

Research on Differentiated Teaching Strategies of Commercial Space Design Course under the Blended Teaching Mode

Xu Han, Yue Mi*

Guangdong Technology College, Zhaoqing, Guangdong, China

**Corresponding Author*

Abstract: With the continuous advancement of the digital transformation of education and the growing demand for interdisciplinary talents in the design industry, the traditional teaching model has gradually shown limitations in meeting students' personalized learning needs. This paper takes the Commercial Space Design Course as the focus and explores the construction of differentiated teaching strategies under the blended teaching mode. By sorting out the theoretical foundations of blended teaching and differentiated teaching, conducting an in-depth analysis of issues such as individual differences in course teaching, designing hierarchical teaching paths based on learning styles, interests and abilities, and matching the supply of differentiated teaching resources with a diversified evaluation system, this paper has constructed differentiated teaching strategies for the Commercial Space Design Course under the blended teaching mode. This study provides a reference for the teaching reform of the Commercial Space Design Course and the blended differentiated teaching of similar art and design courses.

Keywords: Blended Teaching Mode; Commercial Space Design; Differentiated Teaching; Teaching Strategies

1. Introduction

The Commercial Space Design course is designed to enable students to master the principles, methods, and skills of commercial space design, allowing them to create spatial environments that are functional, aesthetic, and commercially valuable in response to different commercial needs. The traditional teaching mode of the Commercial Space Design course is mostly teacher-centered and lecture-based. Owing to the limited total class hours of the course, teachers tend to focus on imparting theoretical design knowledge. This teaching

method results in students lacking problem-solving abilities and innovative design thinking when confronted with practical projects. It is not uncommon for students to memorize the theoretical knowledge of a certain design style fluently, yet fail to flexibly apply what they have learned to conduct innovative designs based on the specific positioning of the space and the needs of the target audience in actual design practice.

The rise of the blended teaching mode integrates the advantages of online and offline teaching. Online teaching platforms provide abundant learning resources, enabling students to conduct independent learning anytime and anywhere according to their learning progress and needs; offline teaching, on the other hand, emphasizes face-to-face interaction between teachers and students as well as practical operations[1]. The application of the blended teaching mode allows students to preview relevant knowledge through online platforms before class, and use online resources for review and extended learning after class. Under this mode, students' learning situations and needs become more diverse—they differ in learning styles, basic knowledge levels, learning abilities, and interests. This requires teachers to refrain from adopting a "one-size-fits-all" teaching method in the teaching process, but instead implement differentiated teaching strategies to meet the learning needs of different students and improve teaching quality. Therefore, researching differentiated teaching strategies for the Commercial Space Design course under the blended teaching mode holds significant practical significance.

2. Blended Teaching Mode and Commercial Space Design Course

2.1 In-depth Analysis of the Blended Teaching Mode

The blended teaching mode is an innovative teaching method that integrates the advantages

of traditional face-to-face teaching and online teaching, namely a teaching mode combining "online" and "offline". It breaks through the time and space limitations of traditional teaching, enabling students to acquire knowledge in a more flexible and diverse learning environment. The blended teaching mode emphasizes being student-centered and regards students as active participants in the learning process. Teachers upload a series of summarized course-related materials to the college's online platform, and students independently choose their study time according to their own learning progress and needs to achieve personalized learning.

The blended teaching mode combines traditional teaching materials and lesson plans with digital teaching resources. Diversified learning materials not only enrich the teaching content but also cater to the learning styles and needs of different students. Through various means such as online discussion forums, live Q&A sessions, and offline group discussions, the blended teaching mode greatly enhances interaction and communication between teachers and students as well as among students themselves. Teachers gain insights into each student's learning status and characteristics based on the learning data on the online platform, and provide personalized learning suggestions and guidance accordingly[2]. By learning basic knowledge online and conducting practical operations and discussions offline, students develop a deeper grasp of commercial space design and better apply theoretical knowledge to practical design.

