

# Research on the Application of Digitalization in Interior Design Teaching

# Zujin Huang

Guangxi Technological College of Machinery and Electricity Nanning city Guangxi Province Post Code: 53007

**Keywords:** Space design; Logic thinking; Teaching mode; Implementation measures

**Abstract.** The fruitful results of digital application gradually affect the traditional interior design concept. In the daily teaching and work, we can feel the convenience of modern digital technology applications. Through the continuous exploration of digital technology, interior design teaching has become more vivid and visual. Digital information technology offers a great convenience to traditional interior design teaching, meeting the requirements of interior design teaching for students to a certain extent and providing a good learning platform. Digital teaching model integrates the traditional interior design concept and modern digital information technology, has a profound impact on the interior design teaching.

#### Introduction

With the continuous innovation and development of modern architectural design, digital applications are gradually integrated into the modern interior design teaching. Digital application has changed the traditional architectural design concept, creating a better living environment for us [1]. The continuous development of interior design teaching has promoted the continuous integration of digital technology and interior design teaching. In the continuous reform and innovation of the interior design, the status of digital teaching model become higher and higher in the applications of traditional indoor teaching. Digital application reflects the concept of designers visually, more conducive to the continuous development of interior design teaching.

## The primary Advantages of Digital Interior Design in Teaching

**Digital Application is Conducive to Enhancing Students' Imagination.** Applications of digital teaching are different from teaching methods in traditional sense, it focuses on helping students improve the level of hand-drawn, to urge the students to do divergent thinking and innovation. Digital teaching application focus on training the ability of thinking and spatial imagination for students, to help students get rid of the problem by sea tactics. In the daily study, students can use professional drawing software for drawing, design a more professional three-dimensional model. The application of digital teaching allows students to feel the differences of spatial structure more intuitively through professional three-dimensional model, improving the accuracy of the student design model, more conducive to enhancing students' imagination of interior design.

Digital Application is Conducive to Cultivating Innovative Thinking. In the process of teaching, teachers should constantly cultivate students' spatial imagination and thinking ability. The application of digitalization in interior design teaching can be more efficient on helping students to cultivate and train thinking ability. Digital application guide teachers and students to think: the main body of spatial design, how to do spatial design well, the core of spatial design. The application of digitalization in interior design teaching can make students understanding of the design more intuitively, can also help students to do divergent thinking and to deepen learning [2]. Teachers skilled in the use of 3ds Max and AutoCAD and other digital software to complete the drawing instead of the traditional hand-drawn mapping method can effectively save time and improve efficiency, can help students to understand the thrust and significance of interior design more intuitively as well[3]. Students familiar with the use of 3ds Max and AutoCAD and other digital software-related to interior design, innovative thinking in the flexible design drawings, to improve the interest in interior design. The application of digitalization in interior design teaching can show the virtual design in front of us more really, conducive to the cultivation of innovative thinking.



**Digital Application is Conducive to Improving Teaching Quality.** Digital interior design can help teachers to design drawings more conveniently and quickly, shortening the teaching time. The application of digitalization on interior design teaching can effectively stimulate the interest of students to learn interior design courses, can also help students to actively integrate into the classroom learning, digital applications in interior design can help students to design better products [4]. The traditional interior design teaching can help the students to study the interior design by using the hand-drawn design drawing or the monotonous design model. The digital indoor teaching can design the intuitive design model through the professional design software, which can help the students to understand the teaching plan better.

#### The Performance of Digitalization Application in Interior Design Teaching

Stimulating the Strong Desires of Students to Learn. In the teaching of interior design, teachers should constantly train students' thinking ability. In the process of teaching, teachers ought to ask students to think questions: the concept of interior design, the problems during the interior design process, problem-solving methods. Teachers not only should guide students to fully understand the knowledge of textbooks, but also encourage students to continue to find problems in the classroom and to solve the problem. The application of digitalization in interior design teaching can arouse students' strong desire for learning knowledge on interior design, actively looking for problems encountered in the design process; constantly exercise the ability of digital thinking in the process of solving problems. Teachers in the application of digitalization be able to flexibly use digital professional software, and actively guide students to learn 3ds Max and AutoCAD software[5]. 3ds Max and AutoCAD software can help teachers and students to draw the blueprints much faster and better, besides, it can take the initiative to identify the errors in the process of interior design. The application of digitalization can help students to design outlines of things, to exercise the digital thinking in the continuous design for the students.

