



# Practice Research on Online and Offline Blended Learning Model Based on Chaoxingerya Platform-Take the Course of “Flower Decoration Technique” as an Example

Lihua Yang<sup>(✉)</sup>, Manling Zeng, and Zhenyu Xu

Huizhou Engineering Vocational College, Huizhou, GuangDong, China  
1322950672@qq.com

**Abstract.** Combining the development of current information technology and the implementation of relevant national teaching reform policies, this article expands exploration and practice of blended learning model for online and offline. “Flower Decoration Technique” is opened online as a high-quality curriculum based on the construction of Chaoxingerya platform, which fully consider the characteristics of online and offline blended learning model, applying information-based teaching design concepts to develop online curriculum teaching resources, and use functional advantages of the platform to design online and offline blended learning organization forms and assessment methods. Through the research and practical analysis of the online and offline hybrid teaching mode, this paper breaks through the traditional teaching mode, and is committed to creating an intelligent flower decoration technology classroom, which overwhelmingly improves the interest and effectiveness of teaching.

**Keywords:** Chaoxingerya platform · Online and offline · Blended learning model · Practice · Research

## 1 Research Background Based on the Blended Learning Model of Chaoxingerya Platform

### 1.1 The Rapid Development of Contemporary Information Technology Promotes the Reformation of Teaching Mode

With modern information technology advances, informatization has become the essential way of the current industrial upgrading and transformation. The traditional teaching model can no longer adapt to the education and teaching activities in the network surrounding. Online teaching has also had a huge impact on the field of education and teaching. It is urgently necessary to solve that utilizing the new pattern of modern information technology to alter the traditional lecturing mode, exploring and constructing a class lessoning model suitable for the network environment in modern vocational education.

## 1.2 The Epidemic Has Brought Changes in Teaching Models

Affected by the epidemic, the biggest influences on teachers and students are the changes in teaching mode. According to this problem, our college conducted in-depth research on teaching during the epidemic, which illustrated that the online and offline blended teaching model is a crucial breakthrough in solving the problem.

## 1.3 Analysis of the Status Quo of the Course “Flower Decoration Technology” in Our College

This course revolves around professional positions such as floral environment designers, and covers several knowledge, including floriculture, western flower arrangement, oriental flower arrangement, modern flower arrangement, flower decoration management, etc. With the development of the times, there are many problems existing in the teaching summary of flower decoration technique. First of all, the teaching content and form are single. In addition, the small amount of lecture information is also a problem. Thirdly, the approaches to learning this course are monotonous. Ultimately, the teacher’s demonstration is not clear. This series of problems are the key factors leading to the decline of students’ learning enthusiasm and low learning efficiency.

## 1.4 Features of the Chaoxingerya Platform

Chaoxingerya, known as an intelligent teaching system, is a platform that extending three clients-side which are mobile, teachers and administrators. Overall, from teachers’ side, they have permission to set lessons, to build classes and to manage classes. What’s more, interacting with the classroom, answering questions, activating the classroom via Chaoxingerya platform will enhance teaching results. On the whole, from students and users’ side, they can join classes and independent learning. Basically, students can develop their classroom interaction by asking questions, which is convenient for students to learn, improving their learning efficiency.

## 2 Characteristics of Online and Offline Blended Learning Model

Online and offline blended learning model is a new mode of pedagogy which combines traditional face-to-face teaching with digital learning. In the whole online and offline blended teaching process, the emphasis is “student centered”, which enables students to have highly participated and personalized learning experience, and significantly enhance learning effectiveness. Online and offline blended teaching can not only play the leading role of teachers’ guidance, inspiration and supervision, but also reflect students’ positive and active dominant position in the learning process. Relying on the Chaoxingerya Learning Communication Platform, the online and offline blended teaching mode expands the teaching time and space, which records the student’s learning performance throughout the lessons, and personalizes the e-learning file for each student’s resume.

