

# Practice and Exploration of the Teaching Mode of Double Lines Blending

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**Abstract.** Since the 21st century, the hybrid teaching model, which integrates the advantages of multiple teaching modes such as high efficiency, innovation, and integration, has received extensive attention from educational circles at home and abroad. This paper takes the course teaching of “Principles of Management” as an example, applies the basic principles of the blended teaching model to classroom teaching, and builds a three-stage teaching model of “guided learning, assisted learning and mutual learning” based on the concept of “two-line blending”. At the same time, through the introduction of multi-level analysis method (AHP method) and with the aid of Yaahp 10.3 statistical analysis software to establish a course evaluation index system. By carrying out empirical research on blended teaching classrooms, it explores the implementation ways and application effects of blended teaching, and provides reference and enlightenment for the implementation of blended teaching reforms in management courses.

**Keywords:** Blended Teaching; Curriculum Evaluation Index System; MOOC Platform; Teaching Reform.

## 1. Introduction

In the 1990s, E-Learning based on network and digital media technology was widely hailed. With the continuous advancement of the process of education informatization, the hybrid teaching mode that combines the traditional teaching mode and the modern teaching mode has attracted the attention of educational circles at home and abroad. This teaching mode combines the advantages of various teaching modes in the past and has become hot topics in teaching reform. This paper takes the course of “Principles of Management” as an example to carry out experimental research on blended teaching, hoping to provide reference and enlightenment for the development of blended teaching in management courses.

## 2. Constructing a New Mode of Double-line Mixed Teaching

Blended teaching is a diversified integration and an effective mixture of teaching resources. In recent years, in the field of school education in China, online education platforms represented by Chinese University MOOC, Wisdom Tree, Superstar Learning Link, and Micro Teaching Assistant have been widely adopted by various colleges and universities and the hybrid teaching model has attracted great attention. In order to adapt to the development of the times, the author began to form a teaching team in 2019, introduced the concept of dual-line blending into management classroom teaching, actively explored effective ways of dual-line blending. Then a new three-stage teaching model “Guiding Learning-Assisting Learning-Mutual Learning” is created.

### 2.1 Online Preview--Guide Students to Learn Independently

The dual-line blending is a change to the traditional classroom teaching model. It improves the previous blended teaching method that uses the network as the boundary and the online and offline are independent and relatively separated. Instead, the online and offline teaching are integrated into one, so as to promote teaching activities out of the classroom to expand to a broader learning space. Learning from this teaching concept and using the online teaching platform to create an online preparatory room to create a two-line mixed entry point.

(1) Create a preview situation. Teachers design preview questions, preview methods, and preview goals according to the requirements of the syllabus and teaching plan and process and sort out the”

task package” for each teaching unit based on the above elements and send them to students through the online preview room for students to preview and discuss.

(2) Create a preview atmosphere. Encourage teachers and students to jointly build and share learning resources. First, collect relevant literature and make online preview “resource packs”. Second, make learning video materials under the guidance of teachers and have produced more than 90 teaching materials such as “Incentive” video material. By uploading “resource packs” and video materials, students’ preview content has been enriched and students’ interest in learning has been intensified. Then students’ ability to analyze and solve problems can be cultivated.

(3) Form preview results. At this stage, students summarize the pre-study and form a written homework report. In the homework report, students combine preparatory self-study and practical activities to conduct a theoretical analysis of the problems raised by the teacher and put forward their own views, opinions and doubts.

## **2.2 Intensive Speaking and Practicing--Helping Students Internalize Their Learning Content**

The introduction of online teaching enables students to have sufficient knowledge of the teaching content. Therefore, the main task of classroom teaching is not to impart knowledge alone, but to guide and tutor students in their learning, allowing students to be autonomous under the guidance of teachers. Study and study to form a combination of two lines.

(1) Discussion and contention. After online preview and social practice, students have a certain knowledge and understanding of what they have learned. In teaching, students are encouraged to actively exchange self-study results, discuss and comment on each other in class. Let students deepen their thinking about teaching content in the course of communication, discussion and debate.