2.2 Commercial Space Design Course

Photoshop is one of the essential basic tools that students majoring in design-related disciplines must master. By learning Photoshop, students can proficiently acquire skills such as image processing, compositing, and creative design, enabling them to undertake design work including posters, logos, and brochures. This lays a solid foundation for their subsequent study and practice of other professional courses. For e-commerce majors, Photoshop is also an indispensable skill: mastering techniques like product image processing and retouching helps highlight the features and advantages of products, optimize e-commerce store webpages, and enhance the competitiveness of products.

The Photoshop course consists of teaching content, teaching methods, practical links, and evaluation methods. With teaching content as the

core, it covers basic knowledge of Photoshop software—such as basic operations, tool usage, layers, masks, channels, and filters—as well as applied skills including image processing, compositing, and creative design. Teaching methods are crucial means to achieve teaching objectives, and a variety of methods are often adopted, such as case-based teaching, project-driven teaching, and task-driven teaching. Practical links may include in-class exercises, after-class assignments, course design, and internships. In-class exercises and after-class assignments help students transform and internalize classroom knowledge, fostering their comprehensive application abilities and innovative capabilities. The evaluation method, which serves to assess and provide feedback on students' learning outcomes, consists of regular grades and final exam grades.

The Commercial Space Design Course has diverse teaching objectives. Students are required to master the basic concepts of commercial space design, gain an in-depth understanding of the characteristics and design requirements of different types of commercial spaces, and grasp the specific contents and methods of various stages—from preliminary research, conceptual design, and scheme design to construction drawing design. Additionally, they need to understand the innovative methods and development trends of commercial space design.

Through the study of the course, students' interest in commercial space design is fostered, and their sense of innovation and creativity are stimulated. It guides students to fully consider people's actual needs and environmental adaptability factors in design practice, enhances their aesthetic ability and artistic accomplishment, and emphasizes the control of quality and details in design work. Additionally, it cultivates students' sense of responsibility and professional dedication, ensuring that design works meet professional standards in both quality and safety.

The Commercial Space Design Course features rich and highly systematic teaching content. It covers a wide range of fields and integrates knowledge from multiple disciplines such as architecture, interior design, environmental psychology, and marketing. The course requires students to comprehensively apply this knowledge in design, placing high demands on the breadth of their knowledge reserves and their

ability to integrate and apply knowledge synthetically. When designing a commercial space, students must consider the spatial architectural structure and functional layout, apply interior design knowledge to the design process, and also integrate consumers' psychological needs and market positioning. These factors pose certain difficulties in the integration and imparting of knowledge during teaching. The projects in the Commercial Space Design Course are often characterized by large scale and complex composition, requiring students to have strong overall control ability and systematic thinking ability. From the preliminary planning of the project, the formulation of design schemes to the subsequent drawing of construction drawings, all links are interrelated, and problems in any link may adversely affect the final quality of the entire project.

The Commercial Space Design Course has distinct practice-oriented characteristics, requiring students to apply theoretical knowledge to practical design[3]. Most students lack frontline practical experience and have limited understanding of issues such as construction techniques, material selection, and cost control in actual projects. This leads to frequent disconnection between design and actual construction during the implementation stage of design schemes—for example, some shapes or techniques in the design scheme are difficult to implement in actual construction, or are unfeasible due to excessively high costs. How to strengthen practical teaching links, improve students' practical abilities, and help them better adapt to the practical needs of future professional positions is an important issue that urgently needs to be addressed in the current teaching of the Commercial Space Design Course.

2.3 Theoretical Interpretation of Differentiated Teaching Strategies

Differentiated teaching is a teaching philosophy and approach centered on addressing students' individual differences[4]. It emphasizes the uniqueness of students, and teachers should formulate personalized teaching plans based on this to help students achieve full development on their original foundation. Hierarchical objectives—including basic objectives, improvement objectives, and expansion objectives—are set according to students'

different levels and potentials, enabling each student to clarify their own learning direction and tasks. For example, students with weaker foundations focus on achieving basic objectives, while students with stronger learning abilities are assigned expansion objectives to encourage them to explore innovative design methods and cutting-edge design concepts. Diverse teaching content is provided based on students' interests and needs, and the selection of teaching methods should also vary from person to person to meet the learning needs of different students.

