
MOOC Higher Education Reform

Li Zhu, Hailun Wang, Lu Zhang, Gang Huang

School of Electrical and Information Engineering, Quzhou University, 324000, China

Abstract

In the information society, it is very necessary for students of all majors to master computer knowledge and skills. Therefore, many colleges and universities will set up computer basic courses in the first grade, which also reflects the importance of computer basic courses. However, due to various reasons, computer courses encountered problems in teaching. Teachers think that teaching is not good enough, students feel that learning is not interesting, and can not achieve the desired results. At the same time, MOOC, as a new teaching mode, has sprung up rapidly and attracted widespread attention. The teaching mode of MOOC has greatly changed the learning platform of students, and also has a great impact on the teaching methods of teachers. As a front-line teacher, facing the new educational storm, we must re-examine and think about our role, reconsider what role teachers should play in the learning process of students, and seriously study how to reform the current classroom teaching mode with the help of MOOC's high-quality resources in order to adapt to the new situation and achieve good teaching. Learning effect.

Keywords

MOOC; Higher Education; Change.

1. Introduction

In 2012, MOOC (Massive Open Online Courses), a large open online course, rose in the United States. In just two years, the number of registered users has risen dramatically. Some people even exclaim, "MOOC will completely change higher education, and universities will perish!"

2. Disadvantages of Traditional Higher Education

2.1 The quality of teaching is uneven and high-quality teaching resources are monopolized.

As of June 21, 2013, there are 2,198 general institutions of higher learning (excluding branch schools) in China. Among the more than 2,000 colleges and universities, there are no more than 100 truly high-level teachers. Moreover, attracted by the conditions of scientific research, academic atmosphere and personal development, more and more teachers with high abilities and good qualities gather in the "famous schools" and form a monopoly of teaching resources. Under the traditional education mode, this scarce resource can't be shared by the whole society, most people can only look at "school" sigh. (as shown in Figure 1).

2.2 The time and place of teaching are very restrictive, and lifelong education is difficult to achieve.

Under the traditional mode of higher education, time and place are rigidly stipulated. The strong desire of working people to study often has to give up because of the conflict between work time and schedule. Even if the time is appropriate, scholars have to rush to and fro at both ends of the school, As a result, a great deal of precious time was sacrificed on the road, which discouraged the enthusiasm of scholars.

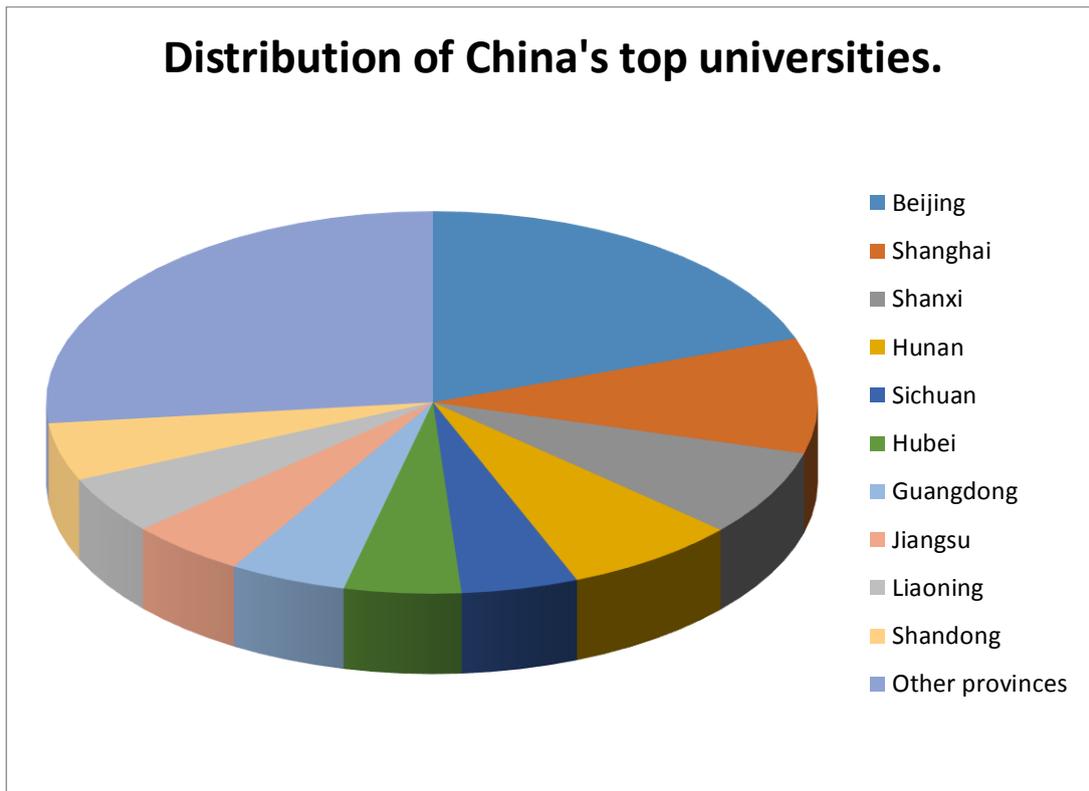


Figure 1 Distribution of China's top universities.