(2) Click to answer questions. According to the situation of students’ exchange and self-study, the teacher will give targeted explanations, check, correct and confirm the students’ pre-study self-study results and point out students’ doubts. QA is to guide students’ thinking style, help students find problems, analyze problems and solve problems and understand and accept teaching content from active learning.

(3) Induction and promotion. On the basis of student exchanges, discussions and debates, teachers systematically summarize and summarize the teaching content to deepen students’ knowledge and understanding of knowledge points. At the same time, reset the problems and select typical cases as exercises for students’ classroom teaching, so that students can use the knowledge they have learned and gained experiences and abilities to solve practical problems, thereby enhancing their ability to analyze and solve problems.

## **2.3 Online Sharing--Guide Students to Learn and Help Each Other**

In order to expand the learning space of students’ professional courses, an online learning achievement exhibition hall was established with the help of an online teaching platform to allow students to exchange learning experiences and learning results, and to build a Double-line blending efficiency point.

(1) Report results. Select a research question as an assessment topic, let students organize a discussion in a study group and get results. Then it will be displayed in the online learning achievement exhibition hall and the assessment scores will be evaluated for the group members based on the network reposting volume, review quality and other indicators. Through exchanges, seminars, sharing and network broadcasting, everyone has a collision of thoughts.

(2) Sharing results, organizing micro-class performance activities. In the teaching of management, emphasis is placed on guiding students to use the knowledge they have learned to solve practical problems and show the results with the help of micro-classes. For example, an innovation and entrepreneurship risk control planning competition is carried out among students, and students are required to conduct concentrated performances in the form of “micro movies” and each class is screened to push excellent films to the college for performance.

### **3. Ways to Strengthen the Effect of Double-track Blending Teaching**

The “two-line blending” teaching model puts forward new requirements for the construction of the teaching team and teaching resources. To this end, the construction of the teaching team and teaching resources should be strengthened around the following four core elements:

#### **3.1 Promote the Interaction and Personalization of Online Courses**

In online teaching activities, teaching interaction is equal to interaction between learners and learning resources plus social interaction [2]. For this reason, it is an effective means to establish diversified online course resources through online surveys. The author conducted a questionnaire survey on what kind of learning resources students like during teaching. Among them, the most popular ones are video, audio (88.1 percent), PPT, teaching plans and other graphic materials (73.81 percent), and live broadcast to supplement knowledge points. (35.71 percent), group collaboration display (33.4 percent). According to the online survey of students, we will increase teaching resources in a targeted manner, and provide various types of curriculum resources such as video courses, synchronized courses, electronic textbooks, supporting study plans, typical cases, question banks, etc. that are suitable for a variety of learning methods based on the content of the course. Form a rich, diversified, selectable curriculum resource library that adapts to the characteristics of online learning to make it closer to learning and stimulate students' interest in learning.

#### **3.2 Promote Thematic and Targeted Classroom Teaching**

The “two-line blending” teaching process makes full use of the versatility, vividness, and intuitiveness of online resources, and realizes the organic combination with offline teaching by digging and integrating relevant “touch points”, which is very important for improving the effect of class- room teaching efficient. For example, by combining online resources such as revolutionary traditions, patriotism and traditional culture with management principles, design and implement “special topics plus MOOC” online and offline hybrid teaching, such as Sidu Chishui on leadership change management, Three Kingdoms The management of those things depends on the strategic choice of the company, the analysis of the organizational culture of the Dream of the Red Chamber, the team management of Journey to the West, the adaptation of Sanwan contains system innovation, management innovation, etc., from the feedback form of students after class, it integrates MOOC learning and special topics The mixed teaching method of tutoring and practical inquiry has won the love and welcome of students.