Pay attention to each student's learning progress and mastery of knowledge, and provide personalized learning time and support. Provide more guidance and practice time for students with slower learning paces, and assign more challenging learning tasks to students with faster learning paces—so that each student can achieve mastery of knowledge at their own pace.

3. Analysis of the Current Situation

3.1 Analysis of the Current Situation of Teaching in the Commercial Space Design Course

Teachers spend a great deal of class time explaining basic knowledge such as design styles, color theory, and ergonomics. In the limited practical teaching sessions, students often only carry out simple design exercises, lacking in-depth participation in and experience with actual projects. Ultimately, their understanding of the knowledge remains superficial[5].

There are significant differences among students. Some have strong autonomous learning abilities and innovative thinking skills, enabling them to master new knowledge quickly. Meanwhile, many others lack proficiency in mastering basic knowledge and applying design skills, requiring more guidance and assistance from teachers. Take learning design software as an example: some students master the software's operating skills proficiently through independent learning and practice, while others can only grasp them after teachers provide detailed explanations and demonstrations. Existing teaching strategies lack personalization. Teachers tend to adopt uniform teaching objectives, teaching content, and teaching methods in the teaching process, and the learning needs of different students fail to be addressed in a targeted manner.

Commercial Space Design is a highly practical

course, yet the practical teaching components in existing teaching strategies are relatively weak. Practical teaching projects are merely simple simulations, and students fail to truly engage with the complexity and challenges of real-world projects. Moreover, the guidance and evaluation mechanisms for practical teaching are also insufficiently refined. After students complete design projects, teachers merely give a score, without conducting in-depth analysis and evaluation of their design thinking, methods, and outcomes. As a result, students find it difficult to obtain effective feedback and improvement from practice[6].

Existing teaching evaluation is mainly based on exam scores and assignment completion. The evaluation method is singular and cannot comprehensively and accurately reflect students' learning processes and outcomes. In the Commercial Space Design Course, students' design works often possess innovation and uniqueness, but the existing evaluation method fails to fully reflect these characteristics. Moreover, the evaluation process lacks student participation. Students cannot understand their strengths and weaknesses in the learning process, nor can they easily conduct effective reflection and improvement on their own learning.

3.2 Current Situation of the Application of Blended Teaching Mode in the Commercial Space Design Course

The blended teaching mode relies on the support of technology platforms, and various issues may arise during the application of these platforms—such as network lag, platform instability, and incomplete functions—affecting the normal conduct of teaching. Teachers need to possess a certain level of information technology capabilities to effectively utilize the technology platforms for teaching.

Additionally, a small number of teachers have a low acceptance of new technologies and struggle to organically integrate online and offline teaching. Some teachers encounter problems such as poor video quality or tedious content when producing teaching videos. Moreover, when using online discussion forums and live streaming functions, they fail to fully leverage the advantages of interactivity and real-time performance.

Students have long been accustomed to the traditional teaching mode, lacking autonomous learning awareness and abilities, and thus are

prone to maladaptation. Many students are unwilling to take the initiative to learn online materials before class and rely on teachers' in-class explanations[7]. After class, they also fail to complete online assignments and tasks in a timely manner, resulting in delayed learning progress. During online learning, when students encounter problems, they may not be able to communicate with teachers and classmates in a timely manner, leading to the accumulation of problems, which undermines their learning motivation.