### **3 Teaching Environment Support of the Teaching Model Based on Chaoxingerya Platform**

#### **3.1 Construction of Intelligent Class**

Intelligent class is a new form of education based on the Internet and Internet of Things technology, which integrates multiple functions, such as smart teaching, teacher-student interaction, cloud storage, video recording and broadcasting, intelligent environment adjustment, self-service attendance and remote interaction, etc. Intelligent class applies modern approaches to cut into the entire teaching process, making the classroom simple, efficient, and intelligent, and help develop students' independent thinking and learning abilities.

#### **3.2 Construction of Chaoxingerya Platform**

The learning platform is the condition and guarantee of the online and offline blended teaching mode. Using the mobile terminal to obtain online teaching resources for learning is a convenient and efficient learning mode. Chaoxingerya platform is a professional mobile learning platform for smart phones, tablets, computers, and other mobile terminals. The Chaoxingerya learning platform can perform classroom activities such as sign-in, topic discussions, group coursework, and live broadcasts. By using Chaoxingerya, there is big data technology to monitor the teaching process, fully grasp the learning situation of students, and adjust teaching strategies in time according to the problems found. Relying on the Chaoxingerya learning platform to expand the teaching time and space, and through a variety of teaching methods to solve the problems in the teaching of traditional flower decoration techniques, the teaching key points are emphasized, and the difficulties are broken.

#### **3.3 Construction of “Flower Decoration Technique” Online and Open High-Quality Curriculum**

Using Chaoxingerya learning platform to build online courses is relatively complicated and takes a long time. However, once it is completed, it has powerful functions. In addition to more intuitive display of teaching content, it can also carry out teaching interaction before, during and after class, and it can also be used for more off-campus students and social enthusiasts to learn [4]. According to the “Flower Decoration Technology” course standards and teaching objectives, following the rules of vocational education and teaching, combining with the World Skills Competition floristry project skill standards, flower arrangers professional standards, and floral environment designer professional standards, the teaching content is selected, refined, and reconstructed into 5 teaching projects (floriculture, western flower arrangement, oriental flower arrangement, modern flower arrangement, flower decoration management). Each teaching project includes online teaching tasks and offline activities. Each project has multiple learning tasks, and

each learning task contains teaching resources such as courseware, explanatory videos, coursework, works pictures, works assessment standards, extended learning, chapter tests, etc. As long as the mobile phone downloads the Chaoxingerya platform, students can access the learning platform anytime and anywhere to achieve autonomous learning and personalized learning. Teachers can monitor student learning through the background and have a fair idea of the learning time and progress of the students (Fig. 1 and Table 1).

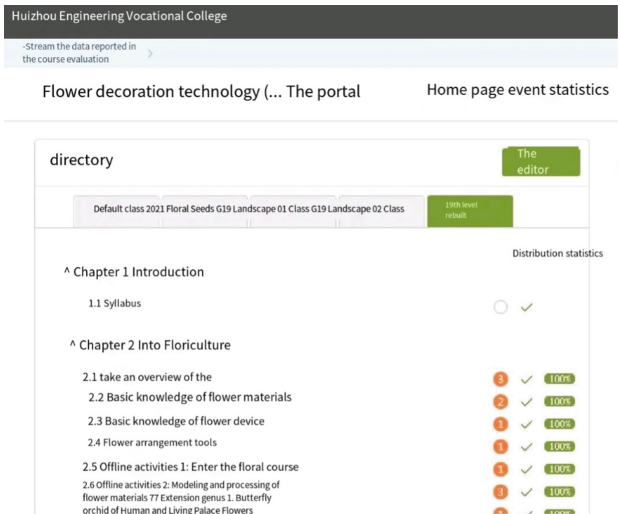


Fig. 1. Application interface

Table 1. Lecture content.

