

# Application of Experimental Teaching Method in Teaching Habitat Interior Space Design

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**Abstract:** "Habitat Interior Space Design" is a compulsory course for environmental design majors. Through this course, students can clarify the ideas and methods of environmental design living space scheme design and systematically master the types, styles, and ergonomics of living spaces; therefore, learning Habitat Interior Space Design well requires students to master more basic principles and practical projects. In this paper, we will discuss the significant changes that have occurred as a result of the introduction of the "experimental teaching method" into the teaching of Habitat interior space design.

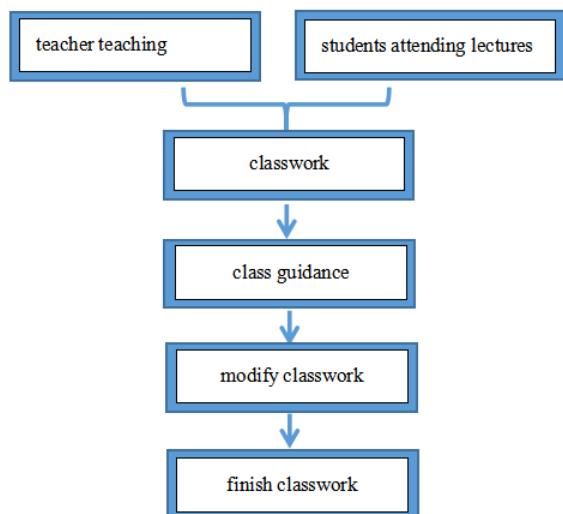
## 1. Introduction

The fundamental viewpoint of the theory of teaching by trial is that "students can try, try can succeed, and succeed can be innovative." The characteristic is "try first and then guide, practice first and then lecture [1]." The theoretical basis of the theory of teaching experimentation mainly includes three aspects: philosophical foundation, pedagogical foundation, and psychological foundation. From the philosophical point of view, the epistemology of dialectical materialism requires that emphasis be placed on the practical activities of students in teaching so that students can acquire knowledge, develop thinking and cultivate ability. The trial teaching method gives full play to the primary role of students in classroom teaching activities, requiring them to carry out trial practice at the beginning, pushing them to the active position; when they encounter difficulties in the trial practice, students will take the initiative to study the textbook by themselves or seek help from teachers, and learning becomes the students' own needs [2]. From the pedagogical point of view, the trial teaching method meets the requirements of modern pedagogical thinking, changes the traditional injection teaching method, unifies knowledge transfer and ability cultivation, and causes a series of changes in the teaching process, such as switching from teachers speaking and students listening to students learning and practicing on their own under the guidance of teachers, and teachers speaking again, changing from simply transferring knowledge to cultivating ability and developing intelligence while sharing knowledge. And so on. From a psychological point of view, trial teaching uses the law of transfer in psychology. It attaches importance to the role of students' existing old knowledge and life experience in learning new

knowledge so that the previous knowledge structure is reorganized and combined with the newly acquired knowledge so that students can form a new knowledge structure of a higher level that can accommodate new knowledge [3].

## 2. Experimental teaching methods to stimulate students' interest in design and thus improve the teaching effect of human interior space design

After interviews with design courses, it concluded that the current teaching process of design courses is mainly based on teachers lecturing, supplemented by students listening. Figure 1 shows the general operation of the present teaching mode.



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How to mobilize students' interest in learning, improve the persistence of enthusiasm for interior design training, and conduct interviews. The survey objects of this interview are first- and second-year students majoring in environmental design in our school. This interview aims to understand the students' problems in the classroom atmosphere and knowledge points in the current professional teaching.

**Table 1.** Interview content

interview question number	interview content
①	How do you comment on the teaching environment and computer room equipment of our school?
②	Do you think that the current teaching of design courses is mainly based on teachers giving lectures, supplemented by students listening to lectures, which is more conducive to your knowledge mastery?
③	Would you check if the teacher posted some questions before class and if the homework is on the app? Will this help you better grasp the knowledge points?
④	Do you have any new ideas and suggestions for professional course teaching?

