

# Reform and Innovation of Higher Education in Economic Reform Period

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**Abstract:** The birth of economic reform marks the arrival of a new era. As the superstructure of society, higher education is inevitably affected by the social and economic development. Since the reform and opening up, especially since the 1990s, the school has clearly stated that talent training is the fundamental work of the school, and higher education is regarded as the foundation of all work of the school. The development level of higher education is not only the main symbol of a country's development strength and potential, but also an important support for promoting economic reform and upgrading. Since the reform and opening up, China has initially formed a multi category, multi-level, multi form and multi specification higher education school running system, and trained tens of millions of management cadres and professional and technical personnel from all walks of life. After introducing the economic challenges of higher education abroad and the current situation of higher education in my country, the article focuses on the interaction between economic reform and higher education, and further proposes how to reform and innovate higher education in my country under the environment of economic reform.

**Keywords:** Economic reform, Higher education, Reform, Innovate.

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## 1. Introduction

The development level of higher education is not only the main symbol of a country's development strength and potential, but also an important support for promoting economic reform and upgrading. Since the reform and opening up, China has initially formed a multi category, multi-level, multi form and multi specification higher education school running system, and trained tens of millions of management cadres and professional and technical personnel from all walks of life [1]. Higher education has played an irreplaceable role in promoting the popularization of education, improving the quality of workers and cultivating all kinds of talents in society. The economic era is the era of knowledge innovation talents, and education will pay more attention to the improvement of quality and the cultivation of talents' quality [2]. Education will show a lifelong trend in the expansion of time, and a global trend in the expansion of space. This requires that the reform of college education must stand on a new strategic height of future development, have a broader vision, think more dialectically, and have a more long-term vision, re-examine and choose the strategic thinking of the reform of college education, in order to cultivate more high school students. Quality and creative talents to meet the needs of economic times.

Since the reform and opening up, especially since the 1990s, the school has clearly put forward that talent cultivation is the fundamental work of the school, and has taken higher education as the foundation of all school work [3]. It is to improve the development level of China's higher education and strengthen the core competitiveness of the country. However, with the social and economic situation and the continuous development of education, higher education is facing new challenges, and multiple problems such as teaching mode, teaching management and teaching quality have emerged one after another. How to make China's higher education develop with high quality, high efficiency, speed and sustainability has become the focus of discussion and

research.

## 2. Economic Reform and Upgrading Urgently Need Higher Education Structural Reform

### 2.1. Economic Development: Higher Education Models

Judging from the development history of higher education in many developed countries in the world, the mode of British higher education in response to economic reform is: strengthening market awareness; strengthening the connection with society; attaching importance to quality improvement. The leading mode of American education technology in response to economic reform is: high-quality innovative talent cultivation; combination of university research and social production; American higher education has obvious market economy characteristics—such as inter-school competition, Competition for teachers and students [4]. As the main channel for the supply of high-end talents, higher education has provided a strong guarantee of human resources for China's economic reform and development. China's higher education has implemented a management system characterized by unity for a long time. This system makes schools, teachers and students lack the competitive spirit, which is the remarkable feature of the market economy. Leaders do not need to consider whether schools can exist in the tide of the market economy, Teachers only need to consider completing the task according to the syllabus, not teaching reform, and students only need to consider the present, not whether they can "live" in society in the future [5]. Obviously, this school-running mechanism is seriously lacking in vitality and adaptability, and needs to be changed urgently. As a result, the traditional economic development mode is unsustainable. China's economic transformation to the high end not only expects a more harmonious development mode, but also needs to achieve sustainable

economic growth by improving the efficiency of "human capital".

## 2.2. Economic Development: Higher Education Increases Productivity

Since the reform and opening up, China's traditional production factors such as labor, capital and land have made a high contribution to productivity growth, while the improvement of knowledge accumulation, education and training, economies of scale and organization management have not made enough contribution to productivity growth. At this stage, China's demographic dividend has gradually

disappeared, the traditional source of economic growth has begun to weaken, and the demand for forming "technological dividend" by relying on technological progress has become increasingly prominent [6]. From the perspective of the structure of scientific and technological research in my country's higher education, there is a mismatch between scientific and technological investment and the transformation of achievements. The total amount of scientific research funding in my country has gradually increased, and its proportion in GDP has also increased steadily. As shown in Table 1, the total amount and proportion of my country's R&D expenditures have changed in recent years.

