

# Classroom Study of Online Education Experiment in China under Epidemic Control Situation

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## Abstract

In year 2020, in response to unexpected Coronavirus, the Chinese Ministry of Education put forward the requirements of "classes suspended but teaching won't stop, classes suspended but learning won't stop". The "Learning Revolution" in education has been further promoted. With the strong support and cooperation of the government, radio and television stations, network companies and parents, 200 million students in China achieved home-based classes.

## Keywords

Online class; education; Coronavirus.

## 1. Introduction

With the rapid development of science and technology, the wide application of big data, artificial intelligence, 5G network technologies and cloud computing, the education industry has made great changes. Especially in the early of this year that Coronavirus raging suddenly, the students can't return to school to have classes, it becomes a long wait before the school open again. In this context, the Ministry of Education put forward the requirements of "classes suspended while teaching won't stop, classes suspended while learning won't stop". Schools and teachers responded positively. With the strong support and cooperation of the government, radio and television stations, network companies and parents, 200 million students in China achieved home-based classes. Until April 3rd, 1454 colleges and universities across the country have opened online courses. More than 950 thousand teachers have opened 942 thousand and 7.133 million online courses, with 1.18 billion students taking part in online courses. In the first quarter of this year, among China's online course platform, the online MOOC courses increased 5000 courses, and other online courses increased 18000 courses. The "Learning Revolution" in higher education has been further promoted, which has changed the form of education. The Ministry of Education will launch the construction project of the international platform for online teaching in colleges and universities. Soon after, 421 million students and even more students in the world will have online classes at home [China Youth Daily, 29 March, 2020]. This accelerates the close combination of "great wisdom moving cloud" with education and teaching, and promotes the unprecedented change of online classroom teaching in the future [News for Reference, 29 March, 2020].

## 2. The History and Present of Online Classroom

Online classroom teaching can be traced back to the 1990s, when the Internet just logged into China and it is in the ascendant. At that time, the new education form which called modern distance education began to develop rapidly. Since 1999, the Ministry of Education has approved 67 colleges and universities and the Central Radio and Television University to carry

out the pilot work of modern distance education. In this period, distance education is only a supplementary form of continuing education, such as correspondence and self-examination, which is far from the mainstream classroom. Until the first decade of the 21st century, the Internet has become a necessary way of life. Khan College in the United States, American famous school open classes, Chinese universities open courses, MOOC, etc. have become popular. Teachers try to upload recorded videos on the Internet, and people can learn online for free. At this time, the Internet online classroom has become a main access for people to use their spare time to learn and keep learning. With the continuous improvement of the network transmission speed, the extracurricular tutoring classes in big cities start to found online classes at the very beginning. Students can sit in front of the computer to enter the online classroom, and can study English with North American local teachers. At the end of 2018, Chengdu No.7 Middle School cooperated with enterprises to broadcast full-time courses to cooperative schools all over the country. Thousands of students in different places have classes with Chengdu No.7 Middle school students at the same time every day. Like a raging fire, especially since the outbreak of the new coronavirus, under the leading of government, schools organized teachers and students, radio and television stations, network telecom companies and parents have been closely cooperated. The online classroom teaching actively participated by the whole society has been developing vigorously, helping students in primary and secondary schools to learn and improve at home.

### 3. New Features of Online Classroom

Combing the current online classroom teaching cases, we found that the characteristics of the current online classroom teaching could be summarized as: 'Four New' that means new ideas, new tasks, new environment, new collaboration [Jiao Jianli, Zhou Xiaoqing, 2020].

First, new ideas. The traditional concept of classroom teaching is teacher centered, because the most important behavior of teaching is the teachers' presentation and organization. Teachers can complete the interaction between teaching and learning in the classroom alone. But in the process of students' home-based online autonomous learning, we should focus on students, pay attention to students' preparation, design learning activities suitable for students according to their characteristics, support and manage students.

Second, new tasks. In the traditional classroom teaching, teachers only need to prepare the curriculum. But during the organization of online teaching, teachers add new tasks to provide help and support for students. For example, in the process, the students cannot log in, the student cannot operate, and cannot find learning resources. Therefore, the teaching form changes from the original classroom explanation and listening into the course design, environment preparation, resources preparation and delivery, as well as providing support to students in learning process.

Third, new environment. Platform, tools and resources are important teaching conditions. Online teaching is highly dependent on technology. Teachers and students need to be familiar with and adapt to these new environments. The unexpected online teaching has become the biggest anxiety point of most teachers, but these new environments can be solved after training and familiarity.

