

## A Study on Education Innovation Mode of Design Talents under the Background of “Internet +”

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**Abstract.** With the rapid development of the Internet era, the concept of “Internet +” has been continuously and deeply affecting the education industry and prompting the education industry of design professionals in China to constantly seek for new development mode. The characteristics of the education industry under the background of “Internet +” is expounded, and the current situation of the education of design talents is analyzed from a practical perspective, and then the urgent problems to be solved in the education of design professionals is elaborated. Therefore, this paper explores the innovative mode of art and design talents education under the background of “Internet +”, hoping to seek the education mode which is really suitable for the actual development of design talents in China and provide suggestions and references for relevant educational reform.

### Introduction

“Internet +” deeply integrates the Internet with various traditional industries, so as to create a new industry model. The Educational Informatization 2.0 Action Plan released by the Ministry of Education in April 2018 provides guidelines for exploring the integration of the Internet and traditional education industry and proposes to accelerate the construction of education informatization through the “Internet +”, thus promoting the innovation of education mode.

Compared with pure art students, design students attach great importance to the cultivation of design thinking ability and design expression ability. They do not have high requirements for painting expression, but they have high requirements for computer expression ability. Meanwhile, they need to express design thinking and show design creativity with the help of computer drawing, modeling, rendering and so on. <sup>[1]</sup> Therefore, with the rapid development of computer and Internet technology, the education of art and design talents should keep up with the pace of the times and seek for an educational innovation mode which is suitable for design professionals under the background of “Internet +”.

### Teaching Characteristics under the Background of “Internet +”

The essence of the deep integration of the Internet and education industry is to explore the education informatization and make use of the characteristics of the Internet, for example, it is not limited by time and space, spreads rapidly and presents in various ways. <sup>[2]</sup> Under the background of “Internet +”, teaching is characterized by convenience, efficiency, diversity, etc.

**Convenience.** Under the background of “Internet +”, as the Internet isn't restricted by time and space, students' class time is no longer limited to the time period speculated by school, so they can have more conditions to choose their own time for learning. For example, some students who are used to studying at night can study independently during non-class hours with the help of online classes. Meanwhile, under the background of “Internet +”, students' learning space is no longer limited to classroom, and they can study anywhere with the help of mobile devices. The convenience of teaching under the background of “Internet +” can better enhance students' independent learning ability and make them become the learning subject for targeted learning according to their own knowledge blind spots and interest points.

In the mean time, teachers' teaching work will be more humanized under the advantage of the convenience of the Internet, and their teaching time and place are no longer limited by the time period and classroom. In addition, teachers can even conduct online teaching by virtue of the Internet, and students can also answer questions online when they have questions after class.

**High Efficiency.** Under the background of "Internet +", due to the rapid Internet processing and information spreading, teachers can carry out the sharing and integration of knowledge points of related disciplines across the country and even worldwide by virtue of the network, constantly absorb new knowledge points and new teaching methods, so as to complement the students' scope of knowledge and attract their interests with the latest cases; As for the assessment of students, they can also be tested by randomly selecting questions from Internet sharing question bank, and the fast operation of the Internet can be used to test the questions just finished by students, and teachers can calculate and record students' scores in real time. In addition, teachers no longer need to spend a lot of time calculating students' scores, accuracy of each question, etc., thus greatly improving the teachers' work efficiency.

When students watch online course videos, they can also choose the explanation part of this knowledge point for online learning according to their own blind spots, which can reduce the time spent on learning repeated knowledge points and increase learning efficiency.

**Diversity.** Due to the rapid development of Internet technology and AI technology, more and more high technologies go into traditional classroom, for example, face recognition technology is used to carry out students' class attendance, record their head-rising rate and then feed back to the teacher. Then the feedback information is used to help teachers adjust the rhythm and content of classroom to better attract and enhance students' positiveness and participation in class. Meanwhile, with the help of digital multimedia, virtual reality and other demonstrations, teachers can make students' feelings more intuitive, so that the explanation and demonstration of knowledge points can be changed from planar and static text description or picture expression in books into three-dimensional and dynamic explanation, thus enriching the classroom form and enhancing students' understanding and sense of substitution.