#### **3.3 Promote Contextualization and Full-staffization of Practical Teaching**

This study uses a mixture of two learning methods, autonomous learning and collaborative learning. It is driven by learning tasks and cooperative exploration is the carrier. Several learning groups are organized according to “heterogeneity within groups and homogeneity between groups” to guide students into the flipping link and use carry out self-learning in fragmented time. Before the start of learning, teachers use instructional design to create situations that are conducive to the construction of meaning for learners. For example, 3 minutes before class, “Small Story Big Management” speech, video production and other activities guide students to actively collect and sort out red management materials in groups. The production of micro-class end performances to expand cross-team collaboration and communication skills; red management case analysis reports, entrepreneurial project planning, strategic thinking activities to enhance conceptual ability, while enhancing students' knowledge summary and reflection, analysis of practical results, based on existing the problem corrects the learning mode.

#### **3.4 Promote the Teamization and Cooperation of Teacher Construction**

In mixed teaching, teachers have multiple roles such as knowledge imparter, learning activity designer, learning environment developer and effect evaluator. To this end, strengthening cooperation

and mutual assistance between teachers is of great significance to improving role skills. Introducing incentive mechanisms into the curriculum, according to students with different professional backgrounds, learning characteristics, and learning habits, conduct chapter learning guidance task collaboration, horizontal joint design and carry out curriculum activities, collect lessons, set up teaching and research teams for scientific research, etc., to form peers that educate people and talents, work together, form a synergistic effect and realize full-course teaching.

#### 4. Constructing a New Evaluation System for Double-line Mixed Teaching

Based on the recording of the teaching and learning process by the platform terminal, combining with the actual needs of the teaching administrators, improving the existing assessment methods is an important basis for the course teaching effect. In order to make the indicators in the evaluation system accurate, reliable and able to guide actual work, the research group adopted the analytic hierarchy process (AHP method) to construct the evaluation system, using Yaahp 10.3 software and combining the Delphi survey method (Delphi), Optimize the index structure of the evaluation index. According to the principle of Delphi survey method, combined with the opinions of the expert group, after in-depth discussion, the practical ability (B<sub>1</sub>), learning ability (B<sub>2</sub>), learning attitude (B<sub>3</sub>), 3 first-level indicators and 6 comprehensive evaluation second-level indicators are determined: red Management case (C<sub>1</sub>), group micro-class performance (C<sub>2</sub>), course activity performance (C<sub>3</sub>), micro-forum speech (C<sub>4</sub>), video viewing (C<sub>5</sub>), online completion score (C<sub>6</sub>) and other 6 secondary indicators, emphasizing Students' active participation, active learning, teacher-student interaction, integrated learning experience, cultivate students' independent thinking ability and innovative thinking ability, and form a multi-dimensional evaluation mechanism that matches the individual development needs of students. The weights of the above two first-level indicators and six second-level indicators are compared and analyzed. Curriculum examination reform experts are invited to compare the two factors and score the relative importance of the factors in the level. The value of the relative importance of the factors in the level adopts the 1-9 scale method of TLSaaty, and the arithmetic average is obtained according to the expert's scoring results to finally construct the discriminant matrix, using Yaahp10. The 0-level sub-software calculates the weight of each index and the consistency ratio of the judgment matrix. The maximum consistency ratio parameter of the judgment matrix takes a value of 0.10, and the weight of each index of the calculation result and the consistency ratio of the judgment matrix are shown in Table 1.