Average expenditure on education for students

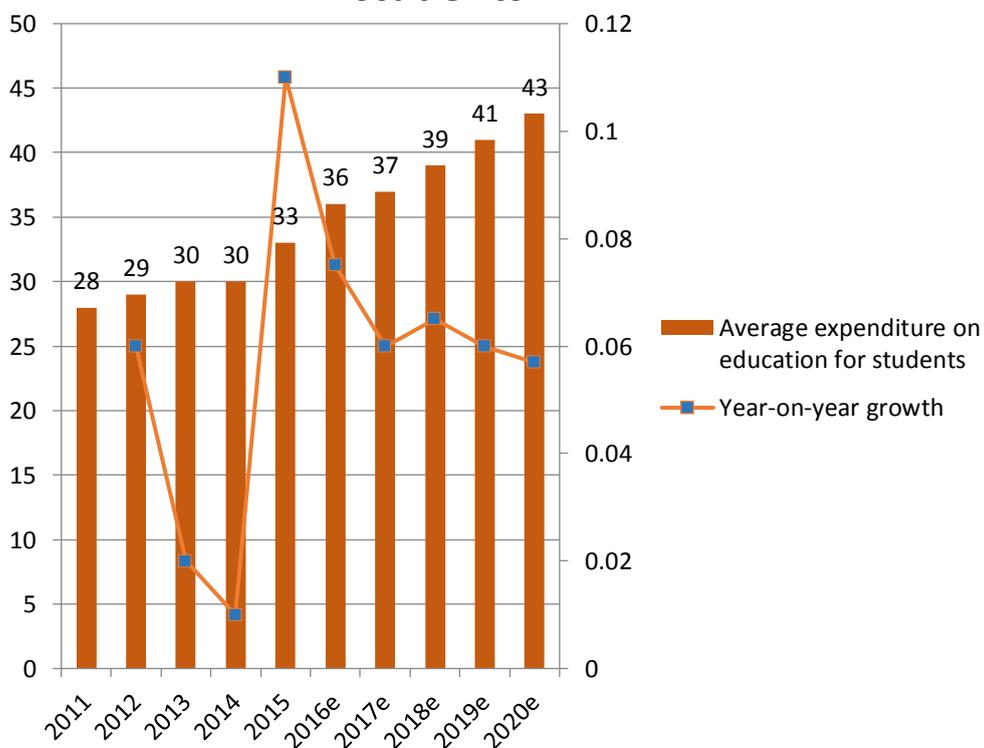


Figure 2 Average Educational Expenditure of Chinese Higher Education Students

2.3 The compilation cycle of textbooks is long and the teaching content is seriously backward.

In this era of rapid change, some textbooks are often out of date from the date of publication. This leads to the serious backwardness of teaching content, the serious disconnection between students and society, and the low employment rate and poor working ability of graduates.

2.4 The high cost of education and heavy economic burden

In China, the annual tuition fee for general majors in public universities is around 7,000 yuan, and for arts majors it is generally around 15,000 yuan. With accommodation and living expenses, it is necessary to train an undergraduate, with the total cost ranging from 4 to 100,000 yuan. If we want to train an overseas student, the annual cost is about 300,000 RMB, which is a heavy financial burden for the wealthier families. (as shown in Figure 2).

3. MOOC advantage

3.1 Famous teachers' schools

In 2012, Coursera, one of MOOC's troikas, announced that 12 comprehensive research universities would join the company's program. Currently, Coursera's cooperative institutions have expanded to 33, all of which are world-renowned universities. There is an instinctive pursuit and yearning for famous teachers in famous schools, and MOOC just provides such an opportunity.

3.2 Low cost

MOOC as a platform to provide the best curriculum resources in the world, the vast majority of its courses are free, which undoubtedly makes it have infinite charm. Moreover, with the rapid development of MOOC, the number of registered users is increasing, and the scale effect will further reduce the cost of MOOC.

3.3 Interaction

Traditional online courses are often recorded lectures, teachers and students can not interact. In MOOC, the professor will insert exercises and quizzes in the video. Research shows that this kind of questioning teaching method can effectively consolidate understanding and strengthen memory. In addition, MOOC students can go to the discussion area to discuss, online courses are no longer isolated personal behavior, but become a group activity.

3.4 Mobile

We are now in the mobile age, and MOOC is keenly aware of this. Most MOOC courses can be received by mobile phones and tablets, which enables learners to learn online courses anytime and anywhere.