Chapter	Online knowledge	Offline capabilities	Capabilities extension	Apportionment of class hours
Floriculture	1. Overview of floriculture 2. Basic knowledge of flowers 3. Basic knowledge of containers 4. Flower arrangement tools	1. Floriculture lessons 2. Floral styling and processing	1. Popular Lunar New Year Eve Festival-Flower Phalaenopsis 2.Appreciation of Professor Ma’s “XiaoSa” Chinese flower arrangement works	4 class hours

(continued)

**Table 1.** (continued)

Chapter	Online knowledge	Offline capabilities	Capabilities extension	Apportionment of class hours
Western flower arrangement	<ol style="list-style-type: none"> <li>1. Brief history and characteristics of western flower arrangement</li> <li>2. Hemispherical type, triangular type, vertical type and L-shaped type</li> <li>3. Inverted T type, horizontal type, fan type, crescent type</li> <li>4. S type, cone type, waterfall type, parallel design</li> </ol>	<ol style="list-style-type: none"> <li>1. Flower arrangement in the West</li> <li>2. Production of L-shaped flower works</li> </ol>	<ol style="list-style-type: none"> <li>1. Plant design and production</li> </ol>	16 class hours
Oriental flower arrangement	<ol style="list-style-type: none"> <li>1. Brief History and Characteristics of Oriental Flower Arrangement</li> <li>2. The basic pattern of oriental flower arrangement</li> <li>3. Basket flower production</li> <li>4. Bowl flower production</li> <li>5. Tube flower production</li> <li>6. Dish flower production</li> <li>7. Vase flower production</li> <li>8. Jar flower production</li> </ol>	<ol style="list-style-type: none"> <li>1. Deeply study Oriental flower arrangement</li> <li>2. Show the ambition with flowers and walk into the poetry meeting of flowers</li> <li>3. Basket flower production</li> <li>4. Bowl flower production</li> <li>5. Tube flower production</li> <li>6. Dish flower production</li> <li>7. Vase flower production</li> <li>8. Jar flower production</li> </ol>	<ol style="list-style-type: none"> <li>1. China's top ten famous flowers and twelve flower kings</li> <li>2. Production of floral embossing works</li> </ol>	16 class hours
Modern flower arrangement	<ol style="list-style-type: none"> <li>1. Modern flower arrangement techniques (1): reorganization, folding, folding, cascading, ladder</li> <li>2. Modern flower arrangement techniques (2): winding, binding, ornamental binding, paved, grouped, piled up</li> <li>3. Modern flower arrangement techniques (3): cone cup, reel, string hanging, weaving</li> <li>4. Modern flower arrangement techniques (4): shadow, frame, structure, paste, perspective</li> </ol>	<ol style="list-style-type: none"> <li>1. Design and production of bouquets</li> <li>2. Flower-cut decoration design and production</li> </ol>	<ol style="list-style-type: none"> <li>1. The production of ribbon flowers</li> <li>2. Appreciation and analysis of works of the World Cup, China Cup and competition over the years</li> </ol>	16 class hours

(continued)

**Table 1.** (continued)

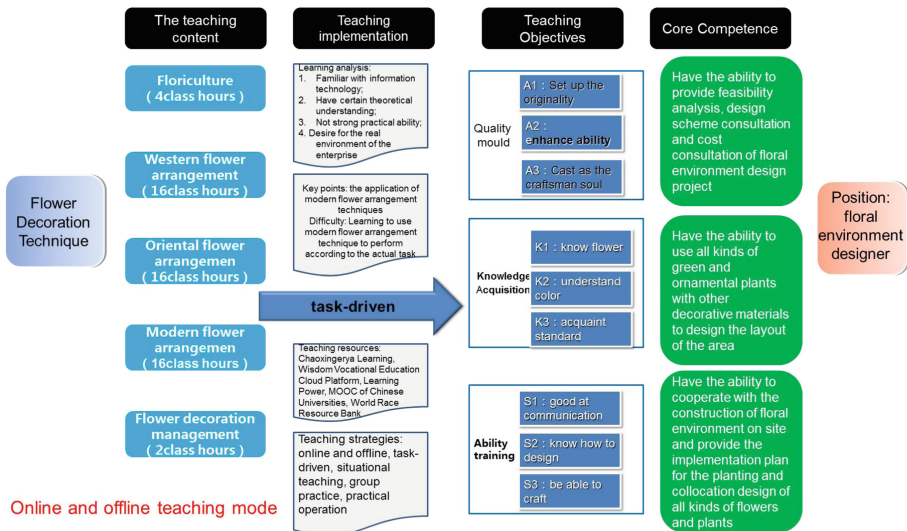
Chapter	Online knowledge	Offline capabilities	Capabilities extension	Apportionment of class hours
Flower decoration management	1. Decoration design of flower shop 2. Flower shop management	1. Research report	1. List of Chinese festivals	2 class hours

