

# Relying on "Integral Body Multi Wing" Personnel Training Mode to Improve the Quality of Undergraduate Education

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**Keywords:** Integral body multi wing, Innovation and Entrepreneurship, Training model, General Education

**Abstract.** Under the context of mass higher education, the research achievements of the undergraduate application-oriented talent cultivation mode reform have sprung up. These achievements clarify such concepts as the application- oriented talent and talent cultivation mode, and a practical research in the undergraduate application-oriented talent cultivation mode construction has been conducted. However, the current research is still insufficient. The research of the social needs for application-oriented talents should be strengthened, and the reform in undergraduate talent cultivation standards and mode should be studied; in order to develop a talent cultivation program consistent with the university's own characteristics, and to increase the quality of the application-oriented talents cultivation. This paper puts forward a kind of "Integral body multi wing" talent training mode based on the improvement of college students' comprehensive ability.

## 1. Introduction

Application oriented personnel training goal orientation, and actively explore the new model of personnel training. Through years of exploration and practice gradually formed "the spirit of science, humanities literacy, professional expertise" of innovative talents training mode, and on this basis, actively build the personality education and "science + art" to refer to the guiding ideology of "integral body multi wing" talent training mode. "integral body multi wing" talent training mode is through diversified construction, diversified and three-dimensional learning resource platform, to provide students personalized, differentiated, customized education services, while students carry out the provisions of the contents of learning, choose a full range carry out selective, independent learning, to achieve the aim of personalized learning, diverse culture and a strong professional ability, great personality, and finally work as personalized technology.

"Integral body multi wing" talent training mode is to combine the ability training with the project teaching; establish discipline competition platform, school-enterprise cooperation platform, social practice platform, strengthen the International exchange program, create innovation and entrepreneurship education practice base, to provide students with personalized, differentiated, customized education services, enhance the comprehensive quality of students and employment and entrepreneurship, training innovative application-oriented professionals to meet the needs of the community.

## 2. Problems existing in the cultivation of students' innovation ability in our country

At the third session of the second session of the National People's Congress on March, 05, 2015, the Premier Li Keqiang regarded "promoting public venture" as an effective way to cultivate the economic and social development of new power in an effective way. The report pointed that "which can both expand employment, increase the income of residents and conducive the promotion of social vertical mobility and justice... Individuals and enterprises should be bold in innovation; it's the duty for the whole society to build innovation culture, so that the folks could achieve spirit success and their own value with the progress of creating wealth<sup>[1]</sup>."

The leader with high-tech knowledge is an indispensable part for entrepreneurial innovation, the university is the main force of innovation and entrepreneurship, students and graduate students group

are extremely important force of scientific and technological personnel. In recent years, China's university graduates are increasing year by year, employment pressure is hard to be ignored, In 2014, 7.27 million college graduates, in 2015, 7.49 million college graduates, in 2016, the number of college graduates may be up to 7.7 million<sup>[2]</sup>, the number of college graduates is the highest in history. With the slowdown in China's economic development and economic structure adjustment, increasing unemployment, the employment pressure is increasing. For these reasons, the best choice for graduates is to start an undertaking independently. However, at present, the proportion of Chinese college students' self-employment is only 1%. According to a survey made by US educational services, the population of self-employment reached about 20% to 30%, it is more than others developing country, whose average rate reached just 2% and Chinese rate is even the half of the average<sup>[3]</sup>. On the other side, it's also good news that indicates great potential of China. How to narrow this gap, how to implement the national policy to the specific teaching process, the innovation and entrepreneurship education and personnel training combine to enhance students' awareness of entrepreneurship, innovation and creativity, is a task that is placed in front of all educational departments and educators; strengthening the practical ability of college students is the need of the society, for the students of applied talents training, practical innovation ability is the basis of their employment and self-employment.

### 3. Relying on "Integral body multi wing" personnel training model revised talent training program

In order to further deepen the teaching reform, innovative talent training mode, Optimization of talent training program, improving the quality of personnel and better adapt to the needs of regional economic social development and the development of the industry for all kinds of talents.

