

## Basic Characteristics of Applied Undergraduate Education

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**Abstract.** The primary purpose of applied undergraduate education is to meet the needs of local social and economic development and construction, so the training of talents should first meet the needs of local construction for senior specialized talents. This paper analyses the basic characteristics of vocational, applied and skilled specialty education, and the basic characteristics of undergraduate education, such as systematicness, academics, innovation and entrepreneurship, and then analyses the basic characteristics of applied undergraduate education, such as professionalism, systematicness to a certain extent, academics to a certain extent and innovation to a certain extent.

### 1. The basic characteristics of special education

The basic characteristics of vocational education are mainly vocational, applied and skilled.

#### 1.1 Professionalism of specialized education

Professional characteristics are the primary characteristics of specialty education. Specialized education is the bottom of higher education in our country, the bridge of popular higher education, and the service for the social and economic development of provinces and regions. Its main goal is to train specialized technical personnel for professions characterized by specialty. In fact, the specialty is set up to meet the needs of economic construction and social development. It is based on the social profession formed by social division of labor.

The specialty education is to train specialized technical talents suitable for the professional needs of all sectors of society. Generally speaking, the specialized technicians who have received specialized education basically possess the basic theory and expertise necessary for the corresponding profession, the basic skills for the practical work of the corresponding profession, and the preliminary ability for the practical work of the corresponding profession.

#### 1.2 Applicability of specialized education

Applied characteristic is the second characteristic of specialty education. Specialized technical personnel trained in specialty education are characterized by their ability to apply the specialized knowledge and technology they have learned. The teaching of specialized education stresses the application of theoretical knowledge and the cultivation of practical ability. The teaching of basic theory aims at application, takes necessity and sufficiency as its degree, and focuses on mastering concepts and strengthening application. In the teaching of specialized courses, the pertinence and practicability should be strengthened.

All kinds of courses should simplify the deduction of theory and the number of lecture hours, and strengthen various practical teaching links. Because the specialized knowledge of specialized education is not mainly required by systematization, that is, not by logical reasoning such as knowledge generation and development, but by the application of knowledge, it is the main content of cultivating students' ability to apply the specialized knowledge and technology they have learned. Therefore, the professional knowledge and technical application ability of college students are the main part of their ability.

### **1.3 Skills of specialized education**

Skills refer to a person's professional and technical ability, which is the inherent quality of a person's professional and applied professional and technical knowledge. The application of professional skills depends on thinking and action, so the main measure of skills is external performance. The core content of Vocational and applied specialty education is skill.

Specialized skills are the objective symbol of specialized education, and the cultivation of specialized skills is the process and ultimate main content of specialized education. Specialty skill education is based on professional theory and expertise. After internalization of theory and knowledge into students' application quality, it shows certain technical ability, which is the internal quality and external performance of Transforming Society for people.

## **2. Basic Characteristics of Undergraduate Education**

In stipulating the academic standards of undergraduate education, the Higher Education Law of the People's Republic of China points out that undergraduate education should enable students to systematically grasp the basic theories and knowledge necessary for their own disciplines and specialties, master the basic skills, methods and related knowledge necessary for their specialties, and possess the preliminary ability to engage in their practical work and research work. Accordingly, this paper holds that the basic characteristics of undergraduate education are mainly systematic, academic, innovative and entrepreneurial.

### **2.1 Systematization of undergraduate education**

The systematization of undergraduate education mainly refers to the systematization of imparting specialized knowledge and basic theory. The teaching of undergraduate education emphasizes the systematic transmission of theory and knowledge, and pays attention to the logical derivation of theory and knowledge. It requires students to understand and master the basic theory and professional knowledge of the subject systematically.

The systematicness of imparting knowledge requires not only the systematicness of the professional teaching plan, that is, the systematicness of the knowledge structure contained in the curriculum system of students' learning, but also the systematicness of the teaching content of each course, that is, the knowledge content learnt by students is complete, continuous, logically deduced and developed. Through systematic professional knowledge learning and systematic professional thinking training, undergraduate students have laid a good foundation of systematic knowledge and professional thinking development for future participation in social activities.

### **2.2 Academic nature of undergraduate education**

Academy refers to two aspects, one is the amount of knowledge, and the other is the ability to learn. The academic nature of undergraduate education mainly refers to the ability of students to learn after they are educated, that is, the ability of scientific research. The academic nature of undergraduate education is based on the systematic foundation of undergraduate education. Systematic knowledge learning and systematic thinking training have laid a preliminary foundation for Undergraduates' future research ability.

The academic nature of education is an essential difference between undergraduate education and specialized education. It makes undergraduate education carry out academic thinking training on the basis of systematically imparting knowledge, makes students' academic thinking and academic ability develop, and lays a foundation for students' future scientific research and other academic behavior.

