

# The reform and practice of online and offline trinity hybrid teaching in the course of restaurant space design

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**Abstract.** Restaurant space design is a highly practical art and design professional core course, the course teaching reform to online and offline hybrid teaching learning form, through classroom teaching and practical teaching to combine theoretical knowledge and practical application, to achieve the teaching goal of learning to use. In the teaching process, we adopt the "three mains" model with the task as the main line, students as the main body, and teachers as the leader. According to the teaching characteristics and learning objectives of each stage, we adopt theoretical lectures, group discussions, practical training, social practice, and other ways to teach and complete the course work and design tasks by "promoting learning through competition" to fully mobilize students' learning enthusiasm. Through this teaching method and scientific learning evaluation system, students' learning initiative is improved, and the interesting and practical nature of the course is increased, so that students' knowledge intake is changed from "passive input" to "active absorption", and theoretical learning and practical design are integrated and mutually promoted, which helps students to be in a favorable competitive position in future employment and realize the school's talent training goal of "high-quality applied talents".

**Keywords:** Trinity; restaurant space design; teaching reform; vocational competitiveness; competence development.

## 1. Introduction

The restaurant space design course is the professional design course of environmental art design direction and public art design direction, in the talent training system, is in the basic course to professional course transition start the course. This course is essential to train students to master the design steps, methods, rationale, goals, and spatial design process characteristics. Improve the students' creative thinking expression, hands-on skills, communication, and cooperation skills in practical design. This course is essential to help students form a systematic design concept and enhance their professional competence in their future work. However, restaurant space design in college teaching teachers did not change the teaching concept well. In the teaching of solid still to the traditional emphasis on theory light practice, and strict discipline, the teaching concept of knowledge inculcation teaching, did not achieve the teaching work toward the track of real quality education. Teachers do not adjust their role in teaching, do not focus their teaching on promoting students' "learning" and do not realize that the teaching purpose of teaching is to not teach. This paper takes the "online and offline trinity" hybrid teaching reform and practice of restaurant space design courses as the research theme. In the present study, we focus on the construction of the "four new" ("New Engineering, New Agriculture, New Medicine and New Liberal Arts" proposed by the Chinese Ministry of Education) and highlight the deep integration of "curriculum thinking and politics". In teaching, systematic teaching combining theory and practice will be carried out, and the "trinity" hybrid teaching reform mode will be adopted to reform the teaching of restaurant space design courses, with the "student-centered" teaching concept as the reform goal (Gao, 2020). To achieve teaching work toward the track of real quality education, students can acquire not only knowledge and skills but also, more importantly, learning methods and learning ability, realize unsupervised independent learning, and cultivate students' self-learning ability, cooperation, and communication ability as well as lifelong learning ability.

## **2. Innovative concept and ideas of online and offline trinity hybrid teaching reform**

The restaurant space design course is a mandatory course for junior students of environmental art design and public art (fifth semester) and is the first course of public space design studied by students of this major (Sun & Xu, 2017). Students have already taken materials and techniques, space decoration, and digital image processing software courses. Before studying the restaurant space design course, students had mastered some of the basic knowledge of space design and decoration and the use of basic software (Zhen, 2022), but they did not have experience in the theoretical knowledge of public space design and the comprehensive integration of theory into practice and cooperation with enterprises (Feng & Li). Students have already taken materials and techniques, space decoration, and digital image processing software courses. Before studying the restaurant space design course, students had mastered some of the basic knowledge of space design and decoration and the use of basic software, but they did not have experience in the theoretical knowledge of public space design and the comprehensive integration of theory into practice and cooperation with enterprises (Zhang, 2021).

However, since most students in their junior year (fifth semester) rely heavily on teachers' lectures in class, they do not develop pre-course prereading and post-course reflection, nor do they have independent exploratory learning, and they are not sufficiently motivated to learn in class, such a passive learning mode makes students not have solid theoretical knowledge and practical application skills (Ning, 2017). Therefore, we hope to establish a new teaching mode and student learning mode through this teaching reform of restaurant space design to strengthen the motivation of students to learn, increase their sense of access, realize unsupervised independent learning, and cultivate students' self-learning ability, cooperative communication ability, and lifelong learning ability.

### **2.1 Improve the online and offline teaching mode and create a "trinity" hybrid classroom**

The restaurant space design course adopts a hybrid online and offline teaching mode. Since restaurant space design is a course with strong practicality and a close connection with society, offline teaching is divided into two parts: classroom teaching and practical teaching, which constitute a trinity of hybrid teaching modes with online teaching (Feng & Li). Online teaching is based on the content of the knowledge section. Offline teaching is based on the content of the ability training part, in which classroom teaching includes classroom theory, case analysis, and practical training, and practical teaching is based on the method of "promoting learning through competition" to improve students' learning enthusiasm and sense of achievement and cooperating with interior design companies to improve students' job skills (Rodny-Gumede & Chasi, 2020).

