

# *Blended Teaching Model in the Teaching of Art Courses in Colleges and Universities*

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**Abstract:** In the traditional teaching model(TM), teachers are the main body of the classroom, and students only passively receive knowledge and information. With the progress of education, students are increasingly becoming the main body of learning. What has changed is an update to the educational model. In order to improve the vividness and attractiveness of art courses, this paper conducts related research on the blended TM. This paper mainly uses the questionnaire survey method and the interview method to study whether the art students in colleges and universities (CU) carry out blended teaching and whether the blended teaching plays a role. The survey results show that 86% of students are willing to acquire knowledge in blended teaching, and their learning initiative is high. Therefore, the blended TM is worth using in art courses.

## 1. Introduction

In the education method, in addition to the traditional TM, the elements of modern technology have been added in our country, which makes the educational methods more and more diversified. With the development of technology and the continuous advancement of education reform, the blended TM has been applied more and more. Blended learning is a new and effective modern classroom management method and means. It has revolutionized the traditional teacher-led, student-centred and single-form teaching methods.

There is a lot of research on blended TMs and college art courses. For example, some people said that information technology has greatly subverted the traditional art education theories and concepts, had a profound impact on the teaching of art courses in modern CU, and gave birth to a blended TM [1-2]. Some scholars also believe that online learning has unique advantages such as rich multimedia resources, convenient collaborative communication, and friendly interaction, but it cannot completely replace teachers' classroom teaching [3-4]. However, some people have proposed that the reform of the blended TM has improved the teaching ability of teachers and improved the enthusiasm and ability of students to learn [5-6]. Therefore, in order to improve the quality of art teaching and enhance the professional ability of students, it is necessary to explore the blended TM in this paper.

This paper takes the application of blended TM in college art courses as the research object, and

the main contents include the following aspects. First, through the analysis and summary of blended teaching, the advantages of blended teaching are put forward. Second, in view of the defects of the current education and teaching methods of CU in my country, the necessity of online courses in art teaching is analyzed. Third, for the blended teaching of art majors, a teaching system is proposed to meet the online and offline mode. Finally, the role of blended teaching in art courses is determined by means of a questionnaire survey.

## **2. Research on Blended Teaching Model and Art Teaching**

### **2.1 Blended Teaching**

Blended TM refers to a new form of education between teachers and students, between classrooms and between classrooms in the teaching process. It emphasizes that within a period of time, the school should aim to cultivate "application-oriented talents". Therefore, its main purpose is to improve the level of curriculum design. The blended TM is based on the premise of "student subjectivity", which combines classroom learning with homework, teachers and students participate together, cooperate with each other to complete course tasks, and realize teacher-student interaction. This teaching method can fully mobilize all students to actively participate in art education activities. Compared with the traditional teaching method, this teaching method has obvious advantages. First, it breaks the previous "indoctrination" education model. The teacher-led monolithic and cramming approach makes the classroom completely free and has no fixed place, restricting learners to self-directed learning. The second is to change the teaching content from simple to deep explanation of knowledge points to teaching students the skills and techniques they must master, and to cultivate their independent thinking and problem-solving ability [7].

Blended learning is composed of two parts, online and offline learning. Among them, learning in physical classrooms and learning in synchronous mode are offline learning, and learning in asynchronous mode is online learning. Blended teaching is a dual-oriented TM that optimizes and improves traditional classroom teaching on the basis of making full use of the network platform, in order to obtain the optimal TM. The "mixing" of blended teaching is multifaceted. The blend in blended teaching is a blend of constructivist learning theory, connectivist theory, and mastery learning theory. The teaching resources used in blended teaching are not single, it includes resources from different sources such as the Internet, printed materials, photos, texts, sounds, videos, etc., and various resources can be fully utilized in the classroom. In the blended teaching, the power of the network platform is needed to realize the mixing of the traditional teaching environment and the network teaching environment. Blended teaching can integrate autonomous learning, collaborative learning, and personalized learning, and realize the coexistence and optimization of multiple learning methods in the classroom [8].

All elements of the octagonal frame model are interconnected, and when designing a blended curriculum, we need to take into account not only our own factors, but also external factors. The teaching content, teaching objectives and teaching strategies at the teaching level are optimized. In terms of technology, choose the appropriate teaching platform and technical means. The page design is designed to simplify and clear pages suitable for student learning. In terms of evaluation, a reasonable evaluation mechanism should be established. Management should design activities that can effectively accomplish teaching objectives. In terms of resource support, appropriate teaching resources should be considered. Moral and ethical design should respect students' equal opportunities and the right to choose freely. The institutional dimension refers to other institutions that can provide support. The advantage of this mode is that the factors are comprehensive, but it is cumbersome to operate, especially some factors are beyond the control of individual teachers [9]. The ASSURE model is student-centered, clearly telling teachers what to do and how to do it, and it

is highly maneuverable. The analysis of learner characteristics mainly includes general characteristics, mastered skills and learning styles [10]. The ADDIE model is an educational system design model that divides teaching into five stages. These five stages include a series of analysis, curriculum design, curriculum content writing, page development, teaching implementation and teaching effect evaluation on teaching behavior goals, learners, environment, etc. [11].

