

How Local Undergraduate Colleges Build the Occupation Education in the Cloud Economy

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Abstract. The cloud economy is the mainstream economic future, which will bring huge impact and change to occupation education, thus changing the existing training goal, training mode and curriculum model for the local undergraduate colleges. This paper focuses on the innovation way of how the local undergraduate colleges adapt to the economic characteristics of the cloud, define diverse training target, and implement 1+2+1 or flexible educational system, reform curriculum.

Keywords: Cloud Economy; Training Model; Cloud Education

1. INTRODUCTION

"Cloud" refers to very large scale data and service center and this concept is accompanied by the rapid development of the communication technology. A concept corresponding to the "cloud" is called as "end", which refers to a variety of individuals sending or receiving the information in the "cloud". "Cloud computing" makes the calculation, storage, and exchange capacity of data and information greatly enhanced, thus accelerating the pace of economic clouds. Cloud economy first obtained a fast development in developed countries, but the biggest development space of the cloud economy will appear in developing countries along with the rapid construction of these countries' communications infrastructure, large computer processing technology, etc. As for China, it owns the world's first individual consumers and most

SMEs (small and medium-sized enterprises), promoting the global cloud economic tide unstoppable in this country. In October 2010, the National Development and Reform Commission and the Ministry of Industry and Information Technology decided to carry out the cloud computing innovation development programs (pilot) first in Beijing, Shanghai, Shenzhen, Hangzhou, and Wuxi. Since then, the information-based construction is constantly accelerated in Chengdu, Chongqing, Ningbo, Guangzhou, Foshan, Xi'an, Langfang, Wuhan, Erdos, and Urumqi. In September 2012, the Ministry of Science and Technology made the "Twelfth Five-year" Special Planning for the Cloud Economic Development of China, in which guidance is provided for the cloud technology industry development, industrial management, etc. With no doubts, the cloud economy will change the economic and trade forms in the future.

1.1 Increasingly easier cloud trades

In fact, cloud trades account for a large proportion in China's domestic economy and international trade, of which C-C, B-C and B-B e-commerce models are the most significant. For example, Alibaba, Taobao, Jingdong, VANCL, Jiuxian and other professional cloud service platforms have been gradually mature and perfect, and the cross-border transactions in these platforms have been expanded; Siemens, Procter & Gamble, GE, SONY and other foreign production companies have successively developed an online transaction platform for

Chinese consumers. The cross-border transactions completed through online platforms involve many industries such as apparel, cosmetics, household appliances, and luxury decorations. According to Report on China's Online Retail Market Situation in the Year 2013, Asia-Pacific region had replaced the North America to become the world's largest online retail market in the international online retail market development trend, while the global cross-border retails would exceed \$100billions. China is gradually becoming the main force of the global cross-border online consumptions.

1.2 Business flow simplification

The main characteristics are as follows:

First, inquiry, quotation, order placing, and other steps are directly completed on cloud end and thus the time and procedures of trade negotiations decrease, and many commodity markets will generate a market state closer to a perfect competition. Then, buyers and sellers can understand all the information and directly place an order on cloud end.

Second, products, bills, and services transformations are synchronized. In the cloud economy, all parties in transactions can directly make and submit all sorts of bills through cloud end, and can synchronously transmit this information and mutually implement product delivery and payments. Payments and claims for product flaws can be done directly through the cloud services of credit intermediaries.

Third, the relevant terms performed in accordance with contract can be announced to the parties of the contract, including product warehousing state, the real conditions of transportation road, and the relevant certificates from health inspection and quarantine departments. All the information can be timely collected and sent to the targeted parties using the cloud devices such as smart phones, making it easier for all parties to timely take relevant measures and ensure the contract performed smoothly.

1.3 Increasing participation in market

Cloud economy is a result of the cloud computing. Through the economic model accumulating resources and improving efficiency, it is bound to make the industries such as agriculture, industry, and transportation profoundly change, and ultimately more market participation subjects will emerge.

1.3.1 The market participation and improvement of agriculture

In the cloud economy, digital design, smart control and scientific management can be implemented for all production factors of agriculture, and large batches of intensive agricultural products and small scales of advanced crop cultivations will be the choices of new generations of peasants. Also, these will certainly help improve the modernization level of the agriculture in China.

1.3.2 Increasingly expanded market profitmaking space for manufacturing

The upgrading of manufacturing will be promoted by the cloud economy. With the help of the cloud economy, users can directly release the required production technology information to cloud end and get the feedback within the shortest time, so as to save the research and development costs and benefits and carry out a simulated test using the cloud computing platform. The cloud economy is advantageous for all walks of life to get the international services. In the future, Chinese residents can enjoy the international services such as international finance, international health care, and education provided by the domestic service enterprises at home. Therefore, service will be constantly promoted to make innovations and improve self-competitiveness, and then the efficiency of the market is boosted.