"Integral body multi wing" talent cultivation mode depends on personality education and "science + art" as the guiding ideology, the meaning of "integral body" is to regard financial ability training and project teaching as a whole, "multi Wing" is diversified construction, diversified and three-dimensional teaching resources platform, to provide students personalized, differentiated, customized education services, students carry out provisions content learning and selective, independent learning, and pursuant to the provisions, of autonomy and selective learning content were credit system change, in order to realize personalized learning and diversified culture<sup>[4]</sup>.

"Integral body multi wing" training mode framework as shown in table 1.

Table 1 table personnel training mode framework

Mode	Module or platform		Platform described
Integral Body	General education	Public required course Public elective courses	The education of students in the whole character and professional quality education.
	Professional education	Professional foundation platform	Enhance students' professional knowledge, abilities and quality education, highlight the post core ability cultivation and professional expertise.
		Professional core modules	
		Professional elective module	
	Practice education	Professional practice education	In all kinds of resources platform for professional ability and quality of exercise and training
		Comprehensive practice education	Through learning the various resources platform, internalize the personality education content.
Multi Wing	Competition resources platform		Providing a rich variety of personalized, customized learning project or activity in resource platform, the student independently choose to suit their own conditions the content of study, to obtain corresponding credit, according to the provisions included in the enrollment files.
	University-enterprise cooperation resource platform		
	Entrepreneurial innovation resources platform		
	International communication resource platform		
	Online courses resources platform		
	Community and social practice resources platform		
	.....		

At present universities exist a common phenomenon in the process of college students cultivating, "five weigh and five light", which is: emphasizing theoretical teaching while despising practical teaching; emphasizing knowledge teaching while despising ability teaching; emphasizing uniform requirements while despising personality development; emphasizing intellectual factors while despising non-intellectual factors training; emphasizing basic knowledge and basic skills training while despising cultivating creative thinking ability, etc. "five light" is a defect of talent cultivation in colleges and universities. To solve the problems existing in the talent training scheme, according to the talents training mode "Integral body multi wing" in the talent training scheme to revise, "Integral body multi wing" training mode is shown in Fig. 1. A scheme of talent cultivation target is more accurate, pay attention to improve students' comprehensive quality and practice ability and the cultivation of innovation spirit and the fabric of the training scheme of course system, teaching content of planning and hours, credit allocation of scientific and reasonable, in line with the training target and the rule of the students' career development.