**Table 1.** Changes in total R & D expenditure and proportion

Particular year	2016	2017	2018	2019	2020	2021
R&D investment (billion)	1418.0	1542.0	1245.0	1502.0	1425.0	1612.0
Proportion in GDP (%)	2.07	2.09	1.78	2.08	2.08	3.02

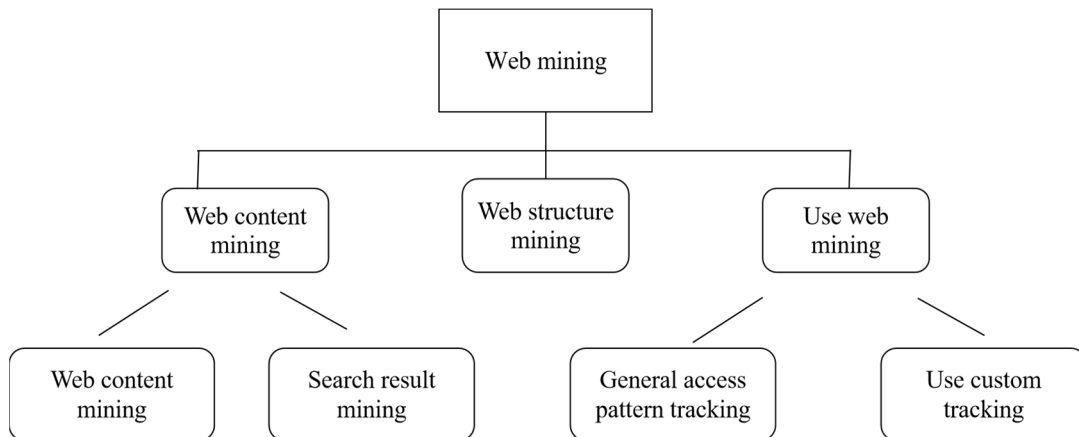
Higher education affects the direction and speed of economic development to a great extent. The worldwide economic competition is essentially the competition of science and technology and the competition of national quality. Actively serving the economy is the trend of educational development. At present, colleges and universities all over the country are trying to participate in and expand their role in economic development. As an educational institution, higher education constantly transports educated workers to support economic construction and development. With the increasing requirements for workers' education level, the role and responsibility of colleges and universities are also increasing.

## 3. Strategies for Promoting the Reform of Higher Education Structure

### 3.1. Cultivation of innovative and entrepreneurial talents

First, strengthen the training of high-end science and engineering talents, focus on promoting the construction of new engineering, and lay a solid foundation for scientific and technological innovation. For colleges and universities, we should pay close attention to the new requirements of the adjustment and optimization of industrial structure on the knowledge and ability of talent training [7]. In the national innovation system, institutions of higher learning and research institutes should become the source of knowledge

innovation, while enterprises are the main body of knowledge application innovation. The development of enterprises drives technological innovation, thus promoting the growth of many emerging disciplines in higher education. Second, take innovation and entrepreneurship education as a breakthrough in the supply-side reform of higher education, and improve the ability of higher education to serve economic and social development. According to the urgent needs of economic reform and upgrading, it is particularly important for China to comprehensively promote innovation and entrepreneurship education. With the advent of economic transformation and the gradual advancement of the popularization of higher education, colleges and universities have gradually realized that students pay fees to go to school and choose their own careers. Higher education employment "meet supply and demand, two-way choice", this measure is conducive to enhancing the vitality of education to promote market economy and social development, and mobilizing the enthusiasm of college teachers and students. The third is to formulate a comprehensive training plan and actively build the quality structure of compound talents. According to the school's training objectives, the school will reform the teaching plan that used to be unified and focused on imparting knowledge in the classroom, and formulate a comprehensive training plan focusing on teaching and integrating the cultivation of ethics, science and technology and humanistic quality. Figure 1 shows the activities of Web Mining in higher education reform.