Online teaching uses rich online resources to provide students with case studies, videos and other resources about the classroom content to help them understand the course content before class and to identify and give initial thought to issues of interest. Flexible learning discussions and teacher Q&A activities are conducted after class. Online resources can assist students in targeted and repeated learning to accumulate and expand their knowledge and enhance their cognitive level of the content learned. Offline teaching means learning professional knowledge under the organization and guidance of teachers, discussing and exchanging ideas with each other in groups for the confusion encountered in online pre-study, and obtaining ideas for solutions. In response to the problem that online content is generalized but not refined, offline teaching is revitalized but not solidified with on-campus design practical training and off-campus base practice application to cultivate students' problem-solving ability and innovative thinking and expression ability (Paul & Quiggin, 2020).

The teaching process divides the teaching period into a pre-period, mid-period, and end-period, in which three different online and offline hybrid teaching modes are used. The first part of the teaching block is mainly online before and after class and offline during class. The online teaching

before the class is aimed at stimulating students' interest in learning, guiding them to find problems and think about solving them; during the class, we help them find solutions to problems in a step-by-step manner; after the class, students organize and improve their questions and answers and complete the practical training tasks online. The middle part of the teaching period alternates online and offline to complement each other, taking into account the advantages of both teaching, so that students' mastery of knowledge content and improvement of design ability go hand in hand and complement each other. At the end of the teaching board, online teaching content is mainly used to supplement offline teaching content so that online knowledge content can supplement offline ability training, improve students' practical hands-on ability and creative expression design ability, and enhance their career competitiveness for future work (Korotky, 2011).

Dividing the teaching period into three periods: before, during, and at the end. — and adopting different forms of online and offline hybrid teaching in the three periods according to the teaching characteristics and learning objectives of each phase is conducive to cultivating and motivating students' learning motivation, helping them grasp more firmly what they have learned, and combining theoretical knowledge with practical operation to realize the purpose of putting learning into practice (Savelyeva & Park).

### **3. Course teaching practice**

#### **3.1 The course "Restaurant Space Design" consists of six chapters forming three major teaching content blocks**

The first section, "Before Design", is a hybrid teaching style with online courses before and after class and classroom teaching during class. One aspect of online learning is to understand the latest restaurant design trends by analyzing the works of Chinese restaurants, Western restaurants, and bar design awards. The purpose of the online course pre-course is to have a preliminary understanding of the effect to be achieved by restaurant space design and to know the content, method, and purpose of research before restaurant space design to stimulate students' interest in restaurant space design. Offline learning enables students to master the systematic correlation of restaurant space, master the different classifications and types of restaurant design, let students stand in the designer's perspective to find problems and solve them, and guide students to think about the positioning of the restaurant (brand, market, crowd), environment (dining atmosphere environment), products (quality products), marketing methods, (operation with chapters), and service (service process, quality) to conduct preliminary research. Break through the thinking mode of restaurant space design, take inheritance and innovation, intersection and integration, synergy and sharing as the main ways, promote the intersection and deep integration of design, humanities, marketing, and other disciplines, and promote the renewal and upgrading of the restaurant space design concept (Horng, Liu, Chou, & Tsai, 2013).

The second section is the learning content and task stage of "Start Design", which focuses on the design concepts and principles in the "Start Design" stage from the perspectives of socio-economic, technological, technical, and cultural aspects of restaurant space design and enables students to master the design methods of various types of Chinese and Western restaurant spaces with a global perspective. Online learning is used to understand the visual aesthetics, taste aesthetics, and spatial aesthetics of Chinese and Western restaurant spaces so that students can understand and master the similarities and differences in Chinese and Western food culture and space design. Offline teaching is the application of online learning content. Students apply theoretical knowledge of external factors affecting restaurant space design, internal functions, space façade design, detail design, lighting design, space design psychology, etc., mastered in the previous study to the actual design. Based on the design basis, they will follow the scientific design method and complete the design to meet the application requirements through specific procedures. Thus, the student's control of the design characteristics of different restaurant spaces will be enhanced, and a firm foundation will be laid for on-campus practical training and off-campus practice (Ayalp, Yildirim, & Cagatay, 2017).

The third section is the "design practical" stage of restaurant space design. This section adopts the hybrid teaching mode of online teaching content supplemented by offline teaching content and realizes the purpose of "promoting learning through competition" through on-campus practical training and enterprise practice. Online teaching is based on the task chosen by the students (Liu, 2022), and case videos and lectures are added according to the student's needs to guide them to complete the project assignment. Offline teaching is a combination of project tasks and off-campus practice, where enterprises, construction sites, enterprise teachers, and teaching teachers guide students to complete design tasks in a four-way process (Satler, 2003).

### **3.2 Teaching organization and implementation**

In the course of teaching, we adopt the "three main" mode of task-oriented, student-led, and teacher-led teaching. Students are the main body of group discussion, design practice, knowledge acceptance, and skill learning, while the teacher is the controller and guide of the whole learning process and the leader of the course (Dolgikh & Dolgikh, 2019).