### 3.4 Curriculum Establishment

Teachers can add students from the student library or import students in bulk, or by sending class invitation codes or QR codes to students, who can join the course using a sweep of QR codes or input invitation codes in the upper right corner of the home page of the Chaoxingerya Learning Platform.

## 4 Pedagogical Design of Online and Offline Blended Teaching Mode Based on Chaoxingerya Platform

Via online and offline blended teaching mode, focusing on the position of floral environment designer, this course covers 5 projects including step into floriculture, western flower arrangement, oriental flower arrangement, modern flower arrangement, flower decoration management. Driven by tasks and based on solving practical problems, this course comprehensively utilizes a variety of teaching methods such as case teaching, heuristic teaching, and on-site teaching. Using the online and offline blended teaching mode, the teacher solves the problems one by one, so that students can master the qualities, knowledge, and abilities needed to complete the project (Fig. 2).



**Fig. 2.** Online and offline teaching mode

## **5 Teaching Implementation of Online and Offline Blended Teaching Mode Based on Chaoxingerya Platform**

Teachers are task-driven in an information environment, meanwhile, whole teaching process is divided into three parts: pre-class exploration, in-class guidance, and after-class expansion. Students preview before class. The class is driven by real cases of corporate floral projects and is divided into two content: floral performance learning and floral performance production. Furthermore, an “online and offline” blended teaching model is constructed, and the floral performance methods are divided into 6 sub-groups. The tasks are designed to: “remember” reviewing the past and learn the new, “introducing” into the task of professional context, students “analyze” flower art examples, teachers “understand” the performance techniques of flower art based on cases, students and students interact with each other to “make” floral works by using the expression techniques of flower art and multiple “evaluation” of the details of the performance techniques of floral art. Six steps that achieve “learning, teaching, and doing” mutually complement each other, allow students to master the key points of the course and break through the difficulties of the course in an interesting, open and intelligent class. Last but not least, students should expend their capacity and make endeavor for their improvement after class.

### **5.1 Pre-class Exploration**

Before class, teachers upload teaching resources to Chaoxingerya learning platform and release learning tasks. Moreover, lecturers should check the situation of studying, degree of test completion and discussion, which is advantaged to teachers ensuring teaching key and difficult points and adjust the strategies of teaching in time.

### **5.2 In-Class Guidance**

In the class, teachers use the Chaoxingerya learning platform to complete 7 teaching parts, containing sign-in, reviewing the past and learning about the new, introducing professional situations, analyzing tasks, explaining new knowledge, guiding practical training, and evaluating and summarizing. Simultaneously, students use the Chaoxingerya learning platform to complete 7 learning parts, covering sign-in, problem thinking, task analysis, mastering new knowledge, listening, and summarizing, group training, and multiple evaluations.

### 5.3 After-Class Expansion

After class, teachers use Chaoxingya learning platform to guide students to study and preview. Subsequently, students use the Chaoxingya learning platform to consolidate the content of the class and complete the pre-class preview of the next project, forming a good habit of learning at every part (Fig. 3).

