level ability indicators, 66 third-level ability indicators [3], each first-level indicator corresponds to the necessary role of students in the future Quality, subdivided two-level indicators and three-level indicators clarify the criteria for professional competence and quality education, and the various competence indicators are organized according to the logical inclusion order and importance. TOPCARES quality education ability index is the development and extension of the concept of "education creates student value" of Chengdu Neusoft University, which runs through the whole process of student quality education and teaching [4].

Serial number	Shorthand	name	Character qualities
1	T	Technical knowledge and	The quality of the learner
		reasoning	
2	O	Open thinking and innovation	Innovator quality
3	P	Personal and professional	Practitioner quality
		skills	
4	C	Communication and teamwork	Organizer quality
5	A	Attitude and manner	Personal civility
6	R	Responsibility	The quality of the person in
			charge
7	Е	Ethical values	Believers
8	S	Social contribution by	Practitioner qualities
		application practice(CDIO)	_

Table 1. TOPCARES Quality Capability Index System

#### 2.2 Clarify the training objectives and adjust the TOPCARES quality and ability curriculum system

The school understands the needs of the society, industry, and enterprises for the comprehensive quality and ability of talents through investigation and research, determines the professional talent training plan, and determines the talent quality ability training goal. Then build a professional talent quality ability system based on the professional talent quality ability training goal and quality ability index system, then analyze and design an integrated quality ability improvement curriculum and practice system, including the organization and development of courses and student activities, and finally pass the ability index system Evaluate students' learning results. The evaluation result will guide the school to adjust the quality and ability improvement curriculum and practice system, thereby promoting the continuous improvement of the quality of quality education and forming a PDCA cycle. Figure 1 shows the design process of quality and ability improvement courses and project system.

When formulating the professional talent quality ability system and designing the quality ability improvement curriculum system, the knowledge, ability, and attitude quality included in the TOPCARES quality ability index system is decomposed into the education of professional talent training programs, quality improvement courses and students' extracurricular activities. Teaching. A quality and ability index should be reflected in the professional talent training program, in multiple courses and multiple activity projects, thus forming the mapping of professional quality training objectives to the curriculum system and activity projects.

### 2.3 Improve extracurricular activities and optimize the structure of TOPCARES quality and ability projects

The school gives full play to the organic combination of extracurricular student activities and in-class teaching to educate people, realize the high integration of quality education and professional education, and improve the overall quality of students. To this end, the school's TOPCARES quality education requires that the objectives of professional training capabilities be mapped to the various items of students' extracurricular activities, and the cultivation of quality ability indicators permeates all aspects of extracurricular student activities.

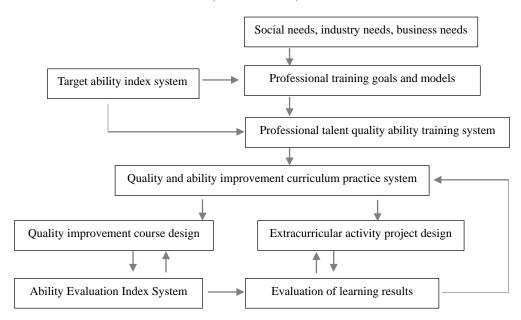


Figure 1. Quality and ability improvement courses and project system design process

### 3. Clarify the Content of Education, Refine the Tasks of Each Stage, and Solve the Problem of "What to Teach" in Quality Education

The content of TOPCARES quality education is mainly divided into three main parts: in-class teaching, practical training and extracurricular activities. The content of the three parts promotes each other, merges with each other, and improves together.

### 3.1 In-class teaching is the main battlefield of quality education

The content of "in-class teaching" part of quality education mainly focuses on the cultivation of professional competence, ideological and moral quality, professional competence, and physical and mental health in the professional talent training program. Mainly through classroom teaching, classroom practice and other in-class links to achieve the effect of educating people.

#### 3.2 Practical training is the main channel of quality education

The content of quality education in the "training and practice" part mainly focuses on the quality of professional training programs that focus on professional practice operation courses and extracurricular social practice activities. Mainly through professional training, graduation practice, social practice and other links to achieve the effect of educating people.

