



# A Comparative Study of Art and Design Education in the Internet + Era Empowered by AI

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**ABSTRACT.** Traditional art design education pays attention to the cultivation of traditional skills and individual creativity, emphasizing the uniqueness of art and humanistic care. The education mode under the era of AI intelligent Internet + pays attention to the integration of digital technology and innovative thinking, cultivates students' digital skills and interdisciplinary ability, and meets the needs of digital creation and technological innovation. Through empirical research, this study analyzes the characteristics of the two education models, and uses big data research to analyze and compare the two education models, and explores the differences in student training objectives, employment prospects and other aspects as well as the similarities between the two models. This study concludes that traditional art design education and AI intelligent Internet + era of college art design education mode have their own unique value. In the future, we can give full play to the complementation of the two, combine the continuous exploration of practice and research, and provide students with more comprehensive and diversified art design education, and cultivate creative talents to meet the needs of the future society.

**KEYWORDS:** Traditional art design education, AI intelligent Internet + era, Art design, Aesthetic accomplishment, Student creativity

## 1 Introduction

In today's society, traditional art design education and the education mode of art design specialty in colleges and universities under the era of AI intelligent Internet + have become important topics in the field of education and art design<sup>[1]</sup>. Traditional art design education focuses on cultivating students' aesthetic taste, artistic creativity and handicraft skills, so that they can become artists or designers with solid artistic foundation. However, with the rapid development of information technology and artificial intelligence, the field of art design is also undergoing profound changes<sup>[2]</sup>. In the era of AI intelligent Internet +, the education mode of art design specialty in colleges and universities needs to integrate digital technology and innovative thinking, cultivate students' digital skills and interdisciplinary ability, so as to adapt to the development trend of digitization and intelligence.

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## 2 CHARACTERISTICS AND OBJECTIVES OF TRADITIONAL ART DESIGN EDUCATION

### 2.1 Cultivation of aesthetic taste

Traditional art design education pays attention to cultivating students 'aesthetic taste, guiding students to appreciate and understand art through art history, aesthetic theory and other courses, so that they can appreciate, understand and evaluate the aesthetic value of art works. By visiting famous art museums and galleries, observing and analyzing the composition, color application and expression techniques of different works of art, students can develop their sensitivity to different art forms and styles, and help them develop their unique aesthetic vision and art appreciation ability<sup>[3]</sup>. Students 'scores on works of art, taking students' scores on different works of art as an index to measure aesthetic taste, illustrate the diversity of art design works (Figure 1).

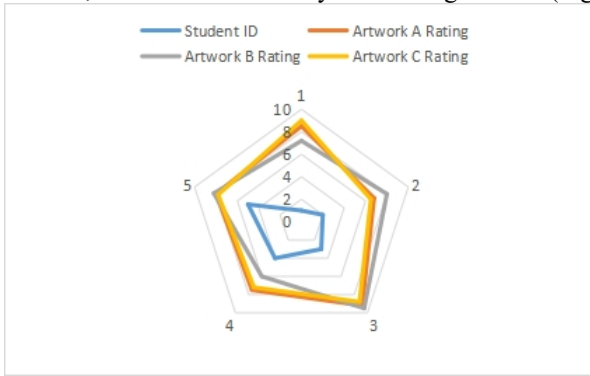
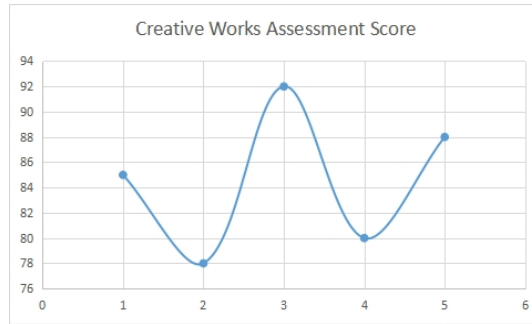