4. Implementation Paths of Differentiated Teaching

4.1 Differentiated Teaching Strategies for Learning Styles

Students with a visual learning style are sensitive to visual information such as images, colors, and spatial relationships, and excel at acquiring knowledge through observation and reading. Students with an auditory learning style are good at learning by listening to explanations, discussions, and audio materials—they prefer to listen to teachers' detailed elaborations or learn by listening to relevant audio resources, and have a strong memory for information conveyed verbally. Students with a kinesthetic learning style enjoy learning through physical activities and hands-on operations. They are passionate about practical activities such as model making and on-site measurement, and their learning outcomes are often better when participating in the design and implementation of actual projects. For students with a visual learning style, abundant visual learning resources should be provided. When explaining the styles of commercial space design, display a large number of commercial space images of different styles, allowing students to intuitively perceive the characteristics of various styles through observation. When explaining the design process, create detailed flow chart PPTs to help students clearly understand the relationships between each step.

For students with an auditory learning style, teachers should focus on the clarity and vividness of verbal expression during in-class explanations, and maintain a moderate speaking speed to capture students' attention. Provide students with more opportunities to participate in discussions and speak up, allowing them to deepen their understanding of knowledge

through communication and sharing. Invite industry experts to give online or offline lectures to share practical experience and cases of commercial space lighting design. By listening to the experts' explanations, students can learn about the latest industry developments and trends. When discussing a commercial space design project, encourage students to express their own design thinking and viewpoints, listen to other students' opinions and suggestions, and facilitate the exchange and collision of knowledge.

For students with a kinesthetic learning style, teachers should increase practical teaching sessions and provide them with more opportunities for hands-on operations. Assign model-making tasks, allowing students to gain an in-depth understanding of spatial layout and structure by making commercial space models with their own hands. Organize field trips, leading students to actual commercial spaces for observation and measurement, so that they can experience the atmosphere and functions of commercial spaces firsthand.

4.2 Differentiated Teaching Strategies Based on Interests and Abilities

Accurately assess students' interests and abilities. By designing scientific and reasonable questionnaires, we can understand students' interests in different fields of commercial space design and in design-related skills[8]. Additionally, the questionnaires can inquire about the degree of students' preference for different design styles and innovative concepts, providing references for the design of teaching content. Based on the assessment results of students' interests and abilities, divide them into different levels to implement hierarchical teaching. For students with weak foundations and average interest in commercial space design, basic-level teaching objectives can be set, with teaching content focusing on simple and easy-to-understand cases and exercises. For students who have a certain foundation and interest and are at an intermediate level of ability, set improvement-level teaching objectives. Increase the difficulty and complexity of design cases, focus on cultivating students' design thinking and innovative capabilities, and guide them to conduct in-depth design analysis and practice.

For students with strong interest and high capabilities, set expansion-level teaching objectives. The teaching content should place

greater emphasis on cutting-edge design concepts, innovative design methods, and participation in actual projects.

Accurately assess students' interests and abilities. By designing scientific and reasonable questionnaires, we can understand students' interests in different fields of commercial space design and in design-related skills. Additionally, the questionnaires can inquire about the degree of students' preference for different design styles and innovative concepts, providing references for the design of teaching content. Based on the assessment results of students' interests and abilities, divide them into different levels to implement hierarchical teaching. For students with weak foundations and average interest in commercial space design, basic-level teaching objectives can be set, with teaching content focusing on simple and easy-to-understand cases and exercises. For students who have a certain foundation and interest and are at an intermediate level of ability, set improvement-level teaching objectives. Increase the difficulty and complexity of design cases, focus on cultivating students' design thinking and innovative capabilities, and guide them to conduct in-depth design analysis and practice[9]. For students with strong interest and high capabilities, set expansion-level teaching objectives. The teaching content should place greater emphasis on cutting-edge design concepts, innovative design methods, and participation in actual projects.