## 2.2 Teaching of Art Courses in CU

In today's teaching, teachers impart knowledge in the classroom, and students internalize knowledge after class, and art class is no exception. First of all, students are more interested in art classes, but because the teaching method is mainly passive and the teaching content is mainly textbooks, it basically follows the script, which makes the effective learning time of the students in the classroom shorter. Secondly, because the traditional art classroom teaching method is single, teachers lack the correct guidance for students. The way of simply instilling knowledge ignores the cultivation of students' autonomous learning ability. Finally, reasonable and effective guidance and utilization of a large number of students' online time can make students reduce the ineffectiveness of online time, so as to effectively make good use of favorable conditions [12].

In the teaching of art courses in CU, the teaching content is very important. Teachers must be clear about what the textbook is trying to convey. The comprehension and application of teaching content is the goal of implementing blended teaching. That is to say, teachers should comprehensively cultivate students' knowledge points and learning ability to ensure teaching efficiency. The application of the blended TM requires students to actively participate in the classroom and conduct an in-depth exploration of the course content.

Teaching content is the basis of teaching, and curriculum design is directly related to students' knowledge points. This requires teachers to fully consider the differences in the understanding and appreciation of art works of students at different levels and ages when teaching.

Teachers should select and determine the course content in a targeted manner according to the teaching needs and in combination with the learning characteristics of students. First of all, we must understand the teaching materials and select art teaching works and content. The second is to make reasonable arrangements for classroom time, and make reasonable arrangements for online and offline. Finally, it is also necessary to pay attention to the use of modern scientific and technological teaching methods to improve teaching methods and evaluation methods.

The individualization, openness and autonomy of classroom teaching is a trend, which is conducive to the implementation of the "flipped classroom" TM. Although the time spent online by students is increasing, it may provide conditions for the realization of informatization and networking of teaching carriers. However, students spend most of their online time socializing, gaming, and watching movies. Therefore, teachers need to guide and improve teaching evaluation methods.

## 2.3 Design of Blended Teaching of Fine Arts in CU

Micro-learning refers to the way of communicating and learning through the application of mobile communication technology at any time and any place. Micro-learning resources with micro-media as the carrier, with the help of micro-courses, WeChat public platforms, Weibo, etc., present short and concise important learning content in fragmented time, emphasizing the learning of relatively scattered and relatively difficult knowledge in a short period of time, often using mobile devices as terminals. To this end, micro-media is required to present micro-learning resources, and micro-lectures, WeChat public accounts, and Weibo have emerged as the times require. Teaching with the help of micro-lectures and WeChat public subscription accounts has

gradually become a new learning model. Teachers can also register the WeChat public platform subscription account to push teaching micro-videos, texts, pictures and other geography course resources for students' knowledge learning and teacher-student interaction.

By establishing an online learning platform, teachers and students can use this learning platform to conduct interactive learning discussions and exchanges, and comprehensively analyze and evaluate the quality of teaching content and learning effects. The online learning platform can be divided into Teacher platform and student platform.

In addition to the platform established by the school, the common QQ groups, WeChat groups, etc. can also meet the simple communication between students and teachers and students. Through QQ groups and WeChat groups, teachers can release some high-quality resources for students, and recent teaching plan and teaching objectives. To this end, this paper designs an online teaching system in blended teaching.

Online learning refers to the learning carried out on the teaching platform. The system is a free open source platform with complete and diverse functions, simple operation and convenient for new students. On the online platform, students can conduct various types of online learning as shown in Figure 1, which are:

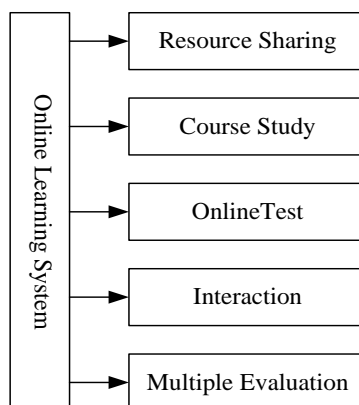


Figure 1: The Design of Online Teaching System

As the administrator of the platform, teachers can add various resources on the platform. As resources are provided, the curriculum needs to be restructured to add emerging knowledge that adapts to the needs of the times. In addition, some students may also have some resources that are helpful for course learning, and teachers can allow students to share resources on the platform. Online students can complete some courses. In order to improve students' interest in learning, teachers can assign pre-class preview tasks before class, and students can preview online independently. When students encounter doubts in their learning in the classroom, they can solve their doubts in learning by reading the platform resources repeatedly. After the class, students can also complete the review of knowledge points by sorting out the platform materials. After completing the coursework, students can complete the online test. Through the test, students can discover their own strengths and weaknesses. Considering that some students are timid in traditional classrooms, teachers believe that online communication and interaction can solve this problem. There are discussion areas, chat rooms, and interactive content on the platform. Students can add their own experience and gains in learning in the discussion area. Evaluation is a test for students' learning in stages. Through evaluation, students can discover their strengths and weaknesses in their learning. Among them, the test is a standard for students' self-evaluation, and students can find their own shortcomings through the test. In addition, the homework completed by the students as required is also an indicator to evaluate the learning effect.