Fig. 1. Grading table of works of art

### 2.2 Cultivation of artistic creativity

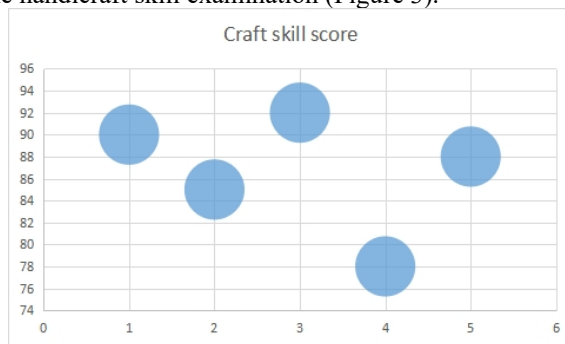
Traditional art design education is committed to cultivating students 'artistic creativity, stimulating their imagination and innovative thinking. By participating in creative workshops and hands-on activities, students have the opportunity to explore different areas of artistic creation and media, such as painting, sculpture, photography, digital media, and more. They will learn how to express their creativity and individuality using different techniques and techniques of expression, thus developing a unique artistic style and creative ability<sup>[4]</sup>. Students 'creative work assessment scores are used as indicators to measure artistic creativity, including students' creative work assessment scores (Figure 2).



**Fig. 2.** Assessment of creative work

### 2.3 Handicraft skills development

In traditional art design education, the cultivation of handicraft skills is an important part. Students learn traditional arts and crafts techniques, such as painting techniques, carving techniques, ceramic making, etc., and improve their skills through practice and experimentation. The development of these craft skills enables students to express their creativity and ideas through hand-making and to have professional competence in the field of traditional art. The score obtained by the student in the handicraft skill examination is used as the index to measure the handicraft skill, which includes the score of the student in the handicraft skill examination (Figure 3).



**Fig. 3.** Handicraft skill assessment

## 3 AI INTELLIGENT INTERNET + ERA OF COLLEGE ART DESIGN PROFESSIONAL EDUCATION MODE

### 3.1 Integration of Digital Technology and Innovative Thinking

In the era of AI intelligent Internet +, digital technology has become an important driving force in the field of art design<sup>[5]</sup>. The education mode of art design major in colleges and universities needs to integrate digital technology with innovative thinking to cultivate students' artistic creation and design ability in digital environment<sup>[6]</sup>. Students need

to be proficient in a variety of Digital tools and AI AIGC software that can quickly enter specific descriptive instructions to create innovative and expressive art. Tools such as Dream studio.ai can automatically create works of art, photos and illustrations in any style imaginable, while the improved canvas can handle multiple images at once and replace, add and edit elements in images through repair and repair, adding specific instructions: Pen and ink drawing of a mystical underwater world, with schools of fish, coral reefs, and a mermaid, highly detailed line-work, high-contrast, stylized, automatically generated artwork (Figure 4).

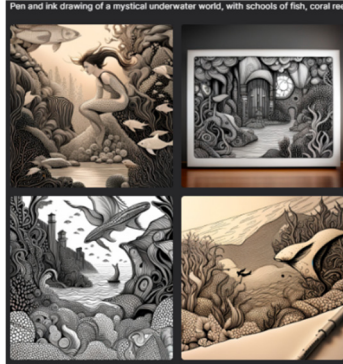


Fig. 4. Dream studio artwork

The development of AI intelligence and big data technology enables art design to draw inspiration and creativity from data<sup>[7]</sup>. The education mode of art design major in colleges and universities should teach students how to extract information from data and transform it into inspiration for creation and guidance for design. The percentage of students in art and design programs who have mastered digital art skills has increased year by year (Figure 5).