### **2.3 Innovation of undergraduate education**

The innovation of undergraduate education is based on the educational system and academic nature of undergraduate education. Systematic knowledge education lays a theoretical and professional

foundation for Undergraduates' innovation. Academic thinking and ability education lays a foundation for Undergraduates' research and exploration.

Innovation means that in creative activities, with the support of personality quality, innovators use existing knowledge and experience to define "old" and judge "new", to put forward new and unique problems, to solve problems, and to generate valuable new concepts, new ideas, new phenomena, new interpretations, new theories, new laws and new methods. Innovation has the characteristics of novelty, advancement and practicability. Innovation is an inexhaustible motive force for social development and progress. The cultivation of undergraduate students' innovative consciousness and ability is the core requirement of the society for advanced specialized talents in the era of knowledge economy. It is also the core source of strength for modern higher education to approach the social center from the edge of society. The innovation of undergraduate education requires not only teachers to teach mature theories and knowledge, but also teachers to teach controversial frontier theoretical issues, so that students can realize the limitations of understanding the objective world, cultivate students' ability to examine, reflect and criticize, and make students have innovative desires and habits in their hearts, and gradually cultivate them.

## **2.4 Entrepreneurship of undergraduate education**

The entrepreneurship of undergraduate education is based on systematicness, academics and innovation. The purpose of education is to cultivate students into qualified social citizens, whose main feature is the ability to engage in the professions related to their major. That is to say, qualified undergraduates should have the ability to meet professional needs after graduation. This ability has two levels, one is the ability to adapt to the needs of the occupation (employment), which is passive; the other is the ability to create new jobs (employment), which is initiative.

## **3. Basic characteristics of applied undergraduate education**

Teachers of applied undergraduate education have just moved from specialized education to undergraduate education. They are familiar with the basic characteristics of specialized education and have some understanding of the basic characteristics of undergraduate education. Therefore, the basic characteristics of applied undergraduate education should be professional, systematic to a certain extent, academic to a certain extent, and innovative to a certain extent.

### **3.1 Professionalism of applied undergraduate education**

Applied undergraduate education is mostly local-run colleges and universities. One of the fundamental reasons for its existence and development is the need of local politics, economy, science and technology, culture, education and other development for first-line senior vocational talents. This need makes the talents trained in applied undergraduate education has obvious professional characteristics. It shows that the connotation of undergraduate education is expanding, the quality standards are expanding, and the popularization of higher education has already begun.

The professionalism of application-oriented undergraduate education is the first regulation for training senior specialized talents. This regulation has improved the quality level of professional talents in the front line of local development. The frontline senior professional talents at the undergraduate level provide the support of intellectual and technical talents for local sustainable development. This is a feat for Chinese higher education to cultivate high-level vocational and technical talents in the front line of popularization while cultivating social elite talents. It indicates that China's social and economic development has begun to have a greater demand for high-level professional intellectual and technical personnel.

The development of modern countries shows that high-level professional intelligence and technical personnel are important forces to realize industrialization, information economy and even knowledge economy.

### 3.2 Certain academic nature of applied undergraduate education

The academic nature mentioned above is aimed at the academic requirements of undergraduate education stipulated by elite education in China, and a certain degree of academic nature is also relative to the academic nature mentioned above. The academic nature of newly-built undergraduate education should exist to a certain extent because of its frontline professional characteristics. That is to say, the academic nature of applied undergraduate education is based on the academic requirements of frontline professions for intellectual and technical talents. Therefore, its academic nature is the academic part of undergraduate education of elite education. The academic nature of applied undergraduate education inevitably leads to its systematicness and innovation.

### 3.3 Certain systematization of applied undergraduate education

Applied undergraduate education must be systematic, which refers to the "systematic" knowledge that professional undergraduates should possess. This "systematic" is the "part" of the undergraduate education system of elite education. That is to say, certain systematization does not require the complete systematization of knowledge imparting, but for the front-line vocational reality, in some courses or some parts of the curriculum for systematic knowledge education. Some systematic requirements, that is, to meet the systematic requirements of undergraduate education, but also to enable students to have a certain degree of systematic understanding of problems, analysis and problem-solving thinking and practical ability.

### 3.4 Certain innovation of applied undergraduate education

Innovation is the general feature of modern senior specialists and the core feature of undergraduate education. Certain innovation refers to the spirit and ability to create new things for front-line professions. This kind of spirit and ability is the main quality that the undergraduate students of applied undergraduate education should possess when they step out of the first-line professional scope and enter into new social posts. This spirit and ability are also necessary for the undergraduate education of Applied Undergraduate Education to vigorously promote the local political and economic development.

To some extent, innovation requires undergraduates of Applied Undergraduate Education to have the ability to ask questions in the technical field of frontline occupation (specialty), or to define "old" and "new" according to existing problems, and to propose new ideas and methods to solve problems, and to some extent, to innovate corresponding social posts of non-specialty.

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