

Reflection on the Cultivation of Art and Design Talents under the Background of the Artificial Intelligence Revolution

Xinmei Liu

Tianjin University of Commerce Boustead College, Tianjin 300192, United Kingdom.

Abstract: With the progress of information technology, especially the widespread use of artificial intelligence technology, it has shown an important role in promoting economic and social development. Art and design in universities is a new discipline that combines modern technology with humanities and art. Only by emphasizing the development of science and technology, adapting to the requirements of the times, and closely integrating humanities and art with science and technology, can we gradually expand the educational channels for cultivating composite and innovative talents. Effectively organizing different types of scientific research activities, building a sound and comprehensive education system, plays an important role in adjusting teaching relationships, innovating teaching models, enhancing students' professional and comprehensive qualities, and improving their academic performance and employment competitiveness.

Keywords: Artificial Intelligence; Art and Design; Talent Training

Introduction

With the development of artificial intelligence technology and the gradual deepening of education system reform, the emergence of a large number of AI generation tools has begun to disrupt the traditional industry of art and design. We believe that traditional art and design education models can no longer adapt to the development of the economy and society. Universities should use innovative thinking to promote and ensure the development of art and design courses and the improvement of talent cultivation models. They should not only attach importance to helping students lay a solid theoretical foundation, but also focus on cultivating their practical abilities, cultivating their innovative spirit and consciousness, and cultivating more outstanding art and design talents for social progress and economic development

1. Technological development transforms people's lifestyles and promotes innovation in art and design

The emergence and development of artificial intelligence technology also promote the transformation of art and design theory and production models. As a product of the rapid development of knowledge economy globalization, the emergence and application of artificial intelligence have played a epoch-making role and significance in economic and social development. Modernist design embodies the ideas of the Industrial Revolution, while postmodern design embodies the concept of information technology. The foundation of artificial intelligence is microelectronics technology, and the use of transistors represents the development of microelectronics technology, which may establish miniaturized electronic devices and lay the foundation for the birth of computers. The development of computer technology effectively transforms the way art and design is carried out, achieving diversified and small-scale design, liberating the inherent form of products, and designing products according to market requirements. In the design process of the post industrial era, the style and category of consumer life are considered, and its technical requirements are more flexible and intelligent to meet the cultural backgrounds of various consumer talents and better adapt to the conditions of product production. When performing art design, the latest process documents, design drawings and design parameters can be obtained with

the help of huge computer data. graphic designer can select image materials to complete design and editing. It can enable environmental designers and architectural designers to work better without laborious and time-consuming production of models, enhance their freedom of production, and better innovate artistic design.

Computer science can handle human-machine problems, analyze consumer feelings and psychological factors, design products with human nature and taste, and transform product sales and development models. Software technology can transform artistic design concepts and design processes. Due to the rapid development of computer technology, product design concepts have expanded from the previous material field to the procedural field, achieving the development and innovation of artistic design.

2. Current problems in the cultivation of art and design talents

2.1 Lack of clear goals for the cultivation of art and design talents

At this stage, most of the universities in Chinese Mainland have the characteristics of similar talent training and complete professional categories, and blindly follow the trend to expand enrollment in order to meet market demand. The school did not position its talent cultivation goals based on its own specific situation, did not conduct differential analysis among schools, lacked clear planning for professional construction and talent cultivation, and did not have long-term strategic goals. Some universities lack an accurate and complete curriculum system for art and design majors, resulting in lagging professional settings, converging content, and outdated teaching methods, making it difficult to meet the diverse talent needs of enterprises. In this teaching environment, it is difficult to cultivate art and design talents with a sense of technological innovation and innovative spirit.

2.2 The curriculum is difficult to meet market demand

In the context of sustained economic development in China, art and design majors in universities have not fully recognized the economic form and have not understood the requirements of society for art and design talents. Students have limited skills, knowledge, and practical experience, making it difficult to keep up with the requirements of the times. The lack of proper understanding of the importance of employment psychology education and talent demand analysis in schools has led to inappropriate employment attitudes and psychology among students, resulting in a gap between students' expectations of work and the actual nature of their work, resulting in maladaptive psychology that affects students' employment. In addition, the teaching content and curriculum system lack analysis of the market, enterprises, and society, the lack of flexibility in professional settings, and the disconnect between theory and practice, resulting in a disconnect between market demand and school education.

