# Exploration on the Classroom Reform of Residential Decoration Space Design in Higher Vocational Colleges in the Post Epidemic Era

DOI: 10.23977/avte.2023.050314

ISSN 2523-5834 Vol. 5 Num. 3

### Renjing Zhou

Chengdu Vocational & Technical College of Industry, Chengdu, 610218, China cdgyzyjsxy\_fgc@163.com

*Keywords:* Post Epidemic Era; Vocational School; Residential Decoration Space Design; Classroom Reform

**Abstract:** In the post epidemic period, the teaching mode of higher vocational education presents a new trend of teaching transformation and development. In particular, many higher vocational colleges reflect the teaching development model of the Internet in their teaching activities, and the cloud based teaching model reflects important value and significance in the application of higher vocational education. Objectively, online teaching is closely related to the current epidemic prevention and control. From the perspective of the overall development trend of teaching, it adapts to the new idea of the current development of Internet plus teaching. From the perspective of practice, this Internet teaching mode is consistent with the teaching situation of students. Taking the key courses of typical majors as an example, we can tap the advantages and disadvantages of online teaching mode. This paper mainly discusses the reform and development mode of teaching design in higher vocational education in the post epidemic era, mainly taking the teaching of residential decoration space design as an example.

### 1. Introduction

The sudden outbreak of novel coronavirus has broken the normal teaching order of ordinary vocational schools. In order to let students recover from the shadow of the epidemic, the best way is to keep them in good learning condition. How to make students unable to return to school and how to do their own teaching work well have become new problems faced by every front-line teacher. Network teaching is the best way to reform the cloud classroom teaching in colleges and universities at present, but there are some problems in the practical application. It is necessary to deeply analyze the challenges and difficulties faced by the current network teaching, find the ideas and direction of future curriculum teaching reform, and lay a solid foundation for the development of vocational education.

# 2. Transformation from network fragmented knowledge dissemination to cloud teaching systematic teaching mode

This epidemic situation allows students and teachers to communicate and study at home.

Objectively speaking, the transition from the traditional offline classroom to the online teaching mode based on cloud computing is closely related to the characteristics of each discipline and the internal laws of teaching. That is to say, which majors are more suitable for online teaching depends on different majors. The application of cloud computing technology in practical training cannot achieve the full coverage of all courses of all majors [1]. Taking the architectural decoration engineering technology specialty as an example, this paper points out that in some specific courses, the network teaching method is more suitable, which has a special positive impact on the teaching effect of optimization design courses.

It can be seen from the changes in the overall life and learning habits of the contemporary society that mobile office and learning have become the mainstream of people's daily life, and online education has also changed with people's living habits, and the whole society is increasingly dependent on mobile Internet resources. It is feasible to replace classroom on-site teaching within this specific time limit. Better teaching results can be achieved by learning from each other online and offline. The use of cloud technology can make teaching collaboration across time and space more convenient, more efficient and cheaper to display teaching achievements, and expand the scope of achievements promotion, etc.

### 3. Characteristics and laws of cloud teaching model

### 3.1. Resource sharing and integration in cloud teaching

In the information society, network resources are a new kind of productivity. Teachers and students of higher vocational education have a large number of digital resources. The library has opened remote VPN networking, super star learning, smart tree and other functions. In order to adapt to the new situation, the graduate design tutor team of the Department of Architectural Decoration has also taken many practical and effective measures.[2] At present, most vocational schools implement the "2+1" training mode. Students study systematically in the school for two years, mainly engage in enterprise practice in the third year, and complete the graduation design in the fifth and sixth semesters. Objectively speaking, this kind of educational system and teaching plan arrangement will limit the mutual connection of students in the design process. In order to avoid this problem, this paper proposes a graduation design scheme of "sectional inspection" based on its own professional characteristics, that is, according to its own work rules, it is divided into four steps: "preliminary design", "mid-term discussion", "scheme revision", "submission of scheme and scheme demonstration".