**Table 2.** Key Points of Student Interview Answers

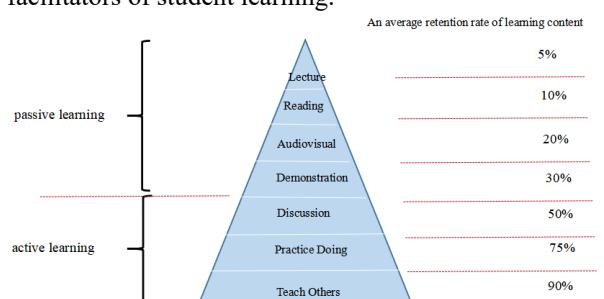
interview content	Answer the main points of the question
How do you comment on the teaching environment and computer room equipment of our school?	In recent years, in order for our students to have a good learning environment, especially for design majors, the school requires high-configuration computers and has invested a lot of money to meet our professional rendering.
Do you think that the current teaching of design courses is mainly based on teachers giving lectures, supplemented by students listening to lectures, which is more conducive to your knowledge mastery?	Every time the teacher gives a lecture in class, I want to listen to the class seriously, but every time I can't help but get distracted, and I can't get into it, which is not conducive to my knowledge mastery.
Would you check if the teacher posted some questions before class and if the homework is on the app? Will this help you better grasp the knowledge points?	I should check it out. Now many majors in the school are using APP software. The teacher will post the relevant content of the next class on it, let the students find the information by themselves, and make relevant PPT for the next class to explain. This will allow me to take the initiative to learn and have a strong sense of participation, which is more conducive to my mastery of knowledge.
Do you have any new ideas and suggestions for professional course teaching?	It is recommended that our profession implement this method as soon as possible to improve students' active learning, and teachers should play a good role in supervision.

The interview results show that the school's hardware construction is sufficient to support basic teaching needs for the teaching environment and computer room equipment. However, students' mastery of professional courses cannot meet the teaching requirements, which requires teachers to reflect, and the key lies in what teaching methods to use. Try the teaching method, use the preparation questions to build a bridge, use the attempted questions to lead the way, prompt the connection between the old and new knowledge, and communicate the connection between the old and new knowledge, it leads to thinking with doubt, which is conducive to stimulate students' interest in learning, once students see the floor plan, they will immediately open their minds, use the old knowledge they have mastered, solve new problems and realize the positive transfer of knowledge. In teaching, pay attention to accumulating doubts, setting up doubts, creating suspense, stimulating students' interest in learning, and guiding students to think actively, try independently, and explore to solve problems.

This gave students the first taste of success in their attempts. The students' desire for practical design was high, which undoubtedly greatly stimulated their interest in learning and training, and improved the effectiveness of their practical training. Habitat design doesn't depend on how much the teacher says, but on how you say it. The use of trial lectures is conducive to stimulating students' learning interest and training enthusiasm, and the teaching of Habitat interior design achieves "twice the result with half the effort".

To verify the above conclusion, groups A and B are taught separately in the same class, and the experiment is carried out with the human interior space course. The same teacher teaches groups A and B and adopts different methods. Group A adopts traditional teaching. In this mode, teachers give lectures, students listen to lectures in class, ask questions, and complete homework after class for education. However, in group B, the teacher adopts the trial teaching method. First, he asks questions about the next course through the online software APP and asks the students to search for the answers according to the questions. It is entirely project-based, and through role-playing among students, the project discussion list is carried out. The final grade is based on the average total quality score obtained after the teacher's status, the student's mutual evaluation, the owner's stage, and the tripartite grade. Finally, it was concluded that the students in Group A needed a solid grasp of knowledge to learn how to use it flexibly, where to start when encountering actual projects, and had no ideas. However, students in Group B know how to be flexible when engaging in different projects, and they can learn from one another. When encountering actual projects, they must first communicate with the owners to understand their preferences. The process is self-explanatory and works well.

Based on the theoretical basis of Feynman's learning method [4], is mainly based on humanistic and pyramid learning theories shown in Figure 2. Humanistic learning psychology believes that learning should be "people-oriented," students should be the main body of knowledge, and teachers only provide specific situational guidance and help students to think independently and learn in depth. Teachers are facilitators of student learning.