Improving Initiative of Student to Learn. Teachers can prepare lessons and learn by the application of digitalization before class. The application of digitalization can convert abstract and cumbersome design into more specific and simple one, to help students understand the content of teaching teachers better. The application of digitalization in the teaching of interior design can help students in the classroom to express their views boldly, which further increase the teaching of interaction. The traditional teaching mode requires students to memorize the textbook knowledge, while the application of digitalization can combine the teaching and practice in the teaching of

Help Students Understand It Better. The application of digitalization can visualize spatial design. The application of digitalization can help students understand tedious design theory more simple, to help students understand the interior design more easily. The application of digitalization attaches more attention to spatial modeling design. For the traditional teaching, spatial design only have the theoretical elaboration, students can not accurately grasp the basic sense of space, cannot convert abstract things into concrete and visualization. In the traditional teaching, teachers can only simply describe spatial modeling by referring to the case listed in the textbooks, while students are not familiar with the spatial modeling; it is difficult for them to understand the deep content of spatial modeling [6]. The application of digitalization in teaching can help teachers better teach students to learn this aspect of knowledge, allow students to feel spatial structure visually as well. The application of digitalization visualizes the abstract design, triggering a strong interest in learning for students.

Improving the Accuracy of Student in Spatial Design. The traditional teaching methods to train students to carry out creation in accordance with the existing things. Students will find design content with a variety of styles in the interior design process; cannot make an ordered classification and application for each of design materials. The application of digitalization in teaching provides a three-dimensional modeling technology for the interior design, it can show the material needed in the design through the way of simulation [7]. The applications of digital counting can provide a complex indoor environment for different spatial modeling, but also matching different lighting effects, spatial color with the shape of space according to the designer's thinking flexibly. In the



traditional indoor spatial design, lighting, space and other materials can not be accurately controlled, while flexible control of lighting effects and changes in spatial color can be reached through integrating the digital technology into the interior design. Professional digital technology can help students get rid of the shackles of manual drawing, and students can draw through professional software. The application of digital technology can effectively reduce the error in the interior design, making the drawing more accurately.

#### The Significance of the Application of Digitalization in Teaching

**Digital Application Change the Traditional Teaching Mode.** Digital interior design can be used to design virtual things through the method of modeling, and can draw a more realistic scene by using the method of color rendering, lighting art, etc. Digital interior design can effectively determine the errors in the design, and correct the error through an automated way. Therefore, the digital application promote the continuous development of interior design teaching quality[8]. The integration of digital application and interior design teaching can simplify the tedious theory and materialize the abstract concept, more conducive to the exchange of teachers and students, constantly promoting the improvement of teaching quality and interior design level.

**Digital Application Promote the Development of Teaching.** The application of digitalization in teaching help teachers reduce the drawing time, and improve work efficiency. Digital technology enhances students' interest in teaching courses, encourages students to actively participate in classroom learning and practice, and enhances the ability of students to explore in spatial design [9]. The application of digitalization in teaching make up for the lack of traditional teaching, to better enhance the teaching objectives. With the continuous progress of science and technology, the effect of the application of digitalization on interior design will also be much greater. The continuous development of digital applications will promote the continuous improvement of interior design teaching quality.

Digital Applications are Suitable for the Development of the Times. The application of digitalization in teaching break the model of continuous inculcation of textbook knowledge in the traditional interior design process, more conducive to students' learning and growth. The application of digitalization in teaching encourage students to actively solve problems in the classroom, and encourage students and teachers to participate in topics related to interior design. Digital teaching help more students develop hobbies, more conducive to the study and research of interior design for students. Digital applications change the bad habits of students to read books, so that students become like reading, like exploring new knowledge. The application of digitalization require students to take the initiative to learn knowledge related to interior design in the classroom, bringing the knowledge learned into the relevant design case flexibility. Digital application in teaching can make more students like to learn, like innovation, which further help society cultivate more talented people.

### Conclusion

With the continuous innovation and development of interior design, digital applications in the interior design become more and more widely. Digital applications make the traditional interior design more simply, which solve a lot of difficulties encountered in the teaching process, therefore developing digital applications has a positive meaning [10]. The traditional interior design and digital applications applied to today's teaching model flexibly, can greatly improve the level of student learning, strengthen the enthusiasm of students to learn interior design, and achieve better teaching results as well.

We must continue to promote the continuous development of interior design teaching, so as to cultivate more outstanding students. The continuous progress of interior design teaching requires the continuous integration and development of digital technology and interior design teaching. In the interior design teaching, the application of digitalization provides us with efficient work efficiency; promote diversified development of interior design teaching.



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