

# **A Professional Learning of the Implementation of Individualized Education in Cultivating Mode of Innovative Talents**

## **-- A Case Study of Individualized Education in Hebei University of Science and Technology**

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**Keywords:** Innovative talent training; Individualized education; Implement

**Abstract.** It's an important way in China's educational reform to implement individualized education in higher education. Individualized education is an innovative and student-oriented teaching mode in which students participate, explore, and challenge themselves actively with sufficient teacher-student communication. The following are the major measures to promote individualized education in colleges and universities: setting up the idea of individualized education, establishing the teaching content and curriculum system that are adapted to individualized education, building up individualized teaching management model, practising heuristic teaching and diversified teaching evaluation. This paper proposes some suggestions on ways of implementing individualized education in colleges and universities.

### **Introduction**

The second rule in the State Planning Outline for Medium and Long-term Education Reform and Development(2012-2020) points out clearly that, “ regard the reform and innovation as the main force in the development of education.” The thirty-second rule says, “the innovative talent producing mode should follow the requirement of the development of our country and society, respect the laws of education and talents' growth, deepen the teaching reform, create teaching methods, explore various training ways and form the situation that all kinds of talents emerging constantly.” The Outline also points that, “teach students in accordance of their aptitude, focus on students' different characteristics and individual differences, explore every student's advantages and unify the integrated development and individual development. ” [1] Those provide policy supports for the individualized education.

Individualized education is a kind of new education mode, which is conducted in recent years among the colleges and universities. In recent years, Hebei Science and Technology University has conducted the individualized education and done some teaching practices. This reform of cultivating individualized education has achieved some positive achievements. By exploring the approaches and methods to the individualized education of the innovative talent producing mode in colleges and universities, this paper is trying to promote the development of the innovative talent producing mode into a deeper lever.

### **The Necessity of Individualized Education for Conducting the Innovative Talent Producing Mode**

Individualized education is an creative teaching pattern, with the educatees as it is center. This pattern needs the students to participate and explore independently and the fully communication and self challenging between teachers and students. To some extent, the traditional education has restricted and oppressed individualized development of students. Students' autonomic will can not be cultivated appropriate. Thus, their creative potential is oppressed heavily. Social development

needs individualized education. “Human beings have come into a modern society with knowledge and information. Social development requires increasingly high demand for people’s proactive and creative spirits. The higher education institutions should base on this, and treat the students’ creative development as its educational thoughts. The institutions must implement the thoughts through a variety of education activities.”[2] Innovation stands for not only the highest value of people, but also the core of individuation. To cultivate the creative talents with creative sprite and practical ability is the bounded duty for the higher education institutions. Individualized education promotes characteristic education. It is the unified process for the educatees to strength good qualities and reduce bad ones. It is the conversion process for the educatees to make the real personal qualities into ideal ones. It is the unity between personalization and socialization, others education and self education.

### The Methods to Conduct The Individualized Education

#### 1. The reform of individualized curriculum system

The first thing of the reform is to enhance the flexibility of the courses. The practical courses take more than a half part among all the courses. The practical study is to cultivate students’ abilities of finding, thinking and solving problems and is conducive to students individualized and comprehensive development. Secondly, trying to make diversified adjustments for the required courses and optional courses. Thus, students can make multiple choices among all the required courses. In the School of Art of our university, the arrangements of the individualized curriculum provide diversified courses. Just as chart one shows:

<i>Traditional handicraft</i>	<i>Number of students</i>	<i>Modern Plastic Arts</i>	<i>Number of students</i>
Jun Porcelain	31	Interior Space Design	34
Ru Porcelain	30	Demonstration Space Design	17
Yuxian Paper-cut	33	Industrial product design	16
Wuqiang New Year Pictures	16	Modern Home Lighting Design	16
Inside-snuffbottle Painting of Hebei	7	Modern Clay Design	21
Feng Xiang Clay in Shanxi	15	Modern Paper Arts	10

