

# **Construction and Scientific Management Strategy of Art Design Laboratory in Private Applied Colleges and Universities**

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**Abstract:** With the development of the times and society, the requirements for education are also improved. In the process of teaching students, in addition to the basic theoretical knowledge teaching, the practical teaching is also very necessary. This requires us to carry out the construction of art laboratory and scientific management. This paper is just to analyze this, hoping to provide some effective help.

## **1. Introduction**

Laboratory is the important foundation of experimental education, innovative personnel training and scientific research. As an important part of colleges and universities, it plays an irreplaceable role in training students' practical ability, and thinking, analysis and problem-solving ability. With the rapid development of modern science and technology as well as the comprehensive development of disciplines, the society puts forward higher and higher requirements for the practicality and technical applicability of students. The important goal of modern education is to cultivate students' ability of art design. The realization of this educational goal puts forward higher requirements for the construction of laboratory and the maintenance and management of instruments and equipment. We should pay attention to the construction of art design laboratory in private applied colleges and universities and carry out corresponding scientific management, which requires us to master certain strategies.

## **2. Importance of Art Design Laboratory**

### **2.1 Help Art Design Teaching Keep Pace with the Times**

With the development of the times and society, requirements have been put forward for our teaching work. We should also make corresponding changes in the process of teaching in order to adapt to the new requirements of the times and society, so as to keep pace with the times. Different from public colleges, private applied colleges lack strong support. So in the process of running colleges, they do not have advantages. The construction of art design laboratory can change this situation to a certain extent. With art design laboratory, some courses that could not be carried out before can be realized, so that students will receive a more comprehensive education in the process of learning, and our education level can be effectively improved.

### **2.2 Help Close Contact with Enterprises**

Private applied colleges and universities are mainly for the purpose of cultivating applied talents for the country and society. Therefore, in the process of teaching, it is essential to pay more attention to practical teaching rather than theoretical knowledge indoctrination. Students requires to be given enough social practice opportunities, and more contact with enterprises in society, so that they have more choices in their daily study and life. The construction of art design laboratory provides a solid platform for the connection between us and enterprises. For enterprise, they can also send talents to participate in our teaching process and supplement our teaching content, so that students will receive a more comprehensive and high-quality education.

## **2.3 Help Teachers Improve Themselves**

Teachers are the leaders in the process of teaching. Their professional ability determines the learning level of students to a large extent. Therefore, we should pay attention to improving our professional ability and level, and carry out relevant education for students. In teaching, teachers are suggested to use the art design laboratory to carry out experiments and improve their professional ability through practice.

## **3. Design Features of Art Design Laboratory**

Compared with the laboratory of science and engineering, the art design laboratory differs greatly, which are mainly shown in the following parts.

### **3.1 Different Purposes and Forms of Experiment**

Generally speaking, the main contents of science and engineering experiments are test equipment and instruments, test principle, test strip, test record, test results, error analysis and thinking. The whole experiment process should be conducted in accordance with certain theoretical guidance, in line with the logical thinking.

In the process of art design experiment, instruments and equipment should also be used and operated according to certain standards. However, it is often a process in which students exercise their personal creativity through instruments and equipment. In the process of implementation, there is no fixed design arrangement, demand, mode, method or step. Otherwise, students' artistic imagination and creativity can't be reflected, and the significance of our art design experiments no longer exists.

### **3.2 Different Experimental Teaching Methods**

In the experiment process of science and engineering, teachers often teach theoretical knowledge, and then conduct corresponding experiments after students fully master theoretical knowledge and experimental principles, so as to verify and analyze their learning content and complete teaching objectives.

In the process of art design experiment, the theoretical knowledge teaching and experimental process are often carried out in the art design laboratory, so this process will take a lot of time. For example, in terms of graphic design, we will teach students theoretical knowledge in the laboratory, and let students create art design works according to our teaching content and give full play to their subjective initiative. This process often lasts for about 3 or 4 weeks. Most of the art design course teaching combines theoretical knowledge and experiment, infiltrate theoretical knowledge in the process of experiment, and supplement teaching contents.

### **3.3 Different Experimental Instruction Methods**

In experiment teaching of science and engineering, the steps are often very strict. The mistakes in the order of one step will lead to the failure of the whole experiment. Therefore, in the process of teaching students, teachers strictly follow the steps of experiment. However, in the process of art design experiment teaching, the requirements for the steps are not so strict. It gives full play to the subjective initiative of students. Teachers also tend to pay more attention to the final works of students, rather than the experimental process.

In experiment, students are different from those in the experiment of science and engineering. They will not accumulate the process of experiment in detail, but retain their own creative ideas, renderings and final products.

### **3.4 Different Evaluation Criteria for Experimental Results**

Science and engineering experiments are often with clear and objective experimental results, but the results of art design experiments include students' design ideas and inspiration, as well as the subject consciousness of the works. Teachers must understand the content, artistic conception and ideological connotation of students' works in the process of evaluation. In art design experiments,

teachers do not put forward a consistent requirement. There is no absolute standard to evaluate the performance of design art experiment.