4.3 Differentiated Strategies for Teaching Resources and Teaching Evaluation

Provide students with teaching resources of varying difficulty levels and formats. For students with weak foundations, offer video tutorials explaining basic knowledge—featuring simple and easy-to-understand content supplemented by numerous example demonstrations—to help them gradually understand and master the knowledge. For students with strong learning abilities and keen interests, provide teaching resources with greater depth and breadth. For instance, recommend professional design books and academic papers, allowing them to learn about the cutting-edge theories and research findings in the industry[10]. Adopt a variety of evaluation methods such as teacher evaluation, student self-evaluation, and peer evaluation. For one thing, teacher evaluation boasts professionalism and

objectivity. It can assess students' learning performance from a professional perspective, point out their strengths and weaknesses, and put forward improvement suggestions. For another, student self-evaluation helps students reflect on their learning process, identify their own advantages and problems, and cultivate their abilities in self-management and self-improvement. Additionally, teachers can summarize and provide feedback on formative evaluation results in class: praise students with outstanding performance and offer specific improvement suggestions to those with problems. If it is found that most students are deficient in a certain knowledge point or skill, teachers can adjust the teaching content and methods, and add relevant explanations and exercises. Through the feedback and application of evaluation results, the teaching process is continuously optimized.

5. Conclusion

This study focuses on differentiated teaching strategies for the Commercial Space Design Course under the blended teaching mode, and has conducted an in-depth analysis of the theories related to the blended teaching mode, the characteristics of the Commercial Space Design Course, and differentiated teaching strategies. By understanding the characteristics of students' learning styles—such as visual, auditory, and kinesthetic styles—targeted teaching methods have been designed for students with different learning styles. For instance, abundant visual learning resources are provided for visual learners; emphasis is placed on verbal expression and organizing discussions for auditory learners; and practical teaching sessions are increased for kinesthetic learners. Methods including questionnaires, tests, and work analysis are used to assess students' interests and abilities. Based on the assessment results, hierarchical teaching is implemented: differentiated learning paths are designed for different students, and corresponding practical activities and project design tasks are arranged. This study is conducted with the aim of continuously optimizing the teaching process, improving teaching quality, and promoting the all-round development of students.

Fund Project

This study was financially supported by the 2024

"Quality Project" Higher Education Teaching Reform Project of Guangdong Technology College titled "Exploration and Practice of Online-Offline Blended Teaching in the 'Commercial Space Design' Course" (Project No.: JXGG2024036).

References

- [1] Zhu Zhiting, Hu Jiao. Technology Empowered Educational Innovation Post-Pandemic: The New Pattern of Online-Offline Blended Teaching. *Modern Distance Education Research*, 2021, 33(03): 3-14.
- [2] Jiang Xue. *Commercial Space Design*. Tsinghua University Press, 2022.
- [3] Wang Wen. *Blended Teaching Design for Vocational Education Courses: Theory, Tools and Application*. Tsinghua University Press, 2024.
- [4] Shen Xiajuan, Zhang Baohui, Feng Rui. Research on Deep Learning Activities in Blended Learning Environments: The Trio of Design, Implementation and Evaluation. *E-education Research*, 2022, 43(01): 106-112+120.
- [5] Xiao Youmin, Zheng Chunye, Zhou Mengqi, Huang Bingqiao, Wang Zinuo, Yang Zhifan. *Commercial Space Design*. Tsinghua University Press, 2023.
- [6] Zhang Qian. Construction and Exploration of the "Dual-Line Integration" Teaching Mode in Art Colleges in the Post-Pandemic Era: A Case Study of the Course "Fundamentals of Computer Application". *Shaanxi Education (Higher Education Edition)*, 2023(01): 35-37.
- [7] Li Hua, Wu Wei, Li Jiarui, Fu Mengchen, Chen Cheng, Yang Lu. *Commercial Space Design*. Tsinghua University Press, 2020.
- [8] Wubuli Pidayi, Ma Youping. Application of Blended Teaching Mode in Open Education. *China Distance Education*, 2020(S1): 128-132.
- [9] Guo Jinhua. The Value of Scientific Aesthetic Education and Case Analysis of Chemical Aesthetic Education. *Chemical Teaching*, 2020(02): 34-38.
- [10] Luo Yinghong. Construction and Practical Exploration of Blended Teaching Mode in Colleges and Universities. *Higher Education Exploration*, 2019(12): 48-55.