Development of College Students’ Innovation and Entrepreneurship Ability under the Model of Personalized Education

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Abstract The essence of personalized education is an innovative education that respects individual differences. With the continuous evolution of the times, the ability of innovation and entrepreneurship has become the key to reflecting comprehensive national strength. In response to the call of China to build "an innovative country", colleges and universities should cultivate students' individualized thinking and methods and abilities to solve problems on the basis of respecting the creativity and subjectivity of college students, and lay a solid foundation for students' future innovation and entrepreneurship. In this paper, the present situation of students' independent development promoted by personalized education at home and abroad was analyzed firstly, and the existing problems and solutions were pointed out. The study aims to contribute to the acceleration of China’s innovation-driven development.

Key words Personalized education, Innovation and entrepreneurship, Capacity development

1 Introduction
With the advent of the era of smart economy, the state needs to cultivate innovative research talents [1]. In this context, the development of China's future economic and social structure depends on the youth's ability of individualized innovation and entrepreneurship [2]. As the main force of individualized youth, college students have great potential for innovation and development. As the main bases for cultivating individualized innovative talents, colleges and universities focus on personalized education to highlight students' individualized awareness more effectively, cultivate a large number of high-quality individualized talents, provide talent security and intellectual contribution to the construction of individualized innovative countries, and implement important measures of innovative national strategies [3-4]. At the same time, it is needed to explore advantages of individualized innovation of college students to develop students' good sense of individuality and find their highlights. In order to better realize personalized education, relying on the theory of personalized education, the training mode and strategy of college students' innovation and entrepreneurship ability were studied, which has important practical significance for the work of cultivating talents in college and universities.

2 Present condition of personalized education development at home and abroad
2.1 Analysis of present condition of foreign personalized education
2.1.1 Development of personalized education theory. At present, foreign studies on personalized education mainly focus on the fields of psychology and education. As early as the early 1980s, Japan advocated the emphasis on personalized education research, and regarded cultivating individualized innovative ideas from childhood as a national policy of education [5]. As one of the countries that attaches great importance to personalized education, the United States has the educational philosophy that "everyone has his own personality and different talents, and giving full play to individual talents is the ultimate goal and principle of moral education" [6]. The French educational philosophy requires the development of college students' mentality of "self-discipline" and "freedom" in higher education. Through the above research, it is found that early foreign countries realized the importance of personalized education earlier, and carried out individualized theory and practice research in the early stage. It can be seen that personalized education can be said to be the focus of global education development.

2.1.2 More investment in education. Foreign countries not only carry out personalized education early, but also attach great importance to education investment. For example, since the 1950s, the federal government of the United States has increased the proportion of investment in education year by year, from 0.4% in 1929 to 7.3%. The United Kingdom raised funds through taxation and other methods. As of 2004, British universities received a total of 14.5 billion pounds of funding each year. The state is increasing its investment and planning for education funds to realize the rational use of education funds and lay a solid foundation for cultivating innovative talents. While providing financial support for personalized education, France also has established relevant laws to ensure the normal operation of the system. In addition, the government also encourages enterprises to invest in education and publishes relevant incentive policies, not only to train outstanding students in advance for enterprises, but also to reduce some em-
ployment pressure, so that the severe employment situation has been reasonably improved\textsuperscript{[7–9].} Therefore, foreign countries have long recognized the importance of personalized education for the development of the youth, and individualized youth is the foundation of national development and the driving force of promoting national economy and people’s life.

2.1.3 Paying attention to learning for practice and cultivating personality. In May 1998, at the centennial anniversary of Peking University, the president of Waseda University in Japan said; the philosophy of Waseda University is to cultivate students’ independent personality, and academics should not be subject to political or economic constraints or influenced by various foreign authorities; students should be encouraged to innovate to be thoughtful college students in the new era, namely the high-level personalized talents with taste, ability and social respect in the world\textsuperscript{[10].} In order to cultivate college students with new era characteristics, schools organize various kinds of associations and social practice activities in a targeted manner, advocate divergent thinking, and continuously discover and exert students’ interest. The University of Cambridge, which has trained many Nobel Prize winners, has its own unique insights into the concept of running a school. On the basis of learning basic theoretical courses, a science park with a large scale and complete categories and based on high technology has been built around the university. It provides favorable conditions for students’ practice innovation and scientific research, so that students’ hobbies and interests are fully exerted. In terms of talent development, the University of Cambridge pays attention to teaching students in accordance with their aptitude, and guides students according to their personality characteristics, so that students can maximize their personal characteristics; undergraduate education are mostly provided in small groups in social practice and laboratories, and students can not only develop their own roles but also develop and train teamwork skills\textsuperscript{[11].} Therefore, the ideological education model that respects individualized life, relievessolidification model, emphasizes independent thinking and dialectical thinking, and rejects binding is a personalized education model that adapts to social development.