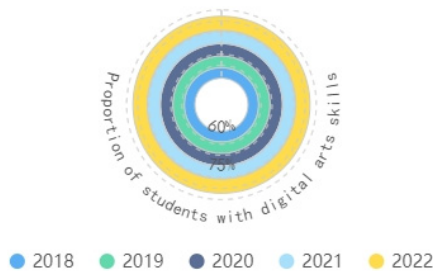


Fig. 5. Proportion of students with digital arts skills

### 3.2 Digital Skills and Interdisciplinary Competencies

In the era of AI intelligent Internet +, art design education needs to focus on cultivating students' digital skills and interdisciplinary abilities. These abilities are essential for students to adapt to the trend of digital and intelligent development<sup>[8]</sup>. Students need to

learn how to use digital media for artistic expression, including digital painting, computer-generated art, virtual reality, and more. They should understand the characteristics and applications of digital media and how to use them to create unique and innovative works of art. Students are expected to have the ability to analyze and visualize data to extract valuable information from big data and translate it into creative and design guidance. Learn to use data analysis tools and techniques to turn data into meaningful graphs, charts, or visualizations to support their artistic and design decisions<sup>[9]</sup>. Student performance in data visualization projects is measured by their ability to interpret and present data in a visually appealing way (Figure 6).

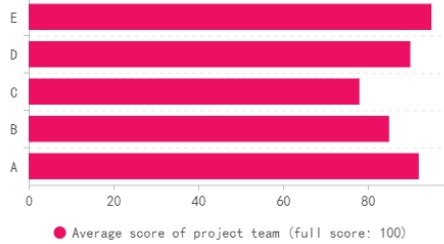


Fig. 6. Average score of project team

## 4 COMPARISON OF TRADITIONAL ART DESIGN EDUCATION AND AI INTELLIGENT INTERNET + ERA OF COLLEGE ART DESIGN PROFESSIONAL EDUCATION MODEL

### 4.1 Differences in students 'training objectives

The training goal of traditional art design education mainly focuses on cultivating students 'aesthetic taste, artistic creativity and handicraft skills. Traditional art design education emphasizes the inheritance and development of traditional art, and pays attention to the cultivation of students 'perception and expression ability of beauty<sup>[10]</sup>. Students learn traditional art skills such as painting, sculpture and pottery to cultivate their professional accomplishment and skills in the field of traditional art. The goal of traditional art design education is to enable students to become professionals with artistic talent and technical ability, able to develop and achieve success in the field of traditional art. However, traditional art design students attach great importance to the basic skills of art. During school, most students can only reach the skilled level of art design. However, in the education mode of art design major in colleges and universities under the era of AI intelligent Internet +, the training objectives of students are different. In addition to focusing on the inheritance and innovation of traditional art, the model also emphasizes the integration of digital technology and innovative thinking. Students need to develop digital skills and interdisciplinary competencies to adapt to digital and intelligent trends. The education mode focuses on cultivating students 'data analysis, visu-

alization ability, and application ability of emerging technologies such as artificial intelligence, virtual reality, augmented reality, etc. However, as long as the master software operation, art design level will be significantly improved. According to the survey of graduates in recent 3 years, the data obtained by big data analysis (Figure 7).

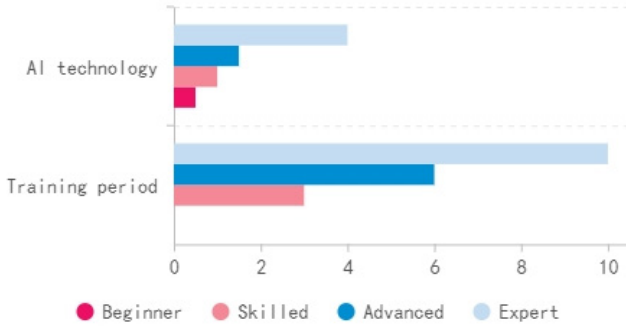


Fig. 7. Skill Level

#### 4.2 Differences in employment prospects

Traditional art design education provides students with opportunities for employment in the field of traditional art. Graduates can usually work in traditional art institutions such as art galleries, galleries and art institutions. They can become artists, designers, curators and other roles, participating in traditional art exhibitions and projects. Employment prospects are relatively stable, but also face fierce competition and changes in market demand.