Fig.1

2. The methods of individualized teaching: self-assessment, convey the needs, individualized study, teamwork, feedback, evaluation and so on. Firstly, those methods need learners to make comprehensive learning pre-assessment, distinguish and define learning requirement and later choose the direction. Based on the selected directions, the learners can preview and collect related materials, and then make visualized creative solutions to improve learning efficiency. Teachers should make suitable solutions for students’ intellective shortcomings while helping their individualized learning. In this process, the traditional face to face learning method plays an important role. Individualized teaching method stresses perception, with interaction, sharing and communication as its features. In the whole teaching process, students can learn automatically with the help of the individualized training plans. This method has already been a main stream of learning. It is a kind of exploring teaching method with the features of knowledge’s recitation, repeatable and easy assessment. It focuses on learning process and effect. “The teaching process

focuses on training students learning strategies and put emotion, will and non-rational factors in consciously teaching. Thus it can provide more space for the full development of the students' personalities.”[3] After class the teachers should make evaluations on students learning, show the achievement and do some feedbacks.

One of the teaching methods in our School of Art is to teach skills and organize students do some practices in many other places(Chart 2). After knowing some skills which are told by the local artist, the students learn related skills by doing some exercises. The second way is to understand the history of the various types of folk art heritages through visiting local museums and heritage room. It aims at broadening students' horizons and let them enjoy the essence of folk art heritages.

<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>
Cizhou kiln, Handan	Fengning Manchu Autonomous County	Shenhu Town, Henan	798 Art Zone, Beijing
Paper-cut Art, Yuxian	Ansai County	Hankun Paper-cut Factory, Wei County	Yangliuqing New Year Picture-Making Gallery, Tianjin
Fengxiang County, Shanxi	Wuqiang County	Hengshui County	Beijing International Design Week Exhibition
Wuqiang County	Cizhou Kiln Museum, Handan	Jingdezhen Ceramic Museum	Ruzhou, Henan

Fig.2

### 3. The management mode of individualized education

The management mode of individualized education is a positive reform to the traditional modeled education. It aims at creating the suitable space for the full development of students advantages and providing institutional guarantee for cultivating students creative abilities. We should establish the "student-centered" management concept and "change the rigid management into the flexible management.”[4] Promoting the management reform, such as, credit system, major and subsidiary courses system, dual-degree system and so on. Reducing the percentage of credits proportion, promoting the percentage of elective credits and conducting the flexible management gradually.

### 4. The reform of individualized education evaluation system

The launching of individualized education promotes the diversified education evaluation system. To make "classroom teaching evaluation services for the students individualized development"[5] needs "renovation of traditional teaching evaluation system and evaluation methods".[6] The evaluation objectives should be diversified, specific and differentiated. The evaluation methods should be diversified comprehensively. Both the focusing of students learning process and ability and the students' assessment are, on the one hand, need to strengthen the guidance to students, and on the other hand, to exam the existing problems. In order to establish a high level of teaching evaluation team, this reform needs to improve teachers' and school managers' overall qualities. Only in this way can we open a new page on teaching-evaluation and promote the reform of teaching evaluation from the basics.

## The outcomes achieved by individualized education

The outcomes achieved by individualized education in our university.

1. The individualized educational outcomes are achieved through participating in high-level competitions. In the National Electronic Design Competition, we won five national first prizes, twelve provincial first prizes; the students from School of Art won the international "Red Dot Supremacy Award" and "Red Dot Award" for 2011; the students from College of Textiles got the

first place in the 16th China Fashion Design for the newcomer; we also got three gold metals and one team championship in the National Aerospace Model Championship.

1. Our University has held the individualized education achievements exhibitions for four times. Some leaders, such as, the Deputy secretary in the Party of Ministry of Education, vice-minister Du Yubo; National Development and Reform Commission and Provincial Department of Education are all speak highly of the outcomes achieved by individualized education.

2. We have developed the “Potential Tutor” system to help students find their potential advantages. Besides, we also made perfect combination between “People-oriented education” and “ individualized education ” and carried out the strong potential targeted individualized education.

3. The self-learning mode is the earliest symbolic achievement in the individualized cultivation. The educational transformation from theoretical to practical and creative is another achievement of the individualized education. In this process, the relation between theory and practice becomes more and more matured with the wide participation of teachers and students. We have formed the preliminary individualized education system. This system needs us to pay attention to the development of students potential, creative ability and personality modernization. The teachers should treat the “taking students as guides” as the educational rule, obey students’ talents, improve students’ potential, stick to the “human-oriented” idea and implement the quality-oriented education.

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