2. The situation of the occupation education in local colleges and universities

Henan province is taken as an example: as of April 2014, there were 19 provincial colleges and

universities totally, but the number of colleges and universities in Hunan was more than 30 currently plus other non-provincial colleges. As for the local colleges and universities, the vast majority of them will step into the occupation education reform and this is an inevitable requirement of economic development and hierarchical education development, and repositioning and reorganizing have become necessary especially under the huge impact of the cloud economy.

2.1 Training objective

According to the survey statistics of China Education Online, 10 undergraduate programs producing the most graduates in 2013 included international economy and trade, law, Chinese language and literature, English, art and design, mechanical design manufacturing and automation, computer science and technology, civil engineering, clinical medicine, and accounting. These programs have been relatively saturated.

2.2 Training model

Currently, "3.5+0.5" and "3+1" are common models. These two training models emphasize gaining the practical work ability and solving the "the last kilometer" problem between students and society through independent practice after establishing a solid theoretical foundation. In fact, however, the practice period in these training models do not play a due role in the local colleges and universities.

In terms of teaching resource allocation, most teachers in local colleges and universities are employed greatly from new master degree graduates and doctoral candidates after the expansion of student emissions. Thus, under the simple school-to-school academic background, these teachers' knowledge scope is very limited, but those with practical work experience are very scarce.

2.3 Curriculum setting

In the existing training models of the local colleges and universities, theoretical study is primarily applied, and practice is used as the complementary; in the process of the four-year training, the class hour and credit proportion in general education is 40% commonly, the class hour and credit proportion in basic subject education is no more than 5%, and the class hour and credit proportion in professional knowledge and skill education is about 55%. The construction of experimental training courses has been strengthened in all colleges and universities, but most of the courses are the so-called in-class practices except the physical and chemical engineering courses.

3. How local undergraduate colleges build the occupation education in the cloud economy

3.1 Training objective

Specifically, emphasis must be laid on the following aspects regard to knowledge, ability and quality.

First, natural geography and social knowledge must be stressed. In the cloud economic model, the systematicness of knowledge must be valued in the new training objective.

Second, e-commerce design and application knowledge, software application value analysis ability, and the ability in the application of the Internet of things must be considered.

Third, marketing channels, marketing patterns, and marketing effect prediction ability must be taken into account.

Fourth, innovative thinking and entrepreneurial quality must be seriously focused.

3.2 Training model

Local colleges and universities can adopt a well-improved elastic schooling system—allow students to graduate based on credits, but not on

schooling years. In other words, students can graduate at any time as long as they gain enough credits.

Moreover, local undergraduate colleges and universities must improve the quality of the teachers. Specifically, the teachers in different majors are required to experience in companies, enterprises, and workshops, and they should own at least half a year of practical experience in the corresponding or related jobs to know well the characteristics of the actual majors.

3.3 Curriculum setting

In the local colleges and universities, most courses are not adapting to the new standards of occupation education, and specific occupation skills training courses are absent, so class hours may increase or decrease according to the new changes caused by the cloud economy to all majors. Some courses have been obvious not to meet the current demands and have lost their values for students to learn, so these courses must be eliminated from the training plans. Some courses currently not listed in the training plans should be added, so as to train students' occupation interest and occupation skills and improve their competence in innovatively applying new things of the cloud economy.

It is necessary to strengthen the intensity of practice courses and the cultivation of innovative thinking, aiming to fully implement the construction of practice courses. Only meeting the standard of school teaching evaluation is not advocated. It is important to guide students to touch upon cloud economy and new things, focus on the evaluation and records in the process of practice, and create more employment opportunities for students. These require to local colleges and universities to enhance the use of cloud classrooms. In details, the cross-major cloud classrooms must be recognized in school, but also a national wide cloud education is necessary to implement, making it easy for the students in the colleges and universities of all provinces to synchronously enjoy the occupation

training resources of the most economically or technologically developed regions; the forefront professional skills must be timely absorbed when school conditions are unavailable. Local colleges and universities should constantly implement the curriculum research and development, and review and inspect the curriculum resources every three years, so as to timely make an adjustment and keep up with the new requirements of the cloud economy for occupation education.

In addition, the teacher's dominant position must be abandoned in terms of the course arrangement, and no textbooks are specified. However, a large reading scope can be proposed, so that students can learn with questions, and the classroom knowledge capacity is reduced and more time can be reserved for students to explore and get inspired. Ultimately, the purpose of stimulating the desire of students and producing a possibility of creating is achieved.

4. Conclusion

Cloud economy will play a profound influence on the occupation education of local colleges and universities. With no doubts, the major settings in some local colleges and universities will greatly change, and adapting to and using the cloud economy are the necessary choices for local colleges and universities to obtain a survival and development of occupation education.

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