2.2 Analysis of present condition of personalized education in China

2.2.1 The theory of personalized education is poor and the characteristics are not significant. Research on the practice of personalized education in China is rare. Most of its contents lack characteristics and are mainly based on the existing research conclusions of education and psychology, such as the innovative and entrepreneurial education book \textit{Innovation and Entrepreneurship Education——Theoretical and Practical Exploration and Entrepreneurial Psychological Expansion of College Students} focusing on practicality, which are written according to five-year educational practice\textsuperscript{[12–13].} At present, the research on personalized education in China is still in its infancy, and there are few monographs on personalized education, while most studies are research papers, such as \textit{Cultivation of College Students’ Entrepreneurial Ability from the Perspective of Ideological and Political Education and Principles and Methods of Individualization of Ideological and Political Education Work}. In recent years, although China’s education provides college students with diverse educational resources and the right to choose independently, there is no guidance of scientific theories. Scientific research in this field still needs to be strengthened and deepened continuously.

2.2.2 Cultivation of students’ innovation entrepreneurial ability starts late. The research and implementation of personalized education in China’s colleges and universities began in the late 20th century. In 1997, Tsinghua University held the ”first business plan competition”, which created a precedent for personalized education in China. In 2002, the Ministry of Education used nine colleges and universities as the first pilot units of personalized education, and personalized education officially kicked off in colleges and universities\textsuperscript{[14].} As more and more countries begin to promote the cultivation of innovation and entrepreneurship ability, research on personalized education theory has gradually developed in China. After years of accumulation and learning, it has achieved a preliminary scale in the practice of personalized education. However, the implementation of personalized education in China is relatively late, so the research is still based on exploration, and there are still many shortcomings. Therefore, colleges and universities need to establish a set of scientific personalized education system, based on the national conditions and adapt to the economic development situation, consider the specific situation of college students, teach students in accordance with their aptitude, carry out various practical activities, cultivate individualized innovative and entrepreneurial talents, and reserve talents for the construction of an innovative country and the realization of the Chinese dream.

2.2.3 There is a lack of innovative faculty. Colleges and universities are the main bases for the cultivation and saving of individualized talents in China, shouldering the important responsibility of cultivating individualized talents. Chernyshevsky once said; what kind of person a teacher should make a student, the teacher should be such a person\textsuperscript{[15–16].} Therefore, cultivating students’ individualized innovative ability should be based on improving teachers’ individualized innovative qualities. At present, education and teaching models of most colleges and universities are relatively backward, and the teaching methods are single. Teachers only instill knowledge into students, and there is a lack of diversified and all-round education. They pay too much attention to students’ academic achievements, but ignore the importance of students’ innovation and entrepreneurship ability, which limits the individualized thinking development of students. In colleges and universities, teachers have the most contact with students and have the most profound influence on students. They are the most important part of cultivating students’ innovation and entrepreneurship ability. Therefore, the
innovation quality of teachers is very important.

3 Effective ways to improve college students’ innovation under the model of personalized education

Through the comparison of present situation of personalized education research at home and abroad, it is found that there are still many shortcomings in the cultivation of talents in China compared with other advanced countries. Based on the research results of domestic and foreign experts and scholars, it is necessary to take the essence and discard its dross, update traditional passive education of students, and vigorously carry out personalized education, so that students’ interests can be fully utilized to create college students in the new era. Perennial cramming education model has been formed, so modern students have a strong resistance to boring political preaching and old-fashioned indoctrination, which is not easy to change. In order to improve the innovation of college students under the model of personalized education, at first, the government should implement the policy of individualized personnel training. In addition, it needs to increase investment in education and improve various legal systems, recognizes the role of universities in cultivating educational talents to provide strong help for cultivating and educating individualized talents. Secondly, colleges and universities should adopt flexible teaching methods to promote cultural exchanges between China and the West, and fully stimulate students’ interest. Colleges and universities should give students a platform for free choice, and should set up reward mechanisms to increase students’ interest and initiative, thereby respecting students’ opinions or suggestions to the greatest extent and encourage their self-confidence. In a family, it is also advocated that children should have their own opinions. Only through continuous reform and innovation can China’s personalized education level be continuously improved and developed.

4 Conclusions

Personalized education is an education that promotes the independent development of individuals, and has unique advantages in promoting the cultivation of college students’ innovative and entrepreneurial ability. Personalized talents are created under the dual influence of the background of the times and knowledge culture. As the main bases for cultivating individualized talents, colleges and universities need to conform to the requirements of the times, dare to innovate on the basis of summing up traditional experiences, and dare to face problems and solve problems. It is needed to update traditional education, actively absorb the essence of foreign education system, give it new educational concept, improve students’ innovative and entrepreneurial psychological quality and entrepreneurial adaptability, and create a good educational environment for the cultivation of students’ individualized thinking mode. All in all, it is not a breeze to carry out personalized inno-

vative education in colleges and universities. It is needed to carry out long-term planning in light of China’s national conditions, develop truths in practice, meet challenges, solve existing problems, and gradually build China’s unique personalized education concept, and contribute to the construction of an innovative socialist country with Chinese characteristics.

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