## 3.2. The four in one characteristics of cloud teaching: "teaching", "production", "learning" and "cloud"

"Integration of production and education" is a hot topic in the field of vocational education in recent years, and it is also an important work in the teaching mode of various vocational schools. The application of students' daily learning theoretical knowledge to post practice will, to some extent, make the communication between teachers and trainees difficult, but on the other hand, it can also promote students to enter the company and integrate their valuable experience gained in work into homework. For example, in cooperation with major universities, we have established a "secondary college", realized school enterprise cooperation, trained outstanding talents, and promoted the integration of industry and education. In terms of curriculum teaching, we always adhere to the "double tutor system", that is, the two-way teaching model of "school teachers+enterprise teachers", to make the combination of teaching theory and practice more closely, and conduct a comprehensive assessment of students' two-way constraints through the evaluation system, so as to closely combine

the curriculum and production. From "curriculum teaching" to "enterprise practice", it is undoubtedly the concrete embodiment of "integration of production and teaching".

The course of residential decoration space design is different from ordinary professional courses, and its centralized management should depend on the display platform with the goal of achievement performance, which needs to be completed with the help of hardware environment such as exhibition halls. At the beginning of 2020, the situation of epidemic prevention and control was severe, and the teaching of residential decoration space design course could not have enough face-to-face communication, guidance and display opportunities compared with the past. Therefore, the continuous improvement and application of "cloud classroom" and "cloud exhibition hall" made the "cloud classroom" and "cloud exhibition hall" change from the previous auxiliary mode to the main teaching mode. "Cloud exhibition hall" refers to the text and images visualized on a virtual platform. Compared with the traditional offline physical exhibition hall, its display mode is more interactive, extensive and fast. "Cloud exhibition hall" is the first choice of this graduation design exhibition, which is mainly promoted through WeChat, Fanya "sharing cloud disk" and other media. Through online teaching practice, teachers' online teaching experience has been enriched, which provides useful reference for further improving online and offline teaching mode. Although the platform is still simple, it still needs to be improved constantly. It has some shortcomings of static and planarization, but it also lays a solid foundation for future work and accumulates valuable experience.

The visualization of the display environment requires a certain amount of teaching hardware support. Colleges and universities have independent exhibition hall teaching conditions, which are incomparable to ordinary colleges and universities, especially higher vocational colleges. Therefore, it is the best solution for higher vocational colleges to reverse the previous single and outdated exhibition mode and create the mode of "graduation design cloud demonstration", which is also an effective way to break the distance between non-professional colleges and first-class colleges. Ordinary cloud libraries can basically meet the needs of information dissemination through PC, iPad, smartphone and other terminal devices, and WeChat and other digital platforms. Among them, interactive simulation and virtual reality are the development trend in the future. It gives students a sense of immersive experience. VR and AR technologies are the technical entrance to achieve this goal, and promote the virtual exhibition from static to dynamic, from a single browsing to an interactive simulation technology. This is a leap in technology, but also an innovation in display methods. VR technology can maximize people's freedom and satisfy people's curiosity and desire for museums. At present, there are two display modes of VR technology, one is VR panorama technology, which is a kind of real scene shooting with digital camera or digital camera, and then post-processing with software to form an all-round digital display. The production process is that after the completion of digital live photography, the photos are spliced and uploaded to the panoramic web page to form a network. This method needs to be carried out under the support of the existing physical venues, which is essentially a digital display based on the physical display, but may not meet the requirements under the original booth conditions. The second method is to use 3D design technology media software, from a virtual 3D environment to an interactive whole body. No physical space is needed, just build a virtual model on the 3D software media, and give it the simulated materials and light, use technology to achieve the most realistic effect, and then use real-time 3D development tools such as Unity3D, Fantasy 4, Kulejia to interact, network transmission and release. Therefore, the establishment of cloud pavilions and the emergence of networks are formed by the comprehensive application of multiple software, including the technical integration of architecture, interior, animation, graphic design and other aspects.

# 4. The innovation of classroom teaching ideas of housing decoration space design in higher vocational colleges in the post epidemic era

# 4.1. Adhering to the teaching idea of taking students as the main body and teachers as the leading role

The traditional classroom teaching methods are mainly teaching by teachers, one-way output, students taking notes, simple interaction and one-way acceptance. For the 45 minute course, the teacher said 40 minutes. The teacher was tired of teaching, and the students' learning efficiency was low. We can use a variety of educational resources such as network platforms, computers, tablets, smartphones, etc. to give play to the role of teachers in guiding, enlightening and monitoring students' learning, and guide students to conduct personalized and adaptive learning according to learning objectives and tasks. We can change the traditional teaching methods of teachers and textbooks, and let students play a leading role in the classroom.