In the education mode of art design major in colleges and universities under the era of AI intelligent Internet +, the employment prospects of students are more diversified and open. Due to the widespread use of digital technologies, students have the opportunity to find employment opportunities in the field of digital creation. They can engage in virtual and in the AI intelligent Internet + era of college art design professional education mode, students' employment prospects are more diversified and open. Thanks to the widespread use of digital technology, students have the opportunity to find employment opportunities in the field of digital creation, and the starting salary is also better. Students can engage in art design and development in virtual reality (VR) and augmented reality (AR), participate in game design and animation, and create digital and interactive media. The survey of graduates in the past five years has drawn the following data (Figure 8).

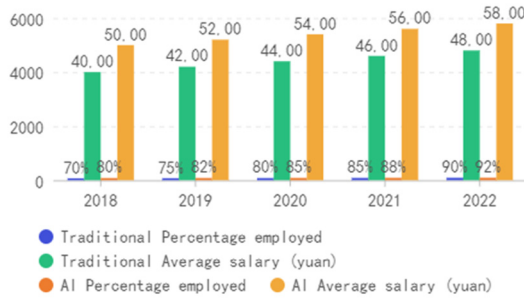


Fig. 8. Employment disparity

### 4.3 Common ground and mutual influence

Although there are differences between traditional art design education and college art design professional education mode in the era of AI intelligent Internet +, they also have similarities and influence each other (Figure 9).

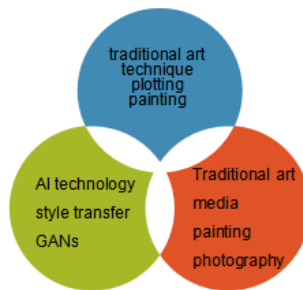


Fig. 9. Common cross influence

First of all, both educational models emphasize the importance of artistic foundation. Whether traditional art design education or AI intelligent Internet + education mode, art foundation is the cornerstone of students' development. Students need to master basic skills such as drawing, modeling, color and composition, as well as related knowledge of art history and aesthetics. Secondly, digital technology has been more and more applied in traditional art design education[11]. With the development of digital technology, traditional art and design education began to introduce digital tools and software to enhance students' creative and expressive skills. Students can use computer-aided design software, digital painting tools and virtual reality technology to create and practice. At the same time, traditional art design education is also influenced by the AI intelligent Internet + era. With the continuous advancement of intelligent technology, the traditional art field has gradually combined with artificial intelligence, and innovative works integrating art and technology have emerged. This cross-integration brings new possibilities for traditional art design education, and encourages students to explore and use intelligent technology in the creative process.

## 5 CONCLUSIONS

In This study compares the traditional art design education with the education mode of art design specialty in colleges and universities in the era of AI intelligent Internet +. First of all, the traditional art design education focuses on cultivating students 'aesthetic taste, artistic creativity and handicraft skills. The education mode of art design specialty in colleges and universities in the era of AI intelligent Internet + needs to integrate digital technology and innovative thinking, cultivate students 'digital skills and interdisciplinary ability, adapt to the development trend of digitization and intelligence, and seek employment opportunities in the field of digital creation. Secondly, there are differences between the two educational models in terms of students 'training objectives and employment prospects. Traditional art design education pays attention to individual artistic expression and inheritance of traditional skills, emphasizing the in-depth understanding of art and the cultivation of creative ability. The education mode under the era of AI intelligent Internet + cultivates students 'digital skills, innovative thinking and teamwork ability to meet the needs of digital creation and scientific and technological innovation.

Traditional art design education and AI intelligent Internet + era of college art design professional education mode of their own advantages and limitations, and realize that they can learn from each other and integration, in order to promote the development of art design education. In the future, traditional art design education can draw lessons from the education mode of AI intelligent Internet + era, introduce digital technology and innovative thinking elements, expand teaching methods and creative media, and cultivate students 'digital skills and interdisciplinary abilities. The combination of traditional art design education and digital technology can provide students with a broader creative space and cultivate students 'competitiveness in the field of digital creation. At the same time, the traditional art design education can also pay attention to students 'personality expression and creative ability, emphasize the uniqueness of art and humanistic care, so as to ensure the inheritance and development of art tradition.

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