The Development of Higher Education in the Era of “Internet Plus”

Huizhuo Li, Quanzhou Xu, Bin Song
Institute of Chemical Defence, Beijing, China

Keywords: “Internet plus”; higher education, technology

Abstract: With the continuous development of the internet era, the integration of internet and higher education has become the theme of our times. Under such a background, this paper has introduced the concepts of "Internet plus" and higher education at first, and then analyzed the bottleneck and its causes of the "Internet plus" education in higher education. Finally, it has given some strategies and suggestions about the integration of "Internet plus" and higher education in order to better promote the fast development of higher education.

1. Introduction

1.1 The concept of "Internet plus"

Premier Li Keqiang firstly proposed the "Internet plus" in the 2015 government work report. The concept made clear that internet should highly combine with other industries, so as to establish new industries by starting businesses and promote the update of traditional industries. "Internet plus" is an important impetus in current development, which crosses the time and regional constraints, and organically combines internet with other traditional industries to promote social and economic development.

1.2 The concept of higher education

Higher education mainly refers to re-education activities after people having finished their secondary education, aiming to cultivate specialized talents. Higher education appeared in Europe several hundred years ago, and now many countries are carrying out education transformation to adapt to better personnel training. For our country, higher education contains ordinary higher education as well as adult education, self-examination, open university and other different types of education.

2. The reasons of development bottleneck of higher education of “Internet plus”

2.1 The development bottleneck of higher education in the “Internet plus” era

2.1.1 The basic problems of current higher education in China

After several-decades development of higher education in China, it has made great progress in both quality and scale while met some problems need to be resolved immediately.

Firstly, insufficient fund. Our government has mainly put fund into universities of "985 Project" and “211 Project”, and general universities is seriously inadequate in fund, resulting problems in infrastructure investment and school scale expansion. Although China's annual investment in education is increasing, per capital education funding is still declining because of the scale of colleges and universities are also expanding. In addition, private capital hasn't been directly involved in higher education, which imposes restrictions on the development of many public universities.

Secondly, there exists problems in the scale and quality of teachers. For colleges and universities, it’s difficult to improve the quantity and quality of teachers in an action, so it can’t meet the expansion requirement of colleges and universities in a short period. For colleges and universities, although the quantity of teachers is increasing every year, but the rate is slower than the increase rate of students, and new teachers are often inadequate in teaching experience. In addition, the relatively heavy teaching task and plenty of research tasks lead to some academic moral anomie phenomenon.
Thirdly, the teaching quality of higher education is declining. China has expanded fast in recent years, although education resources are increasing under the background, it’s far less than the quantity of students, resulting that per capital education resources are declining, among which the most significant feature is the lack of teachers.

Fourthly, there exists inequity in higher education. Although colleges and universities in China are increasing enrollment all the time and it has benefited more general people, which meets their demand of higher education in a certain level, the access of higher education, in fact, has regional difference, and there is opportunity inequality around China.

Fifthly, colleges and universities become similar in structure. As the quantity of colleges and universities are increasing, their discipline structures are similar without their own characteristic subjects.

2.1.2 The thinking path of “Internet plus” hasn’t been formed.

For many traditional universities influenced by existing education idea and education thinking path, the “Internet plus” hasn’t been carried out in teaching, even some scholars are inimical to it. On the one hand, some universities haven’t kept up with the demands of the times, and they can’t implement “Internet plus”. On the other hand, some social education platforms or industries depend on the internet technology excessively, neglecting the rich resources in universities, which can’t combine the internet platform well with universities. Therefore, many education platforms lack enough cultural deposits.

2.1.3 The lack of technology and equipment

Although China's internet network develops rapidly in recent years, the country has entered the 4G network era and 5G network will come true soon in the near future, low internet coverage rate and high price of internet exist in some economically underdeveloped areas. China should enhance its internet coverage through various effective ways, such as provide internet terminal equipment to the less developed areas through the use of fiber or the internet to ensure that all universities have access to quality educational resources through internet.