## Online and offline blended teaching model

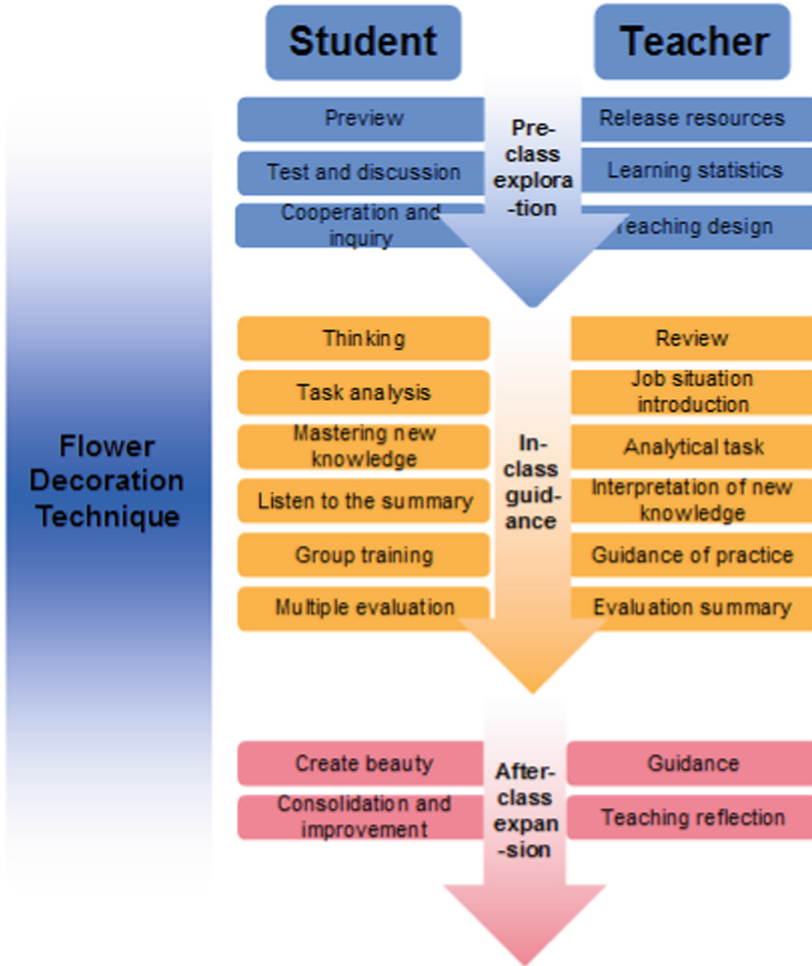


Fig. 3. Teaching process

## 6 Teaching Evaluations of Online and Offline Blended Teaching Mode Based on Chaoxingerya Platform

### 6.1 Teacher's Evaluation of Students' Learning

The assessment of online and offline blended teaching mode based on Chaoxingerya platform pay high attention on students' flower decoration design ability, information collection, processing and analysis capabilities, focusing on students' hands-on and language expression skills, divided into three aspects: process evaluation, project outcome evaluation, and comprehensive skill evaluation. The results of the evaluation include survey reports, floral works, to name but a few. The weight of the evaluation is composed of three parts: learning attitude, theoretical knowledge evaluation, and practical ability evaluation (Table 2).

**Table 2.** Teaching evaluation weight

Evaluation parts	Evaluation content	Weight(%)
Online	Self-learning	20
	Class performance	20
Offline	Evaluation of project outcomes (practical results)	30
	Skills assessment	30
Total	100	

### 6.2 Students' Reviews of the Online and Offline Blended Teaching Mode Based on the Chaoxingerya Learning Platform

It appears that the background data results from the Chaoxingerya Learning Platform show that the pre-class preview rate of students reaches 100%, indicating that most students have consciously completed the teaching resources uploaded by teachers. By testing the students' pre-class situation through the chapter test, most of the students passed the chapter test and achieved their goals. Definitely, the goal of the course is achieved very good. In terms of student participation, students participate in 100% of classroom interaction, and classroom quality has been significantly improved. By and large, in terms of student satisfaction, student satisfaction with the classroom reached more than 95% (Fig. 4).