#### **4. Construction and Scientific Management of Art Design Laboratory in Private Applied Colleges and Universities**

##### **4.1 Reform the Laboratory Management System**

In the 21st century, the most important resource is talents, so the management of talents is the top priority of our work. Improving and reforming the laboratory management system is the main work of the current laboratory construction. Because of the diversity of design, small scale, single function and low utilization rate, the traditional art laboratory no longer meets the needs of talent training in the 21st century. This is why we should improve the management system of art design laboratory, optimize the resource structure, improve the scale efficiency, and maximize the efficiency. To meet the requirements of education, scientific research and development of private applied colleges and universities, the art design laboratory should be built into an art teaching and scientific research unit. Therefore, when designing the management system of technical design laboratory, colleges and universities are required to make implementation according to the training objectives and requirements of art design talents, strengthen the management of human, financial and material resources of the laboratory, realize the sharing of laboratory resources, and improve the utilization rate. It is also essential to divide the laboratory based on regions, and establish professional personnel training system, so that it can be more organized in the process of experiment, so as to improve the learning and teaching efficiency.

##### **4.2 Focus on the Construction of Teaching Staff**

As we mentioned earlier, the teacher is the leader of the whole experimental teaching. In a sense, the professional skill level of teachers determines the learning efficiency and results of students. In teaching, more attention needs to be paid to the construction and improvement of teaching faculty.

In the process of laboratory design and teachers' team building, ordinary colleges and universities are often vulnerable to the impact of the field of science and engineering, and stress the differences between experimental teachers and theoretical teachers, which means that not only in terms of treatment and professional title evaluation, the attention paid to experimental teachers is also lower than that of ordinary teachers. In reality, teachers who participate in art design often have strong personality and most of them are not willing to be an experimental teacher, which easily makes art design experimental teachers composed by non professionals, teaching efficiency fail to be improved, and the level of education of students not be guaranteed. Most of experimental teachers are not clear about the operation principle of electronic instruments, mechanical equipment, etc., and the principle of the experiment. Once there is a problem with the equipment, it can not be maintained, producing the same effect on our education.

Therefore, for the composition of teachers in the art design laboratory, we should not only recruit professional teachers, but also employ some professional talents who can maintain the equipment. Only when they cooperate with each other and perform their duties, can we combine learning, scientific research and laboratory work ecology, give full play to their roles, make use of the laboratory human and material resources to improve the quality of laboratory staff, solve their future career development concerns, and attract more teachers to participate in the experimental teaching.

##### **4.3 Select Equipment and Construct the Site**

We should pay attention to the following problems when carrying out specific experimental demonstration, procurement and installation: the laboratory equipment of private applied colleges and universities is to meet the needs of education and scientific research, which should be different from the needs of enterprises or factories. More consideration should be given to the selection of functional and model batch production equipment, mainly by relevant professionals. Relevant

experts should be invited for analysis and research when appropriate. We must not be greedy for perfection and buy some functions and equipment that are not commonly used, which fail to meet the simple needs of current education and scientific research. It is necessary to allow some progress, which should be consistent with future education and research.

In the process of equipment installation, we are required to emphasize our site requirements, comprehensively consider the water, electricity and heating of the site, whether it can support us to use and install the equipment, and whether the power supply can meet our needs. This requires us to hire relevant professional and technical personnel to carry out professional analysis and adjustment. In the process of equipment installation, we should adjust the space, make the most of the space, and improve the space utilization rate in our experiments.

#### **4.4 Establish an Open Laboratory**

With the deepening of higher education, open laboratory has become an objective condition for the implementation of quality education. Opening the laboratory to students through the network protocol not only improves the utilization rate of the laboratory, but also makes students have sufficient experimental conditions and environment, and provides them a certain space to carry out leisure activities, scientific and technological activities and innovation projects, which plays a very important role in training professional talents. It is feasible to only open it to students of this major, or to students of the whole college or university. For some laboratories, such as sculpture room, photography room, freeze frame study, they also play a certain role in cultivating students of other majors, so we can choose to open them appropriately, so that students of the whole college and university are able to learn and apply.

Advanced laboratory open mode can be managed through network technology and access management technology, and accountability for non-standard behavior. Professionals are suggested to be hired to carry out relevant management, or we can hire some students with strong sense of responsibility to conduct relevant work.

### **5. Conclusion**

Private applied colleges and universities are different from other public ones which have strong financial and technical support. In the process of construction and management of art design laboratory, it is essential to make good use of the existing resources and implement relevant strategies. Art design experiment is a combination of theory and practice. When building an art design laboratory, we are required to give full play to the unique nature of art design experiment and carry out corresponding scientific management.

More attention is needed to be paid to the construction of teachers, actively introduce professional talents, carry out the selection of professional equipment and site, and establish an open laboratory to provide better services for students and help students learn and grow more efficiently.

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