Using a mixture of online and offline teaching methods, the three types of teaching content are systematically taught, including theoretical knowledge of restaurant space design, restaurant space design performance skills, and the three types of teaching content derived from restaurant space design, namely, educating emotion with reason, educating emotion with the situation, and comprehensive emotion with passion. Online learning: After learning the teaching content of the classroom, students use resources such as Super Star Online to read and watch film and television text materials online to complete further online inquiry-based learning and realize the expansion of theoretical knowledge. Offline teaching: Offline teaching includes theoretical lectures, case sharing, and access to site investigation and research, and students communicate and discuss through learning groups to deepen their mastery of the content learned. The mixed online and offline learning method not only allows students to acquire knowledge and skills but also, more importantly, to acquire learning methods and learning ability, which can realize unsupervised independent learning and to cultivate students' self-learning ability, cooperation, communication ability, and lifelong learning ability (Vasconcelos, 2017).

## **4. The effectiveness of teaching reform**

### **4.1 Case characteristics and innovation points**

#### **4.1.1. Theoretically linked to practice, implementing the "unity of knowledge and practice"**

In the teaching of "Restaurant Space Design", we advocate the combination of science, design, art, and culture and propose the criteria of "international, cultural, wisdom and innovation" for judging works according to the development of international interior design. We always emphasize the awareness and action of the "unity of knowledge and action" and adopt a mixed online and offline teaching mode to realize the parallel teaching of theory and practice, which helps to improve students' design concepts and drawing ability.

#### **4.1.2. Teaching methodological techniques and shaping design concepts**

The course combines the learning of theoretical knowledge with the design of actual cases, takes the restaurant design process of public space as a guide, and teaches students design methods and specific techniques through a combination of online and offline learning points so that students can develop interest and solve problems in the process of practice and form unique design concepts (Celadyn, 2020). During the learning process, the teacher shows the cases, gives opinions, and discusses with the students according to their ideas to solve the problems, which fully mobilizes the students' learning initiative and classroom interaction, and the students have the desire to give feedback and seek solutions to the problems through discussion, which enhances the students' motivation to learn, and the classroom effect is ideal (Li, Whalley, Zhang, & Zhao, 2011).

#### 4.1.3. Integration of industry and education, competition and learning

By integrating national and regional design competitions into the course of restaurant space design and cooperating with related enterprises, industry-education integration and competition-learning can not only make students gain more knowledge and a sense of acquisition but also apply the theoretical knowledge learned in enterprise practice and serve society.

### 4.2 Important and difficult problems solved by the teaching reform and their effectiveness

#### 4.2.1. Major problems solved

By adopting the "trinity online and offline" blended teaching method, we actively guide students to think, discuss and practice in the teaching process, which improves the fun of learning and students' enthusiasm. By using "competition to promote learning" as a means to explore the subjective initiative of students' learning, students' knowledge intake is changed from "passive input" to "active extraction";2. The teaching process combines theoretical teaching and classroom communication to help students understand and master what they have learned, systematically grasp the whole process of design, and complete the design work independently;3. Combining theoretical teaching with social practice, the higher-order teaching from theoretical knowledge to practical application is completed, and the theoretical knowledge is tested, considered, and improved in practice, which achieves the purpose of applying what you have learned and realizes the talent cultivation goal of "high quality applied talents"4. The ideological education of the curriculum is carried out in the whole process of teaching so that the teaching of the curriculum can serve the regional economy and implicitly cultivate students' values in the teaching process (Kaminskyi, Yereshko, & Kyrychenko, 2018).

## 5. Conclusions and discussions

In the present study, the "online and offline trinity" hybrid teaching mode is applied to the teaching of the restaurant space course, in which the online and offline hybrid teaching period division form and the teaching content board settings are taken into account. Through the "online and offline trinity" hybrid teaching reform and practice of the restaurant space design course, the "three mains" model of task-based, student-led, and teacher-led teaching is adopted. The course is designed to transform traditional teaching, which emphasizes knowledge irrigation and neglects practical training, into a real quality education track, and to enable students to acquire not only knowledge and skills, but also learning methods and learning abilities, to realize unsupervised independent learning, and to develop students' self-learning ability, cooperation and communication skills, and lifelong learning ability.

This paper, the combination of offline classroom teaching, practical teaching, and online teaching of some of the knowledge is studied in the context of the hybrid online and offline teaching of restaurant space design. It should be noted that hybrid online and offline teaching can be improved in many ways, such as the enrichment of teaching resources, the introduction of forward-looking new materials and processes, and the cross-fertilization of disciplines (Kaminskyi et al., 2018). In addition, the scientific planning of enriched teaching resources, the promotion of interdisciplinary cross-fertilization, and the cultivation of composite talents are topics that can also better realize online and offline hybrid teaching, which we will study in our future work.

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