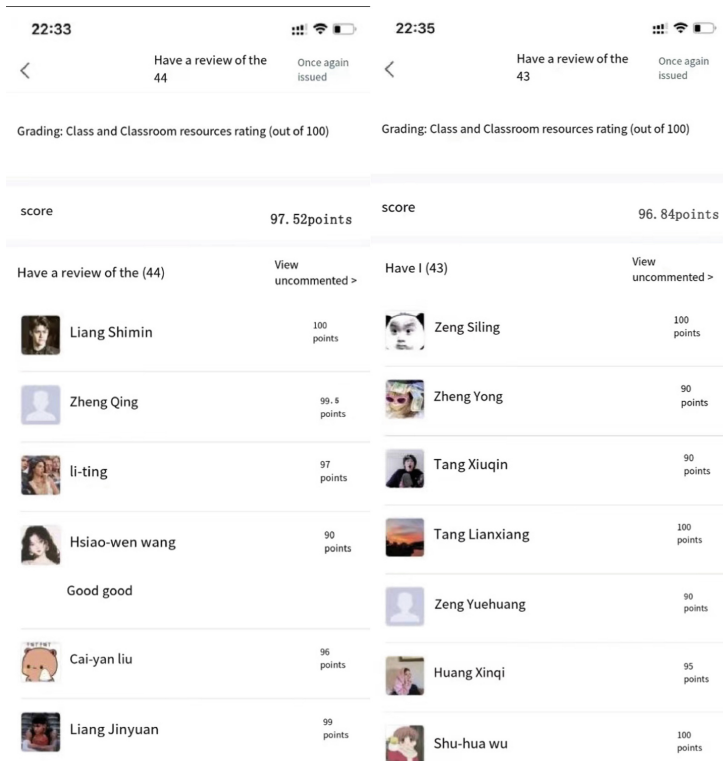


Fig. 4. Students' reviews of the class

## 7 Reflection and Improvement of the Blended Teaching Mode Based on the Chaoxingerya Learning Platform

### 7.1 The Adoption of Different Teaching Approaches

Because of the different sources of senior vocational students, even if the teaching content is same, for different learning foundation and learning habits of students, the effect is different. According to the students' personality, we must further explore a variety of teaching methods and use models for students at different levels. Based on their personality and merit, we aim to teach according to their talents, teach by individuals, and teach according to their genre.

### 7.2 The Necessity of Promotion of Online Teaching

The main target of the project is the students in the general recruitment class. In the face of the new changes in the social recruitment policy situation, not only should we deepen the study of learning background, but also improve the online teaching form and assessment methods.

### 7.3 Teaching Resources Need to Be Further Supplied

The quantity of teaching resources in the course of “Flower Decoration Technology” is considerable, however, the quality of some teaching resources is not satisfied. More or less, some resources construction is not standardized enough, and the sustainable utilization rate is not enough. At present, the curriculum group has completed the classification and sorting of existing curriculum resources, listing the curriculum resources construction. The group intends to spend about a year to make the course resources construction basically reasonable, sufficient, applicable.

## 8 Conclusion

The “Flower Decoration Technology” course based on the Chaoxing Fanya learning platform incorporates information teaching, which increases the effectiveness of the course. The course is accorded to information technology as a platform, applying online and offline blended teaching model, which create an intelligent flower decoration class, breaking through the traditional teaching model, and highly boosting the interest and effectiveness of teaching. Besides, curriculum resources can be stored effectively on the Chaoxing Fanya learning platform for a long time, and students can also retrieve the content they want to learn at any time to complete online and offline individual learning.

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