The system uses the fuzzy evaluation method to analyze the students' performance. Establish an evaluation factor set W, an evaluation level set S, a weight set X of the evaluation factors, and a fuzzy judgment set P. The evaluation matrix is:

$$P = \begin{bmatrix} P_{11}, P_{12}, P_{13}, \dots, P_{1m} \\ P_{21}, P_{22}, P_{23}, \dots, P_{2m} \\ P_{31}, P_{32}, P_{33}, \dots, P_{3m} \\ \dots \dots \dots \\ P_{n1}, P_{n2}, P_{n3}, \dots, P_{nm} \end{bmatrix} \quad (1)$$

Among them, P is a fuzzy link from the evaluation factor universe W to the evaluation level universe S. When the fuzzy weight set W and the fuzzy relationship matrix P are known, fuzzy transformation can be used for comprehensive evaluation:

$$D = X \bullet P \quad (2)$$

Finally, according to the principle of maximum and minimum calculation, then normalization operation is performed, and then a reasonable comprehensive evaluation result can be obtained according to the size of the membership degree.

### 3. Research on Art Teaching

#### 3.1 Selection of Survey Subjects

Since the object of this study is the art course in CU, the object of investigation selected in this article is the art students in CU. In order to ensure the specificity of the survey results, only 300 freshman, sophomore and junior art students and 5 teachers from a local college were selected for the survey. Students are mainly surveyed by questionnaires, and teachers are conducted by interviews.

#### 3.2 Design of Survey Content

The preparation of the questionnaire is carried out on the basis of clarifying the aspects of "flipped classroom", "the current situation of art in junior high school", and "learning conditions". Comprehensive analysis of the questionnaire, data analysis and summary.

#### 3.3 Issuance and Recovery of Questionnaires

The questionnaires were distributed on Wednesday, of which a total of 100 offline questionnaires were distributed, and 200 students were invited to answer the questionnaires online. The time for filling out the questionnaire is one week. On the deadline, 90 offline questionnaires were returned, and 150 online results were received. The effective recovery rate of 240 questionnaires reached 80%. Conduct data screening and analysis on the survey results to draw relevant conclusions.

### 4. Survey Results of Blended Teaching

#### 4.1 Current Situation and Attitudes of Blended Teaching

As can be seen in Table 1, 87% of the students have used the Internet to learn art more or less,

and only 13% of the students said they have never used the Internet to learn art. 72% of students think that online teaching is helpful to learning art, and 23% of students think that it is very helpful.

Table 1: Attitude and Willingness of Combined Teaching

	Never	Occasionally	Sometimes	Often
Study Frequency	13%	51%	31%	5%
Learning Attitude	5%	7%	65%	23%
Willingness To Learn	2%	22%	64%	12%
Learning Initiative	14%	54%	22%	10%