### **Analysis on the Education of Art and Design Talents under the Background of "Internet +"**

**Outdated Teaching Model.** Because Chinese design education started late and there is a lack of experience, and it blindly learned foreign educational concepts and didn't improve based on the characteristics of each school, the teaching mode is outdated, and there is a lack of uniqueness in teaching methods and curriculum setting of each school, making it difficult to form characteristics.

**Uneven Level of Students.** Due to the increased university enrollment, many design students participate in and pass the painting examination only after a short-term painting training, which leads to their inadequate understanding of art and uneven level.<sup>[3]</sup> However, in a large-class class, it is difficult for teachers to adjust the class rhythm due to the progress of a few students, which will also reduce students' efficiency and reluctance to listen to lectures because of students' inability to follow the class pace, thus resulting in a vicious circle.

**Unreasonable Teacher Allocation.** Due to the diversity of art itself, design major usually involves different professional disciplines, such as architectural design, structural design, bionics, etc. In addition, with the rapid development of the Internet era, educational concepts are constantly changing, and traditional design majors have derived many new directions, including digital media design, UI design, interactive design, etc.<sup>[4]</sup> However, teachers of art design mostly have a pure art background or traditional design background, and they have a deep understanding of the theoretical knowledge of pure art and traditional design concepts, but they are deficient in the knowledge of multidisciplinary integration. Meanwhile, teachers teach students mostly by virtue of personal knowledge or experience, and they don't understand different professional disciplines and the latest concepts and directions, which makes students' knowledge unable to keep pace with the society.<sup>[5]</sup>

**Not Close Contact with Enterprises.** With the rapid development of the Internet, many emerging industries have emerged, and the impact of online industry model on offline industry

model has also led to the transformation of a large number of traditional industries. The talent reserve of enterprises comes from the output of talents from schools. If students cannot quickly adapt to the enterprises' working rhythm and integrate into the working environment after graduation, the education in schools will lag behind or fail. The training time of most universities is four years. Students usually enter enterprises as interns in the fourth year, and they often find that the knowledge they learned is derailed from the enterprises' development, which makes it difficult for them to quickly adapt to the enterprises' job requirements.

**Not Tight Connection with Emerging Industries.** Under the background of "Internet +", many new directions have emerged, such as interaction design, design of intelligent wearable products, etc. However, due to the shortage of teachers, many schools are unable to offer such courses with fashionable ideas, which also leads to students' insufficient understanding of emerging industries as well as their inability to increase enhance advantages in the era of "Internet +".

### **Education Innovation Mode of Design Talents under the Background of "Internet +"**

The education reform of design talents should conform to the current trend of the times, and the educational mode of design professionals should be scientifically adjusted by combining with the background of "Internet +" and taking advantage of the strengths of the Internet.

**Establish Interdisciplinary and Cross-school Alliances.** Under the background of "Internet+", science is developing towards a comprehensive direction, and various disciplines are more penetrated and integrated, so design should also integrate with other disciplines to find its own balance point. With the help of the diversity of network information, students can learn the interdisciplinary knowledge of different subjects and expand their scope of knowledge. Meanwhile, under the background of "Internet +", schools should carry out alliances according to different advantageous disciplines, and achieve mutual assistance of educational resources and faculty, so as to achieve a win-win situation of inter-school resource sharing and collaborative development. Therefore, schools should give full play to the characteristics and advantages of majors of each school and establish cross-school elective courses, MOOC courses and other forms, realizing the mutual recognition of credits.

**Combination of Offline Teaching and Online Teaching.** Teachers can record the class content and upload it to the online platform after class. On the one hand, it can urge teachers to carefully prepare for each class; on the other hand, it can also help students who do not fully master the knowledge points in class to check and fill in the gaps after class through the recorded lessons on the online network platforms.