**Table 1.** Blended learning evaluation index weight and judgment matrix consistency ratio

Criterion B <sub>i</sub>	W <sub>B<sub>i</sub></sub>	Index C <sub>i</sub>	W <sub>C<sub>i</sub></sub>	Ratio	W <sub>I</sub>
Practical ability B <sub>1</sub>	0.663	C <sub>1</sub>	0.8333	CR <sub>1</sub> = 0.0000	0.4096
Practical ability B <sub>1</sub>	1	C <sub>2</sub>	0.167	< 0.10	0.2048
Learning ability B <sub>2</sub>	0.278	C <sub>3</sub>	0.1429	CR <sub>2</sub> = 0.0000	0.0384
Learning ability B <sub>2</sub>	5	C <sub>4</sub>	0.8571	< 0.10	0.2300
Learning attitude B <sub>3</sub>	0.117	C <sub>5</sub>	0.3333	CR <sub>3</sub> = 0.0000	0.0391
Learning attitude B <sub>3</sub>	2	C <sub>6</sub>	0.6667	< 0.10	0.0781

Remark 1. The C<sub>i</sub> represents the arithmetic weighted average of the scores of the relevant expert groups. The B<sub>i</sub> represents the score of each subsystem in the criterion layer:  $B_i = \sum_{i=1}^n W_{C_i} C_i$ , where W<sub>C<sub>i</sub></sub> is the weight value of the ith subsystem. A represents the final comprehensive score:  $A = \sum_{i=1}^n B_i W_{B_i}$ , where W<sub>B<sub>i</sub></sub> is the weight value of the ith subsystem.  $W_I = W_{C_i} \cdot W_{B_i}$ , where the

criterion layer weight  $W_{B_i}$ , the index layer weight  $W_{C_i}$ , and the comprehensive evaluation index weight  $W_1$ .

According to the weight calculation results in Table 2, the consistency ratio of the judgment matrix of the evaluation index  $CR=0.0707 < 0.10$ , at the same time  $CR1=0.0000$ ,  $CR2=0.0000 < 0.10$ ,  $CR3=0.0000 < 0.10$ , all of which are less than 0.1, indicating that the consistency is satisfactory. The order of the weight of the criterion layer relative to the target layer is: practical ability (0.6144)>learning ability ( $B_2$ ) (0.2684)>learning attitude (0.1172). As a result, the weight value of various indicators has been established. It can be seen that in the composition of the student performance system, practical ability is the most important, accounting for about 60 percent, while learning ability evaluation accounts for nearly 30 percent, and finally learning attitude, that is, the extra points for learning MOOC performance are about 10 percent. This shows that blended teaching should conform to the characteristics of students' quality education and focus on the internalization of practical knowledge.

## 5. Investigation and Analysis of Blended Teaching Effect

Through the effect evaluation of the questionnaire survey of 50 students majoring in financial management in 2019, the effective recovery rate was 95 percent. The SPSS software was used to conduct a single-sample T test analysis. The results show that the effects of blended teaching on various abilities are all significant ( $p < 0.05$ ), which means that the average of 11 items is statistically different from the number 0.0. The details are given in Table 2:

**Table 2.** One-sample t-test analysis results, \*  $p < 0.05$ , \*\*  $p < 0.01$

Item	Average	Standard deviation	t	p
Satisfaction	1.952	0.936	13.521	0.000**
Assessment method	2.024	0.924	14.2	0.000**
Resource richness	1.81	0.833	14.071	0.000**
Learning interest	1.857	0.872	13.81	0.000**
Self-learning ability	2.024	0.924	14.2	0.000**
Mastery of knowledge	1.905	0.878	14.057	0.000**
Communication skills	2.095	1.031	13.801	0.000**
problem solving skill	2.048	0.962	13.477	0.000**
Teamwork	2.095	1.008	13.477	0.000**
Support my learning	1.929	0.867	14.424	0.000**
Teaching method	1.738	1.061	10.621	0.000**

## 6. Conclusion

In summary, through the interviews with the teachers and students participating in the experiment and the research on the blended teaching process and learning effect, it is found that students have a higher evaluation of the cognition and participation and satisfaction based on blended teaching. Teaching style improves students' participation in classroom learning, stimulates students' enthusiasm for learning, helps students to improve their independent learning ability and problem-solving ability, and at the same time improves teachers' teaching ability and teaching quality. Therefore, the practical

exploration of the “two-line blending” teaching model carried out in this paper provides a useful reference for the subsequent research on the blended teaching model.

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