

# Research on the Application of the “Dual-teacher Collaboration” Teaching Mode in College Teaching Based on 5G Technology

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**Abstract :** To successfully run education in the new era is related to the country’s and the party’s plans. To vigorously develop school-enterprise cooperation in colleges and universities, and to create an innovative team of “double-qualified” teacher teaching is the foundation of education and the source of education. The use of 5G technology to create a new model of “dual-teacher” innovative teaching in the new era will inject vitality into the education of colleges and universities.

**Keywords :** 5G Technology; Dual-teacher Collaboration; University Teaching

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The rejuvenation of the Chinese nation is inseparable from education, and the foundation of a strong nation is education. In the report of the 19th National Congress of the Communist Party of China, General Secretary Xi Jinping proposed to deepen the integration of production and education and the cooperation between schools and enterprises. This has pointed out the way forward for college education in the new era. School-enterprise cooperative teaching is conducive to cultivating high-standard talents needed by the country and society for development. As the foundation of education and the source of education, teachers are the top priority of education, and they are the promoters and practitioners of talent cultivation. The construction of “dual-qualified” teachers is the key to the implementation of the integration of industry and education, as well as the key to running a school-enterprise cooperation.

The “dual-teacher collaboration” teaching model based on 5G technology is a strong guarantee for the effectiveness of college education in the new era.

## 1. Teaching application based on 5G technology

5G technology has entered the study, production and life of the broad masses of people, and it has brought improvements in various fields of technology. In the development of teaching in colleges and universities, 5G technology, with its characteristics of high speed, low latency, ubiquitous network, and low power consumption, brings unlimited possibilities for the implementation of intelligent classrooms based on the real-time sharing of remote interactive teaching resources.

5G technology has brought a powerful boost to the construction of the “dual-teacher collaboration” teaching model in college teaching. It has played a strong role in building a classroom-based “dual-teacher collaboration” teaching system between enterprises and university teachers and improving the level of curriculum teaching. Technical advantages.

After entering the “5G” era, the three major domestic telecommunications operating companies and major Internet companies have actively deployed smart education and teaching systems and platforms based on 5G technology, and launched their own 5G+ smart campus education plans.

Looking at the current 5G technology field, we strongly feel that the research and development and innovation of teaching technology and products based on 5G technology are booming, which greatly promotes the development of education in the new era

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and provides reliable technical guarantee.

## **2. The development of the “dual-teacher collaboration” teaching model**

The history of “dual-teacher collaboration” teaching in my country has a long history. During the Warring States Period, the Jixia Academy of Qi State innovated and developed the teaching method of “double-teacher collaboration” and even “multi-teacher collaboration” in academic research, thus creating a spectacular “contending of a hundred schools of thought” in the history of academic thought in our country. Which has greatly contributed to the formation of academic controversy in the world, and also brought academic achievements to blossom everywhere.

In order to conform to the trend of the times, to advance the teaching work of colleges and universities with the times, and to create a new situation in the education work in the new era, many colleges and universities are constantly exploring innovative education and teaching models.

Among many colleges and universities that are exploring and innovating, Haikou School of Economics actively implements the deepening of industry-education integration and school-enterprise cooperation proposed by General Secretary Xi Jinping in the report of the 19th National Congress of the Communist Party of China. In recent years, in order to fully tap the effectiveness of school-enterprise cooperation, Haikou School of Economics and major companies have successfully established as many as 11 school-enterprise cooperation industrial colleges, and 3 school-enterprise cooperation departments. Enterprise cooperation in running schools extends from the college level to the department level, continuously deepening the construction of demonstration and application-oriented universities and cultivating high-level application-oriented talents.

One of the major benefits that school-enterprise cooperation brings to the education of colleges and universities is the inheritance and innovation of the dual-teaching collaborative teaching model.