2.2 Analysis of causes

2.2.1 Improper system and lagging notion

China's higher education has been dominated by public power, and many private capital will not get involve in higher education, which also causes the lack of funding for higher education. There are also some unreasonable phenomena in the quantity of teachers and the mechanism of teacher evaluation, which has led to a decline in the quality of higher education. Current traditional higher education model in China has lasted for hundreds of years, in which teaching model is face to face model and the vast majority of teachers and students have been accustomed to the traditional method. Teachers are the main body and core of educational activities in traditional learning while students are teaching core in the "Internet plus" education model. In addition, some educators haven’t kept pace with the times, and they have less knowledge of big data or cloud computing.

2.2.2 Regional disequilibrium and lagging facilities

Colleges and universities in developed regions and underdeveloped regions have lopsidedness in the development path of “Internet plus” due to unbalanced economic development. The internet education in some underdeveloped areas depends heavily on infrastructure, but their infrastructure construction is relatively lagging behind, even some regions have no infrastructure at all, which imposes great constrains on the popularization and promotion of internet education.

2.2.3 Scanty talents and lagging technology

"Internet plus" has become a representative for new technologies. Big data, cloud computing and some other technologies are also the latest technology of the times, and 3D printing, VR technology, quantum computers, etc. will be put into practical applications soon. For higher education in the era of "Internet plus", we must introduce talents who master these high-tech, so as to quickly combine the
school education and Internet education together and set up a platform for internet education to realize education resources sharing.

At present, the intranet of some universities is still in the construction stage and the broadband speed is also very limited. In the era of "Internet plus", such practices make these school unable to adapt to the development of internet. To realize "Internet plus" education and provide a better online study platform, backward equipment and network must be eliminated and efficient campus network should be established.

3. The suggestions on the integration between "Internet plus" and higher education

3.1 Eliminate the preconception of "Internet plus"

For human beings, the fast development of internet can be regarded as the fourth industrial revolution in human society, this kind of change impacts all walks of life in a fast speed. In the leap process, higher education, as a model to cultivate social elites, is no exception. Education, a very old industry, has been existing for thousands of years in China. It has adopted a rigid approach in teaching before the industrial revolution, but it has received an unprecedented impact when facing with internet technology revolution.

Many people believe that internet is constantly invading all traditional industries, some people think that internet is only a tool and haven’t put enough attention on it. In fact, there is no contradiction between internet and higher education, they can integrate and develop together. Internet development can bring new opportunities for higher education while the progress in higher education is bound to promote the upgrade of internet technology. There will form a new education model based on internet, and the mass will participate in it in the future integration process between "Internet plus" and higher education. In the trend of social life become more Internet, people have higher demand on education, forming higher education in "Internet plus" era.

Internet transforms from PC terminal to mobile terminal and wired broadband to 4G wireless, and the internet application also transform from professionals to social public. Internet has penetrated into every aspect of life. In the era of "Internet plus", internet is not only a technology that people can not only search for class video but also interact with teachers, carry out fragmented learning and individualized learning, making education a wireless learning model that people can choose whenever or wherever they want.

The internet era requires that internet penetrates into all sectors of the society. Internet shows its real meaning in modern application. The main role of internet is to serve users and remove the media, so as to rebuild the whole social relations. Therefore, higher education should follow the characteristics of internet and continue to develop new education forms.

3.2 Take the advantage of “Internet plus”

At first, higher education should integrate with internet technology comprehensively. In the era of technology, higher education should combine with internet rather than avoid it. Efficient interactive technology can shorten the time period of higher education, provide multiple teaching methods, share teaching resources, finally making teaching basis more multiple. In the application of internet technology, micro class is a good example, which can record the teaching process of teachers, then enable students to listen again and again if some content hasn’t been digested after class. Students will have a better understanding in such a way.

Going forward, increase technology staffs and technology equipment of internet. As for education, it’s unrealistic to only depend on national investment, so we can bring private capital into public education infrastructure in a small scale. Integrating private capital with internet education organically to enhance the development of internet infrastructure in colleges and universities. Colleges and universities should enlarge internet investment and accelerate the establishment of campus high-speed internet, so as to enable students to use internet whenever and wherever they want.

Finally, teachers in colleges and universities should be integrated with “Internet plus”. From the
experience of internet development, it’s development dependent not only on investment. As teachers in colleges and universities are first-tier workers in the era of “Internet plus”, they should participate in “Internet plus” education at first and apply internet in teaching proficiently to ensure that teachers can effectively use internet in future internet education. It’s a real integration of internet and education for students to study online in the form of group or individual.

References