3.5 Providing Education and Employment Opportunities

As a new type of online education, MOOC has a final exam in its course, and it is also a final exam in the case of invigilation. Students who complete their studies will be given a diploma. Outstanding students can even obtain employment opportunities in world-renowned enterprises. This is undoubtedly very tempting in today's high unemployment rate.

4. The Enlightenment of MOOC to the Reform of Higher Education

4.1 Information technology

With the development of Web2.0 network, educational information will inevitably become an irreversible direction of development. Since a series of online education has been launched before, after a short period of prosperity, one after another has been depressed, the argument that higher education can't be information has begun to emerge. But the emergence and popularity of MOOC undoubtedly give a heavy blow to this argument. The Internet has been popular for more than 20

years, and its development in the field of education is still in its infancy, which can be said to have lagged far behind.

4.2 Socialization

Higher education should strengthen cooperation with the government and enterprises. One of the most attractive aspects of MOOC is that it will recommend outstanding graduates to world-renowned enterprises. At the same time, MOOC will charge a certain intermediary fee to enterprises, so that part of the cost of education will be transferred to enterprises, enterprises have acquired talents, graduates have found jobs, and achieved three goals with one stone. Higher education must strengthen its connection with society, understand social needs and make full use of social resources in order to improve the quality of personnel training and reduce the cost of training.

4.3 Opening up

Higher education should not be limited to knowledge teaching, but should pay more attention to interaction and problem solving. At the same time, we should cancel the interactive participation. As an open teaching platform, MOOC's creation, structure and operation all show this point. Some teachers who offer MOOC classes and traditional education classes at the same time find that the depth and breadth of knowledge discussed in MOOC discussion area far exceed that in classroom discussion because of the diversity of student population caused by the open platform.

5. Teaching effectiveness evaluation

MOOC itself has great advantages, which will have a multi-factor, multi-level and multi-start impact on the education and teaching of new students. The evaluation of the teaching effect of this course focuses on four aspects: 1) students' earnestness to MOOC; 2) the influence of MOOC on classroom teaching results; 3) the influence of participating in MOOC on students' ability improvement; 4) the influence of MOOC on follow-up courses. Summarizing the reform of MOOC teaching method in the past three years, we can draw the following conclusions:

(1) With the passage of time, students' enthusiasm for MOOC gradually declines, so that they can not obtain the certificate of course completion or complete the learning plan. Therefore, the supervision and guidance of teachers is particularly important. Online learning resources are abundant. Students experience the university without walls through MOOC, which virtually promotes the cultivation of leapfrogging thinking and innovation ability.

(2) MOOC plays an auxiliary role in classroom teaching. Similarly, the subject of the course is interpreted by different teachers to achieve multi-angle teaching, which makes students' knowledge application more logical and self-confident. In the classroom, they change from passive acceptance of knowledge to active participation in discussion, such as students who participate in C language MOOC and study seriously, whether they are or not. In the classroom or in the experimental link, there are obvious advantages in acceptance ability, understanding ability, practical ability and so on.

(3) MOOC allows students to arrange their learning time and place independently, to study in the most coordinated and active state of both intellectual and non-intellectual factors, and to meet the psychological needs of learning and the law of psychological activities. When participating in group discussions, we often hear students happily and excitedly tell about their online learning experience and experience, show off their learning results, and realize that students have greatly improved their knowledge, ability and morality.

The introduction of MOOC into the existing classroom teaching should give full play to the advantages of MOOC curriculum and its platform. Firstly, teachers can expand knowledge, improve educational skills and master MOOC's educational concepts and teaching methods by learning MOOC courses. Secondly, in classroom teaching, let students use MOOC platform to do a good job of pre-class preparation, after-class review and testing, which will bring students different learning experience.

Designing teaching cases pertinently, strengthening the difficulties in teaching content with the help of MOOC course, effectively integrating MOOC with classroom teaching,

making it a teaching assistant. Being a SPOC member of online courses can also enable students to use high-quality teaching resources free of charge, and can also publish teaching cases suitable for their students. In short, effective combination of MOOC and classroom teaching can optimize the teaching effect.

6. Conclusion

Appropriate MOOC teaching mode for college freshmen can help students improve their abilities of learning, thinking, exploring, distinguishing and innovating, help them integrate into college life quickly, and also provide valuable experience for students to participate in MOOC courses of professional courses in the future.

Acknowledgments

This work was partially supported by Zhejiang Classroom Reform Project(No.KG2015389).

References

- [1] The development of Wang Wenji's MOOC and its impact on higher education (J). Jiangsu Higher Education, 2013 (3).
- [2] Liu Yangxie, MOOC: Challenges for Traditional Universities [N]. Chinese Journal of Social Sciences, June-26, 2013.
- [3] The Impact of MOOC on Higher Education in Post-IT Era of Lao Songyang [] Journal of Higher Education Research, 2013 (9).
- [4] Research on Hybrid Information Literacy Teaching Model in Eurogroup. MOOC Environment [J]. Library and Information Work, 2015 (14).