### 4.2. Expanding the use of information resources and realize the dual application of online and offline

At the beginning of the epidemic, the whole semester was dominated by online teaching, and it was necessary to carry out effective teaching links between online and offline. After two semesters of online learning, students are very familiar with the application of this platform. Therefore, students can use network resources to carry out offline teaching. For example, in the classroom, teachers can release learning tasks in micro classes, so as to "give priority to guests" in the classroom. In the classroom, we can provide exercises, release tasks, feedback assignments, and course evaluation to help students learn. After class, we will consolidate and summarize the feedback. In this mixed teaching mode, the network platform can run through the three time and space, making the teaching content more rich.

# 5. Innovation in classroom teaching methods of housing decoration space design in higher vocational colleges in the post epidemic era

### **5.1.** Clarifying the teaching purpose

According to the teaching characteristics and needs of the residential space course, the social reality is connected with the course teaching, and the current social reality problems are introduced into the course. We should let students really play their own professional expertise, inspire the thinking of "interior designers", and consider whether students' self-design schemes can really solve the problems related to living space in today's society, and link the training of design ability with social responsibility.

### **5.2.** Adjustment of course content

Complete online teaching has the problems of teaching time and space between teachers and students, complete physical isolation of teaching behavior, ineffective monitoring of student activities, and difficulty in online completion. Therefore, we should make some adjustments in the teaching content, reorganize, arrange and select, inspire students' design thinking, introduce crisis awareness, social responsibility, humanistic care and other topics, and stimulate students' creative enthusiasm.

### **5.3.** Integration of teaching resources

On the basis of making full use of information resources, a series of software and hardware resources of residential space design course are integrated to meet the needs of different teaching media and design expression. In terms of software, the mixed teaching mode of "vocational education cloud+Tencent+QQ+WeChat" is the main mode. Among them, with the vocational education cloud as the main body, students can learn independently on the vocational education cloud platform under the guidance of teachers; Tencent conference is an effective auxiliary tool, which is mainly used for real-time interactive communication, bug filling, question answering, discussion, etc., while QQ group is an auxiliary tool, which can provide real-time or personalized guidance. In terms of hardware, teachers integrate various electronic devices into their own live broadcast platform. For example, special digital drawing boards, Ipads, etc. can be used for online modification.

### **5.4.** Reform of teaching methods

Teachers can adopt project-based teaching and set up specialized teaching content, allowing students to establish professional ideals, experience a sense of professional responsibility, appreciate the emotions of the country, understand the national culture, establish the "four confidences", integrate ideological and political education into the curriculum, and achieve the educational goal of "three comprehensive education".

In order to create an atmosphere of learning and discussion, teachers choose some practice units when teaching online, and use the platform to form a discussion group of 3-4 students. After the class, we will discuss and make records. Students will learn from each other and encourage each other. During offline teaching, different design teams are divided, investigated and discussed, and corresponding designs are made according to different projects to achieve the cultivation and development of students' overall quality and ability.

#### 6. Conclusion

In short, the post epidemic era marks the arrival of the online teaching era. In this special era, countless educators have united together, gathered on the Internet, gathered wisdom, and created an unprecedented popularity of cloud education. However, there are still many problems that need educators to reflect on. Under the current network environment, how to make the new teaching methods that conform to the laws of education more scientific and effective in practice, so as to improve the teaching quality and promote the sustainable development of higher vocational education. The development trend of education informatization is inevitable, and the talent training mode must be innovated. How to ensure the implementation effect of cloud computing and how to establish a systematic and scientific cloud education system is a problem worthy of serious consideration.

### References

[1] Ren J. Research on the transformation path of "Internet plus classroom" in the post epidemic era -- based on the perspective of stakeholders [J]. Modern business industry 2021;42(34):51-52.

[2] Yan C, Li M, Zhang J, Li R, Wang H. Online and offline resonance of the same frequency: reflections on classroom teaching reform in the post epidemic era [J]. Journal of North China University of Technology (Social Science Edition)2021;21(02):86-91+103.