### 3.3 Extracurricular activities are the main front of quality education

"Extracurricular activities" part of the quality education content mainly focuses on moral education, student attitudes and habits, students' openness and innovation of thinking, values, innovation ability, communication and expression and teamwork ability, sense of responsibility and other qualities in the professional talent training program. The effect of educating people is mainly achieved by carrying out extracurricular quality education and quality practice activities.

### 4. Improve Education Methods, Enhance Practical Experience, and Solve the Problem of "How to Teach" Quality Education

The school implements the "four-level five-category" project teaching method to carry out quality education, which has better realized the integration of students' knowledge, abilities, and qualities, thereby better achieving the education process and the optimization of educational goals.

The "Four Levels and Five Types" projects refer to student quality education activities that are

divided into four levels and five categories. The "four levels" are school level, department level, teaching team level, and student team level; the "five categories" are respectively Ideological and moral qualities, innovative practice qualities, cultural and sports activities qualities, humanities qualities, and professional competence qualities.

### 5. Integrate Educational Resources, form an Educating Team, and Solve the Problem of "Who Will Teach" Quality Education

The school has built a TOPCARES integrated quality education management team, which provides a strong organizational guarantee for the school to implement comprehensive quality education for students.

#### 5.1 Establish a school integrated education management leadership team

The TOPCARES integrated quality education management leadership team is student-centered, with the goal of improving students' overall comprehensive quality, and fully mobilizes the secondary colleges and departments, the ideological and political theory teaching department, the enrollment and employment department, the university student entrepreneurship center, the school league committee, and the educational affairs department , Logistics and other auxiliary functions of the teaching and education departments to serve and educate people in conjunction.

#### 5.2 Establish a professional integrated education and teaching management team

The teaching units of the secondary schools and departments have established a professional education management team that integrates quality education and professional education. Each professional organization has implemented an integrated professional education management model with majors as the basic education management unit. Educate people by orientation and promote the improvement of students' comprehensive quality.

## 6. Give Full Play to the Advantages of Resources, Build a Platform for Educating People, and Solve the Problem of "What to Teach" for Quality Education

The school has built a 4A (Anytime, Anywhere, Anyway, Anycontent) flexible learning environment, carried out teaching in the form of E-Learning, and carried out teaching in the form of an online training platform. At the same time, the school also specially developed a quality education and management service system and student quality The online education credit system provides a good open learning environment and guarantee for the comprehensive and in-depth development of students' quality education and teaching and students' independent practice.

### 7. Strengthen Quality Measures, Establish a Guarantee System, and Solve the "How Is It Taught" Problem of Quality Education

The school draws on quality management concepts and methods such as ABET and PDCA to build and gradually form a relatively complete quality management and guarantee system for student quality education, the evaluation system of "six have and six levels" for project activities, the identification and evaluation criteria for student quality education credits, The quality assessment and evaluation standards of qualified teachers. These systems and standards have further strengthened the organizational guarantee for quality education quality management, strengthened the monitoring and feedback of the quality education process, and continuously improved the efficiency and effectiveness of quality education management.

### 8. Conclusion

The school implements the TOPCARES integrated quality education reform, and effectively solves the private application-oriented undergraduate colleges through comprehensive innovative practices in quality education personnel training mode, quality education project system, quality education integration team, quality education quality assurance system, etc. There are two common problems in the cultivation of comprehensive quality education for college students. The first is that the traditional

quality education training model of college students singlely regards professional quality (intellectual education) as the goal, and the cultivation of students' humanities, ideological and political quality (moral education) is subject to certain constraints, and the application-oriented Undergraduate colleges have not been able to effectively develop students' professional quality and overall quality in a unified and harmonious development; the second is to effectively overcome the pan-scientization of college students' ideological and political education and humanistic quality education, and to break away from social needs, and better solve the quality education training Unclear goals in the system, outdated teaching methods, insufficient practical teaching, unclear teacher rights and responsibilities, and misplaced evaluation systems.

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