**Figure 1.** Display of Web mining activities of higher education in economic reform

### 3.2. Globalization Layout of Higher Education

In today's world, the concept of globalization has penetrated into various fields of higher education. Under the background of economic globalization and transformation and upgrading, the educational structure reform of China's higher education should also follow the trend. The core value of the higher education system lies in the strategic choice that higher education should provide higher education human resources suitable for scale, quality and structure for regional economic and social development. Taking the characteristics of higher education and social and cultural development needs of the regional economy and industrial structure as the code of conduct for planning majors, personnel training standards, higher education standards and training courses, and ultimately realizing the coordinated development and mutual development of higher education and higher education regional economy and society. Promote. The first is to promote the reform of the structure of higher education talents, and effectively cultivate various talents that meet the needs of regional development in higher education [8]. In order to change this situation, enhance self survival ability and improve the conditions of running higher education, major colleges and universities have begun to make extensive contact with all sectors of society, implement open-door running of higher education, joint running of schools, strive for foreign investment, and develop school run industrial higher education combined with industry, University and research. On the one hand, they can actively adapt to the development needs of market economy and society, and on the other hand, higher education can improve the economic strength of independent running schools and enhance the vitality of running schools [9]. Second, higher education is to attract more international high-level scientific and technological innovators before higher education joins China's higher education system, so as to raise the level of higher education resources of higher education teachers and promote the development of scientific and technological innovation and entrepreneurship.

### 3.3. Build A Sustainable Funding Guarantee Mechanism

Economic reform and upgrading not only requires first-in-class trials, but also requires balanced advancement of higher education. Through innovative growth, the gap between economic and social development between China's eastern and western higher education regions and between urban and rural areas can be reduced. Governments at all levels need to establish a higher education funding guarantee mechanism for benign higher education. Higher education colleges and universities serving economic development is one of the important ways to give full play to the advantages of colleges and universities, fund higher education resources and deepen the reform of colleges and universities. At the same time, it is also an opportunity for colleges and universities to quickly and effectively adapt higher education to the needs of society and open up new tasks. First, higher education is to increase subsidies for students with family difficulties and students with high-level academic qualifications, so that students can study at ease and devote themselves to research in Higher Education [10]. Accurate poverty alleviation can help poor students successfully complete their studies, so the scope should be expanded and the subsidy standard should be raised.

The second is to raise the standard of scientific research funds and relax the mechanism of fund management in higher education. Further investment in scientific research and innovation in higher education is an important part of giving full play to scientific and technological innovation in colleges and universities to support the transformation of economy into higher education. In terms of financial investment, the school can raise school-running funds through multiple channels such as co-construction and joint school-running. At the same time, the school can rationally allocate resources through connotation development, improve the use efficiency of funds and teaching facilities, and lay a solid foundation for comprehensively improving the quality of higher education. material basis.

## 4. Conclusions

To sum up, in the era of economic reform, the world's competition is becoming increasingly fierce. If China wants to win the competition, it must cultivate high-quality talents as soon as possible to improve its comprehensive national strength and meet the requirements of the knowledge economy. Higher education is a new educational system from traditional school education to lifelong education. Its development represents the trend and direction of educational reform and development. Higher education is facing a changeable external environment. We should face the diversified talent needs of enterprises and the diversified needs of talent growth. Only by being brave in innovation, willing to start a business, and good at cultivating a dynamic entrepreneurial mechanism, entrepreneurial team and culture, can we accumulate the inexhaustible driving force for the sustainable development of higher education. Nowadays, many enterprises attach great importance to students' abilities, such as oral expression, cooperation, practice, writing and English communication, while examining their professional achievements. Therefore, colleges and universities should encourage college students to improve their abilities in all aspects and cultivate high-quality talents. Therefore, the reform and innovation of China's higher education is imperative.

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