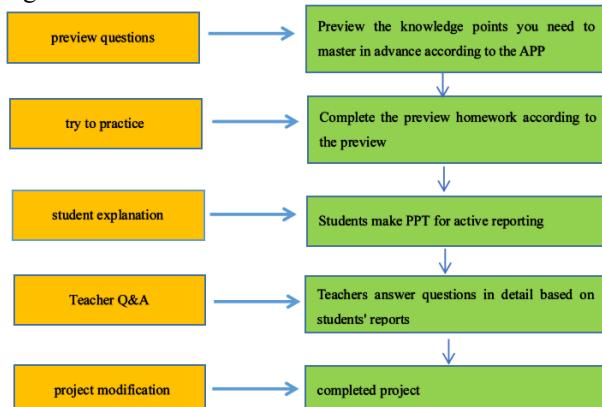


**Figure 2.** Cone of Learning by Edgar Dale

Through thinking about relevant issues before class, students will gradually form a good habit of being hands-on and loving to use their brains. A virtuous circle stage in which theory is guided by practice, and then the idea is enriched by tradition has genuinely been carried

out. In this way, the design of human living interior space becomes an intense and challenging skill practice activity, and the enthusiasm and initiative of students are unprecedentedly high [5].

Through the previous experiments, the experimental teaching method requires "student autonomy" and adds "preview" for innovative design, which is more conducive to students' active learning, as shown in Figure 3.



**Figure 3.** The general teaching process of the "trial teaching method"

### 3.Experimental teaching and development of skills and applications related to interior design

The Experimental problems in the attempted teaching, instructors should design their own according to the teaching content of Habitat interior space design and the actual situation of the class students, and their forms should be diverse, novel, interesting and strong in thinking, to cultivate ability and develop intellectual development. After completing the design, students will discuss and summarize the problems they encountered, the design considerations, and how they can design a solution that meets the customer's requirements both quickly and well so that the teaching purpose of Habitat interior space design can be achieved.

Like other disciplines, Habitat interior space design class needs to develop students' self-learning, self-exploration, and innovation abilities, which is the ultimate goal of the "experimental teaching method" [6]. It is not enough for students to master the knowledge of Habitat interior space design class, they should learn to think independently and expand their abilities to meet the needs of their future work. This requires us to focus on cultivating students' self-learning ability in the teaching process, i.e. guiding them from the direction of "learning" to "studying" while being creative [7]. An important part of teaching is to let students study the textbook and consult the information, that is, to try before teaching new knowledge. Students concentrate on reading and thinking, looking for answers, and solving them through teacher guidance and peer discussion when they encounter difficulties. The knowledge learned and self-learning skills are also developed. Discussing design solutions based on already designed drawings can be in-

depth and lively, making the abstract superficial, the hidden obvious, and the stereotypical vivid [8]. Students are in an exciting cognitive activity, i.e., they mobilize their initiative and enthusiasm, transfer knowledge and skills, and develop their self-learning ability.

Using the experimental teaching method, I feel that this teaching method can make students become the master of learning, students' self-learning ability and spirit of exploration can be fully cultivated so that intelligence can be developed, ability can be cultivated, and quality can be improved, thus laying a solid foundation for cultivating talents of the trans-century. Try teaching method is not a good teaching method [9].

### 4.Adopting incentive mechanisms to fully motivate students in the interior design of living spaces

For many college students, they are not too interested in theoretical knowledge, but these students are particularly active, hands-on, competitive, and curious, strong desire for skills, and all want to fully express their talents, using these psychological characteristics of students, in the Habitat interior space design before the announcement of the course design grouping, grouping the purpose is to make the same group of students to help each other, help each other to learn, to promote good students to help poor students, and to help the poor students. The purpose of grouping is to make the students in the same group help each other, help each other to learn, encourage the good students to help the poor students, and then also cultivate the student's ability to work together and enhance team consciousness [10]. To ensure the smooth development of the course teaching, the teacher must be ready to deploy the hands-on ability and analytical ability of students in each group and determine the ringmaster of the next course design operation competition according to the final score of each group, and other groups will challenge the ringmaster so that students will be in constant competition in all future course design process. After the end of the course, the ring competition is evaluated and commended, and encouraged, so that every student is in a positive state and greatly motivated.

### 5.Conclusions

In conclusion, we have learned that the method of teaching in the Habitat Interior Design class can give full play to the "director" role of the teacher and the "protagonist" role of the students, which is conducive to overcoming the blindness of the curriculum, improving the quality of teaching, preventing polarization, enhancing students' interest in learning, emphasizing the mastery of basic knowledge and basic skills, and focusing on the development of students' It emphasizes the mastery of basic knowledge and skills and focuses on the cultivation of students' hands-on and innovative abilities. For all students, it cultivates a strong spirit of

collectivism and stimulates students' enthusiasm for practice.

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