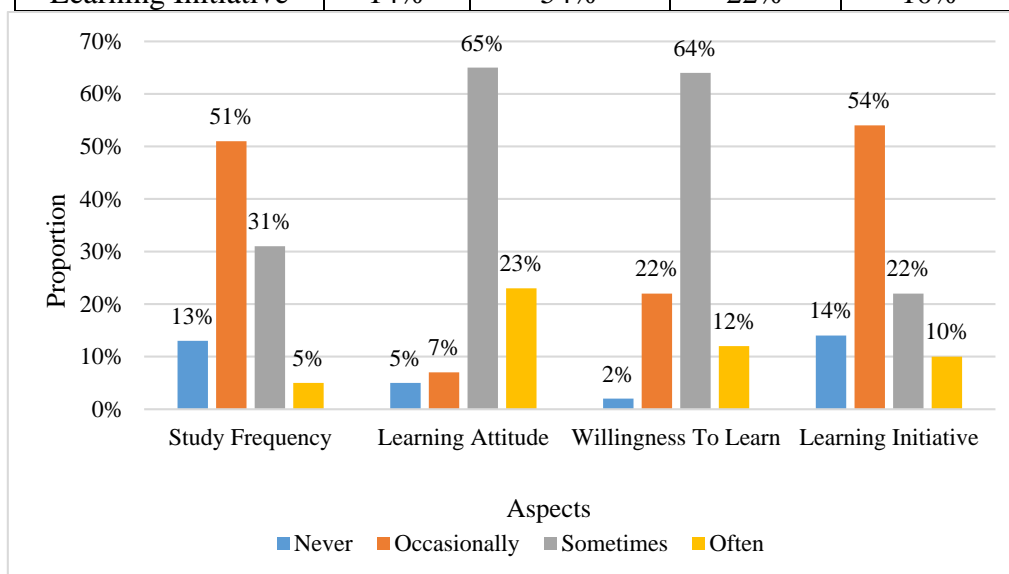


Figure 2: Learning Frequency and Learning Initiative of Mixed Teaching

As shown in Figure 2, we can find that 76% of students are willing and very willing to try blended learning. Therefore, it can be seen that the vast majority of students are in line with the common characteristics of post-95 students, like online learning, like new things, and are willing to change their learning methods.

## 5. Conclusion

The application of blended TM in college art courses is a new concept and method, and it will become an important trend in the development and reform of modern education. Through this new classroom form, a large number of comprehensive talents with innovative consciousness and practical ability have been cultivated. At the same time, it also puts forward more diverse and challenging requirements for the school. The results from the survey show that the blended teaching method is supported by the majority of people in art courses. Online and offline teaching needs to rely on technical means and scientific management to achieve the goal of efficient teaching. Therefore, the methods, systems and platforms of blended teaching need to be further explored.

## References

- [1] Hadrien Cambazard, Nicolas Catusse, Nadia Brauner, Pierre Lemaire: *Teaching OR: Automatic Evaluation for Linear Programming Modelling*. 4OR 20(2): 333-345 (2022).  
 [2] Oscar Pastor, Alfonso Pierantonio, Gustavo Rossi: *Teaching Modeling in the Time of Agile Development*.

*Computer* 55(6): 73-76 (2022).

[3] Kingsley Okoye, Arturo Arrona-Palacios, Claudia Camacho-Zuñiga, Joaquín Alejandro Guerra Achem, José Escamilla, Samira Hosseini: *Towards Teaching Analytics: A Contextual Model for Analysis of Students' Evaluation of Teaching through Text Mining and Machine Learning Classification*. *Educ. Inf. Technol.* 27(3): 3891-3933 (2022).

[4] Yehuda Peled, Sara Perzon: *Systemic Model for Technology Integration in Teaching*. *Educ. Inf. Technol.* 27(2): 2661-2675 (2022).

[5] Cathy H. Xia, Nan-shan Chen, Priya Natarajan: *Teaching Performance Modeling via Software and Instructional Technology*. *SIGMETRICS Perform. Evaluation Rev.* 49(4): 14-19 (2022).

[6] Donya Rooein, Devis Bianchini, Francesco Leotta, Massimo Mecella, Paolo Paolini, Barbara Pernici: *aCHAT-WF: Generating Conversational Agents for Teaching Business Process Models*. *Softw. Syst. Model.* 21(3): 891-914 (2022).

[7] Chetna Gupta, Varun Gupta, Agnieszka Stachowiak: *Adoption of ICT-Based Teaching in Engineering: An Extended Technology Acceptance Model Perspective*. *IEEE Access* 9: 58652-58666 (2021).

[8] Cornelis J. de Brabander, Folke J. Glasra: *The Unified Model of Task-Specific Motivation and Teachers' Motivation to Learn about Teaching and Learning Supportive Modes of ICT Use*. *Educ. Inf. Technol.* 26(1): 393-420 (2021).

[9] Thong Nguyen-Huy, Ravinesh C. Deo, Shahjahan Khan, Aruna Devi, Adewuyi Ayodele Adeyinka, Armando A. Apan, Zaher Mundher Yaseen: *Student Performance Predictions for Advanced Engineering Mathematics Course With New Multivariate Copula Models*. *IEEE Access* 10: 45112-45136 (2022).

[10] Luis Abraham Sánchez-Gaspariano, Israel Vivaldo-de-la-Cruz, Jesús M. Muñoz-Pacheco, Luz del Carmen Gómez-Pavón, Arnulfo Luis-Ramos: *EI-SCAM as a Teaching Tool in an Undergraduate Course in Analog and High-Frequency Circuits*. *Comput. Appl. Eng. Educ.* 30(4): 1022-1035 (2022).

[11] Idris Aktas, Haluk Özmen: *Assessing the Performance of Turkish Science Pre-Service Teachers in a TPACK-Practical Course*. *Educ. Inf. Technol.* 27(3): 3495-3528 (2022).

[12] André Menolli, João Coelho Neto: *Computational Thinking in Computer Science Teacher Training Courses in Brazil: A Survey and a Research Roadmap*. *Educ. Inf. Technol.* 27(2): 2099-2135 (2022).