

# Higher education popularization and promoted application of modern education technology

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**Abstract:** Higher education popularization refers to a higher education activity and phenomenon which is happening currently in the whole world, while higher education in our country is also in the popularization process. Higher education popularization in our country is the one in the country which accounts for 1/5 population of the whole world, is the largest-scale activity in the world, we must pay much attention to it. From historical perspective, higher education is developing continuously, the later stage of which is based on the previous stage for its development, therefore, the whole process of higher education in our country from elite stage to popularization stage and even to widespread stage can be taken as the process of higher education popularization.

## 1. Introduction

As a fresh kind of higher education, technology-applied university has had a history of 17 years in our country since it was proposed in 1998. For a short time, though such kind of university has made some achievements in the construction and development processes, it is still in the preliminary stage. Even if the state universities in overseas, such as state university in America and “new university” in England, have also taken 30 years to explore the schooling method and mode thus to win recognition from the society. In our country which is one “backward country” in the higher education post-popularization stage, technology-applied university doesn’t experience the promotion process from bottom to top like those in developed countries, but instead, it is guided by the government’s macro-policy under the large support of the Party and the country, which is promoted from top to bottom and develops rapidly. In the development process, only when the technology-applied universities closely center on the overall view of serving for the local and social development, orientate at serving for students’ employment and pursue for school construction and development can they become excellent and win recognition from students and the society. But the development of technology-applied university is not self-conscious but is passive. Therefore, the technology-applied universities in our country face difficulties in theoretical system and education system software as well as hardwares such as fund, teaching staff and practical base, and many development problems need to be solved. The reformed technology-applied university will become the symbolic “product” to directly serve for the society, wherein, how should it coordinate with higher education system, science and technology and economic system for development still needs theory researchers to make further exploration and needs other technology-applied universities to make summary thus to make the problem reach to a national perspective for standardization.

## 2. Higher education popularization

In this paper, higher education post-popularization stage is defined as the stage that after higher education popularization develops to a higher level, the enrollment rate of school-aged population appears with stagnation and fluctuation while the growth rate of non-traditional students increases continuously and surpasses the enrollment rate of school-aged population, besides, repeated enrollment of school-aged population exists and higher education tends to be lifelong learning. This stage refers to the “later period” of popularization and “early period” of widespread stage proposed by Martin Trow.

### **3. The learning mode of working and learning alternation reverses the development of technology-applied university**

In the post-popularization stage of higher education, the whole society enters into a strong atmosphere for study. The traditional learning mode that requires students to complete all courses in school for graduation will be out of fashion, but instead, the students can graduate without completing all courses continuously in school, they can prolong their learning duration in a noncontinuous way until they complete all credits for graduation. Owing to increasing of sensitivity to labor market, the modes of working and learning alternation and in-service learning may appear, in addition, some high school graduates can have other choices temporarily and then enter higher education institution again, some university students select further learning after graduation and even some students can go back to school again when they drop out of school, which is a “noncontinuous” learning mode.

Technology-applied university requires students to combine practice with theory, persist in combinatorial use of hands and brain, and put learnt knowledge into practice; besides, it provides the mode of working and learning alternation for students to seek for work in face of urgent demand on professional technicians, and learn in spare time, which can not only transform knowledge into practice but also can satisfy the development of enterprise and economy. Such kind of transformation is also a significant characteristic in the post-popularization stage of higher education. At present, transformation of ordinary university to technology-applied university is urgent, therefore, related universities should realize transformation actively and take positive measures to face such kind of change and undertake this task.

### **4. Technology-based learning contents promote the development of technology-applied university**

With increasing development of the society, more and more technicians are needed, especially high-level technicians. However, it is difficult to find such kind of talents from any kind of education type and level. But technology-applied universities combine skill with theory to practically solve the demand on such kind of talents, besides, this is the only way. Wherein, learning technology-based contents is the main knowledge form for the students in technology-applied universities. Technology-based knowledge refers to solving difficulties in production and life based on theoretical knowledge and practical knowledge, which is featured with functionality, situationality, analysis and complication of thinking, therefore, technology-applied universities mainly combine theoretical knowledge with technology-based knowledge, but stress technology-based contents, which is different from stressing theoretical knowledge of traditional universities. What's more, technology-based universities set education contents from perspectives of politics, society, economy, ecology and human development, which integrates universality, theoretical property and operability.

A large number of technology-applied talents are needed not just for social development, but with the advent of learning-orientation era, people pay more and more attention to applied technology in the post-popularization stage of higher education, stress more on actual work capacity and neglect diploma and education background, therefore, more and more people enter into university to learn one certain skill to make up for defect and improve themselves. Most students have work experience, and they choose to learn in order to solve capacity insufficiency in production and life, wherein, the learning contents are technology-based knowledge needed for students, which is characteristic by short-term, practicability and modularity, as a result, the students can qualify their work within short-term training. In this stage, higher education is to realize self-enhancement and self-development, which is difficult for traditional education school, but technology-applied university can satisfy the demand of personalized development.

## **5. Formation of lifelong education concept promotes the development of technology-applied university**

Diploma-pursuing phenomenon in traditional education is dominant. With the advent of knowledge economy, people's ideological and educational concepts have also changed largely, accordingly, learning is not just for vanity but the demand of people in life and work to enhance ability, strengthen skill, influence sentiment and make improvement. Lifelong education or lifelong learning has become new normal, students choose to learn more owing to conscientiousness instead of being forced or completely narrow utility purpose. Therefore, people pursue higher education not for diploma but center on learning knowledge and mastering skills to enhance learning capacity and complete self-actualization.

The reasons for appearance of lifelong education: firstly, in the learning-orientation society, science and technology is progressing gradually, and accordingly, knowledge has lost its durability, therefore, original knowledge can not adapt to the development of modern society. In order to keep up with the times and display their talent, many people choose to return to university to have further learning to "improve themselves", update their old knowledge and make break-through in their work positions. Secondly, the development of great industry has prompted new industries to emerge constantly. At present, our country is in the key stage of industrial transformation and upgrading, wherein, the tertiary industry has developed rapidly, especially the service industry, while the primary industry is declining. Owing to industrial transformation and upgrading, labor turnover is changing quickly, moreover, some factories are closed, meanwhile, many employees face dismissal crisis and can not adapt to re-employment based on original skills. In order to find a job suitable to social development, they have to accept further education and "pre-post training" to obtain new skills for a new job. Thirdly, the development of great industry increases free time, therefore, people accept further education not for instant consumption but making investment to create situation for comprehensive development. For the purpose of cultivating taste, people choose to learn knowledge and skills in spare time to gradually form their own interests and hobbies, which is the important choice for people to accept lifelong education.

## **6. Conclusion**

In the post-popularization stage of higher education, the important significance and measure of developing technology-applied university determines the importance of this topic research. This research is helpful for having clear thinking and correct cognition on some typical phenomena and characteristics appeared in the post-popularization stage of higher education as well as the development trend of higher education. Our country entering into the post-popularization stage of higher education means the higher education structure and system in our country should be reformed and keep up with the times instead of stepping towards original route, therefore, it is needed to strengthen theoretical research on developing technology-applied university in the post-popularization stage of higher education, which is helpful to correctly recognize the post-popularization of higher education in our country, explore rules and find out methods thus to find theoretical foundation for developing technology-applied university, enrich and develop higher education theory.

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