Secondly, schools can establish their own bank of curriculum resources through platforms such as "micro-course", "MOOC", etc, and facilitate students from different schools to study by taking advantage of the convenience of the network platforms, so as to form the sharing of resource database and improve the public's awareness of schools. <sup>[6]</sup>

**Alliance between Colleges and Enterprises.** Many colleges and universities only allow students to carry out the graduation internship in their senior year. However, the three-year study and life in the "ivory tower" of the university leads to the fact that some students don't understand the enterprises' current requirements for talents, so that some fresh graduates often feel confused when hunting for jobs. Moreover, some enterprises are reluctant to recruit fresh graduates due to the high human cost and time cost of training them. Therefore, the establishment of school-enterprise alliance can not only improve the employment rate of schools, but also enable enterprises to recruit satisfactory talents.

In the first year of university, students usually study basic courses, and enterprises can hold campus talks irregularly to let students understand what kind of talents are needed by enterprises and what skills need to be developed in the university. Meanwhile, teachers can analyze some cases and works in the classroom, so as to let students understand the work positioning required by enterprises; In the second year of university, teachers can divide projects in enterprises into small assignments which can be completed by students, and then ask them to cooperate in a team, which

can not only cultivate students' teamwork ability but also enable students to understand the implementation process of internal projects in enterprises. In the junior year, teachers can organize students to participate in the project bidding of enterprises, which can not only allow students to closely feel the atmosphere of enterprises but also provide enterprises with some new ideas, thus forming the thinking collision between universities and enterprises. In the senior year, students can enter the enterprise for internship. With the foundation of the previous three years, students can adapt to the pace and environment of enterprises more quickly, and at the same time, the cost of cultivating talents and time cost can also be reduced.

**Attach Importance to the Cultivation of Students' Network Ability.** The art design under the background of "Internet +" puts forward higher requirements for student's ability to use network software. Teachers need to improve the course proportion of students' software in the curriculum setting and strengthen students' attention to network software.<sup>[7]</sup> Therefore, students are allowed to release their works through network platforms, such as QQ space, WeChat circle of friends, weibo, Tik Tok small video, etc., and then the praising numbers of student works made by the public can be regarded as the reference for these works, and the public's comments on students' works also can make students realize the advantages and disadvantages of their own works.

**Enrich Classroom Content Through Online Resources.** The reform of textbooks isn't updated as quickly as the Internet, and many textbooks are even published five or ten years ago, so the content of textbooks is outdated and the cases are out of date. Therefore, teachers should take more advantage of network resources to integrate the latest cases and cutting-edge design ideas into the classroom, enrich the content of textbooks and classes, and let students understand the latest and most cutting-edge ideas.

### **Necessary Conditions for the Education Reform of Design Talents under the Background of "Internet +"**

Compared with book resources, the network resources are abundant, but the information is complex and mixed, which puts forward higher requirements for teachers and students' ability to collect and distinguish information. In the education reform process of design professionals, it is necessary to improve students' ability to discriminate and inquire information and enhance their artistic and aesthetic accomplishment. Moreover, it is also necessary to strengthen students' self-management ability to prevent them from indulging in the Internet, so that the network serves people rather than people are used by the network.

Under the background of "Internet +", teachers should never stand still and refuse to make progress. They need to keep learning constantly and learn the latest ideas and design concepts, so that they won't fall behind the trend. Meanwhile, schools should also vigorously support the teachers' training and encourage them to participate in more seminars and cross-country learning.

### **Conclusions**

Under the background of "Internet +", the education reform of design professionals needs to keep pace with the times. In view of the current status of art education, targeted adjustments should be made by combining with the Internet to make up for the deficiencies in the education and training of art and design talents with the advantages of the Internet, so as to avoid blindness and radicalization. Under the background of "Internet +", educators should also actively change the educational methods and modes, better integrate the technological advantages of the Internet era into talent education, and cultivate more suitable "Internet +" art and design talents for the Internet era. Under the background of "Internet +", higher requirements are also put forward for students majoring in design as well as their consciousness and self-control. They need to change from passive acceptance into active learning and carry out more independent learning according to their own deficiencies and plans.

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