The teaching model of “double-teacher collaboration” and even “multi-teacher collaboration” has a long history and has made great contributions to the progress of human civilization. Since its development, the construction of teachers under the traditional “dual-teacher collaboration” teaching model has gradually highlighted the limitations of the development of the new era: Many colleges and universities have hired enterprise engineering and technical managers and skilled craftsmen to serve as full-time and part-time jobs in teaching reforms and school-enterprise cooperation. Teachers and teachers in the school accompany the teaching. Although this cooperative school-running method has improved the school-enterprise disconnection and improved the students’ operational and practical ability, the new era of “double-teacher collaboration” teaching mode is only. It stays at the initial stage of construction, or although individual professional courses have already carried out practical operations, they cannot be fully developed and continued after all. This makes this model only stay at the initial stage, far from meeting the teaching needs of the new era.

In order to solve the limitations caused by time and space constraints in the construction of teachers, and to make better use of the teaching advantages of the “school-enterprise cooperation” mode of running a school, the establishment of a “dual-teacher collaboration” teaching mode based on 5G technology came into being. This will be the strong technical support and guarantee that 5G technology will bring to the teaching work of colleges and universities in the new era.

## **3. The establishment of a “dual-teacher collaboration” teaching model based on 5G technology**

### **3.1 The innovative meaning of the “dual-teacher collaboration” teaching model based on the “5G” technology-based intelligent classroom teaching system platform**

#### **3.1.1 Close the distance of space and solve the space constraints of teaching in different places**

The smoother realization of remote teaching is a major technical support brought by 5G technology to education and teaching. Whether teachers and students are thousands of miles apart or thousands of miles away, the network online teaching system based on the application of 5G technology can enable teachers and students far away to communicate with each other on the network online platform as close as possible. Not only that, teachers from thousands of miles away can also provide lectures for teaching classrooms in many different regions at the same time through the online teaching platform.

#### **3.1.2 Solve the time constraints of teaching and learning at different times**

The network online teaching system based on the application of 5G technology can more conveniently provide teachers with live and recorded and replayed teaching methods, so that both teachers and students can fully arrange their own teaching and learning time, thereby greatly promoting Efficient development of teaching and learning.

## **3.2 Innovative practice of intelligent classroom teaching mode based on “5G” technology**

### **3.2.1 “5G” technology realizes virtual and real interactive scenarios, and explores the establishment of new forms of meta-universe of Internet applications and real applications**

In the practice of education and teaching in colleges and universities, teachers are committed to pursuing an “immersive” effect. Based on “5G” technology, this teaching effect will be what they want. With the support of ultra-low latency communication of “5G” technology, the Internet of Things and mobile broadband, the classroom teaching model based on “5G” technology can realize the creation of practical teaching scenes through virtual reality technology. For example, the scene teaching application of engineering construction and construction, the classroom teaching mode based on “5G” technology can present real construction site scenes to students, bring a full range of auditory and visual sensory stimulation, so as to achieve a combination of theory and practice teaching purpose. Through construction practice scenarios, students not only thoroughly understand the theoretical knowledge in the books, but also arouse students’ interest in professional practice applications. The immersive experience will establish a framework for thinking and solving professional problems and improve professional capabilities.

#### **3.2.2 Breaking the site constraints of the traditional teaching model**

The intelligent classroom system platform based on “5G” technology can bring richer course content to students in areas where teaching resources are relatively lacking, and make up for the problems caused by insufficient development of teaching hardware resources such as venues and equipment. The intelligent classroom system platform under the “5G” technology can realize that rich teaching resources can be output to every student indiscriminately through mobile phones and other terminals, greatly improving the uneven distribution of teaching resources, and promptly accepting high-quality teaching resources for students. Teaching brings unlimited possibilities.

### **3.3 Based on “5G” technology, combined with “AI” technology and big data technology for post-teaching evaluation**

Combining “AI” technology and big data collection and analysis technology to conduct a scientific and effective post-evaluation of teaching effects will help improve the accuracy of teaching, achieve precise teaching, and better realize differentiated customized teaching.

Based on “5G” technology, teachers can use big data technology to effectively monitor and evaluate students’ learning effects, and use the learning data left by students on mobile terminals such as mobile phones to fully grasp the status and effectiveness of their learning. Through the post-evaluation derived from big data collection and analysis, teachers will be able to better integrate the characteristics of learning needs feedback from students, improve and innovate teaching methods, and provide students with professional teaching that is more suitable for their own development. In the end, a good and continuous interaction between teaching and learning is achieved, and the teaching goal of learning success is achieved.

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