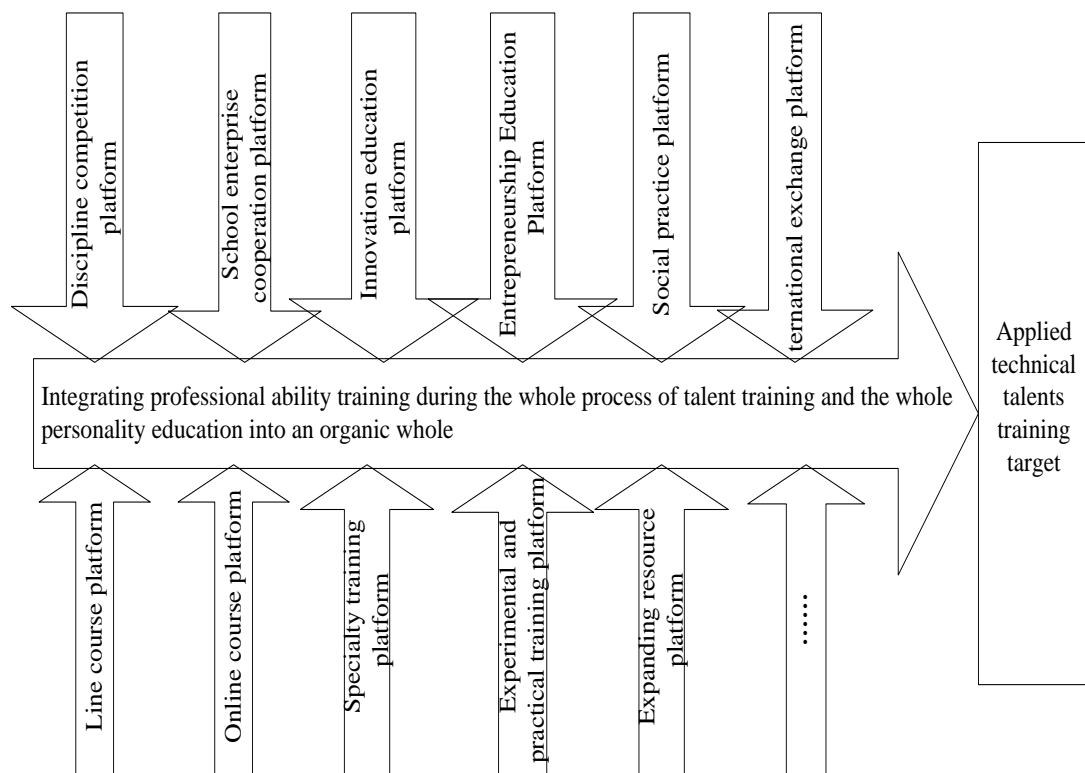


Fig. 1 Integral Body Multi Wing training mode

#### 4. Relying on "Integral body multi wing" personnel training mode to modify the curriculum system

"Integral body multi wing" personnel training model curriculum system as shown in table 2.

Table 2 "Integral body multi wing" personnel training model curriculum system

Category don't	Content of courses		Course nature	Proportion of credits
General Education (58 credits)	Public class must (about 44 units)	The main courses includes English, computer, etc.	Required	≈34%
	The public elective course (about 14 units)	Mainly related to the humanities, social sciences, natural sciences, etc.	Limited selection	
Professional education (65 credits)	Professional foundation platform	Course basic courses, professional courses	Required	≈38%
	Professional core modules	Curriculum group for typical work tasks	Required	
	Professional development module	Vocational qualifications, labor skills and other development courses	Limited selection	
Practice education (49 credits)	Concentrated education practice (45 credits)	General education practice (5 credits)	Required	≈28%
		Practice of professional education (40 credits)	Required	
	Comprehensive educational practice (4 credits)	Social practice module (4 credits)	Required	
total	About 172 credits			100%

#### 4.1 General Education

##### (1) Compulsory courses in general education

Compulsory courses in general education are divided into Ideological and political courses, tools, curriculum, physical education courses, employment and entrepreneurship courses. Each teaching unit can be based on professional quality training needs, the need to add the necessary courses.

##### (2) General education and General Education Elective Course

Through general education must pass the general education elective through general education elective courses is by the students according to their own needs and independent of the choice of courses, a total of eight categories, each class contains a number of courses, requiring each student to take at least 14 credits. General learning methods can be combined with online teaching resources under the line<sup>[5]</sup>.

#### 4.2 Professional education

Professional education curriculum system should be determined according to the requirements of professional post ability. Professional core courses (Group) building ideas should be: clear the corresponding professional post group, to tease out the typical tasks, the typical task of vocational ability analysis and induction, finally mapped into course (Group)<sup>[6]</sup>.

##### (1) Professional basic courses

Professional basic courses are based on professional training objectives and requirements, training students' professional basic theory, basic knowledge, basic skills, professional basic ability of the course. Including basic courses and professional courses.

##### (2) Professional core module

Professional core curriculum is the core of professional orientation and highlights the professional nature of the curriculum. Set up professional core courses (Group) according to the needs of social development and professional needs, to achieve curriculum (Group) and the typical task of docking, curriculum content and specific business (flow) docking. Depending on the actual situation, each professional can set one or more professional direction.

### **(3)Professional development module**

According to the characteristics of the subject, set up the development course, to help students to obtain professional qualifications related to the professional certificate, skills, etc., training students with strong professional skills and professional skills.

### **4.3 Practice education**

#### **(1)Concentrated education practice**

The aim is to cultivate students' practical ability and the ability to solve practical problems. The content includes general education practice and professional education practice.

#### **(2)Comprehensive educational practice**

Practice of comprehensive education mainly refers to the "Ideological and political course" social practice, including social survey, production labor, voluntary service, public welfare activities, science and technology invention and work for student and other social practice activities.

## **5. Conclusion**

"Integral body multi wing" talent training model for application oriented college students based is not solid, characteristics of the foundation is thin, to set up the innovation and entrepreneurship courses, students can according to their own interests to choose courses, aims to cultivate the consciousness of innovation and entrepreneurship<sup>[7]</sup>.That includes professional quality and employment ability, teamwork and leadership, entrepreneurship and innovation marketing ability, business negotiation and execution ability, social etiquette and speech ability, foreign language use and communication skills, information processing and solving ability and career planning and self-management ability etc.

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