Fourth, new cooperation. A teacher can complete a simple online teaching, and a high-quality online teaching course needs to be completed by multiple roles, which is a new way of team cooperation. An online course is a project group composed of by teachers and instructional designers. In the past, teachers didn't need to use other people's design in classroom teaching, but today when we carry out the teaching practice with industrialization and informatization, designers become very important.

Therefore, online teaching doesn't mean transferring offline teaching to online through platform and technical support directly.

#### 4. The Future of Online Classroom

In the development history of educational informatization, people have been arguing about whether technology can change education. It seems that both sides have their own reasons. With the development of big data technology, the behavior of online teaching and learning can be recorded. Based on such data, the teaching process can be monitored very accurately. In particular, the development of modern information technology provides better technical support for online teaching, and further strengthens the interaction between teaching and learning. For example, artificial intelligence technology provides the possibility of personalized knowledge service for online teaching. According to the process monitoring data, we can push the learning content and tell the teachers how the students respond to the knowledge points.

However, according to Professor Yang Hao and Professor Zheng Xudong's systematic analysis, since 1928, there has been a research finding: there is no significant difference on education and learning results caused by different technical methods, which is called "non significant difference phenomenon"[Yang Hao,2015]. It has been shrouded in educational informatization like a dark cloud. In other words, online classes can take many technology forms, not necessarily to the coolest technology.

Why does this happen? Meyer, a famous educational psychologist and expert in educational technology, once said that the fundamental reason lies in the orientation of researchers. The technology centered research orientation is based on the practical functions of research (Multimedia) technology, that is, how to use these functions when designing multimedia presentation. Therefore, researchers who hold this orientation tend to follow closely (more Media) the latest development trend of technology, try to find out which multimedia technology is more conducive to learning through comparison in presenting learning content, for example, which is better comparatively by watching video and learning in real classroom. However, the research of this orientation is often very exciting at the very beginning - because there are new cutting-edge media / technologies joining in, but the results are often proved to be less effective or ineffective, so the slogan of "technology is useful" is not firmly established in the field of education. Corresponding to this is the learner centered orientation, which does not force learners to adapt to the requirements of these new technologies. Instead, it advocates understanding how the human brain works, and based on this, consider how to use technology to help people learn more effectively, that is, to adapt technology to the needs of learners, so as to achieve "technical usefulness".

Online classroom does not necessarily choose the coolest technology, but to start from the needs, combined with the factors such as school section, discipline, teaching objectives, student characteristics, local conditions, etc., to choose the appropriate online classroom mode. For example, large classes in middle schools and universities may be more suitable for live video or video broadcasting, while small seminars for postgraduates may adopt the way of video conference, and primary schools may be more suitable for carrying out the game learning online classes. Combined with the theory of humanistic learning and considering the development of human beings in an all-round way, we may use this period to carry out more patriotic education, parent-child education, environmental education, life education, health education and other teaching activities, such as patriotic education, life and health education combined with current epidemic situation, and we will find that students will gain more.

## 5. Conclusion

Therefore, the future development of online classroom is inseparable from technology, but technology is an auxiliary tool to improve learning effect, and the ultimate goal is to achieve the future of students.

## References

- [1] UNESCO: 421 Million Students in the World are Affected by the Epidemic, Distance Learning Platform Ding Ding is the First Choice [EB/OL]. China Youth Daily on: [https:// baijiahao.baidu.com/ s?id=1661231572422835403&wfr=spider&for=pc](https://baijiahao.baidu.com/s?id=1661231572422835403&wfr=spider&for=pc), 29th March, 2020.
- [2] The World is Paying Attention to the Unprecedented Education Experiment in China[EB/OL].News for Reference on: [https:// mil.sina. cn/ 2020-02-21/ detail-iimxxstf3273615.d.html?ivk\\_sa=1023197a](https://mil.sina.cn/2020-02-21/detail-iimxxstf3273615.d.html?ivk_sa=1023197a), 29th March, 2020.
- [3] Jiao Jianli, Zhou Xiaoqing, et al. Case Study on Online Teaching in Accordance with "No Suspension of Classes" in the Context of Epidemic Control [J]. China Educational Technology, (2020) No.3, 106-113.
- [4] Yang Hao, Zheng Xudong. Some Thoughts on the Integration of Information Technology and School Education from the Perspective of Technology Diffusion [J]. China Educational Technology, (2015)No.4.