2.3 Lack of flexible teaching management mechanisms

Although the reform of art teaching can generate new teaching concepts and teaching plans, due to the talent cultivation plan formulated four years ago, and with changes in market demand and economic environment, the rigid teaching management system is difficult to update in a timely manner, resulting in teaching content and teaching plans unable to meet the requirements of teaching reform and talent cultivation, or the developed school enterprise cooperation plan cannot be operated or implemented in teaching. Due to the fact that the teaching time and syllabus of the course are subject to talent development plans, which are relatively fixed, while school enterprise cooperation belongs to a dynamic operation mode, which is relatively flexible and constantly changing. Currently, the education mechanism has not yet developed a teaching management mechanism to operate and coordinate the relationship between the two, leading to education reform entering a dead end.

2.4 Lack of comprehensive professional practical teaching

Practical teaching can enable students to have strong professional abilities, and cultivating technological innovation talents can reflect students' applicability. Art and design majors in universities should take practical teaching seriously. However, in actual teaching, universities have not built fully equipped and well-equipped training bases due to issues with educational philosophy and funding, and have not established a practical teaching system that meets the requirements of cultivating art and design talents. The proportion of practical teaching in the teaching plan is relatively small, and practice is superficial without building a school enterprise cooperation base. Students have short internship time, limited internship content, and few opportunities. In addition, the art and design talent major has not yet established a good circular interaction mechanism with enterprises. Enterprises have built practical training

bases in universities, and both parties lack scientific cooperation methods. At the same time, due to the importance of profits by enterprises, school enterprise cooperation has not reflected its due role.

3. Strategies for Improving the Cultivation of Art and Design Talents from the Perspective of Technological Innovation

3.1 Emphasize professional foundation courses.

The basic skills and knowledge of art and design are the knowledge points that students must learn. Mastering basic skills and knowledge can enhance their professional abilities and meet the requirements of technological development for students to update their knowledge and deepen their theoretical knowledge. Construct a dynamic update mechanism for teaching content. The teaching content of the course is the key to cultivating talents and the main content for students to learn. Universities should continuously analyze and refine the teaching content, abandon outdated cases and knowledge, add project-based teaching content to freely research topics, cultivate students' exploratory thinking, mobilize their problem-solving ability and innovative consciousness, and demonstrate the timeliness and foresight of the teaching content.

3.2 Establish a practical teaching system.

Universities should set up specialized or comprehensive practice sessions, and students should conduct artistic design exercises based on commercial operation requirements. The content includes conceptualization, design, creating renderings, drawing, making models or products, understanding the requirements of different sessions and the relationships between them. Teachers can also choose teacher horizontal projects or social service projects in graduation projects, thematic designs, and comprehensive designs, allowing students to personally experience project commissioned design, understanding design requirements and tasks, setting design goals, analyzing and conducting market research, expressing design creativity, cost pre selection and material selection, production and production, and information feedback, etc., to improve the comprehensiveness of student training.

3.3 Universities should establish practical training bases.

On campus laboratories or training bases attach great importance to cultivating students' basic and professional skills. Off campus training bases belong to the joint construction of schools and enterprises, allowing students to understand professional requirements and job characteristics, and cultivating their professional abilities and qualities.

Conclusion

At the current stage of severe economic situation in China, efforts should be made to explore new economic growth points, so that the creative industry can shoulder the important mission of promoting economic development. The development of the creative industry requires universities to cultivate a large number of talents in the field of art and design. In the process of cultivating talents, art and design education should pay attention to the future, attach importance to social development, analyze the requirements of society and enterprises for talents, effectively reform teaching methods, adjust curriculum systems, enrich teaching content, optimize teaching structures, build a practical teaching system, establish a dual teacher team, and improve teaching management mechanisms, By utilizing scientific and technological reform and innovation to solve the problem between art and design talents and social needs, we aim to enhance the professional and comprehensive qualities of design talents, and cultivate more outstanding talents for society.

References

[1] Zhao SJ. Exploration of the Generation Mechanism of Artificial Intelligence Art [J] Journal of Qinghai Normal University (Social Sciences Edition), 2021,43 (06): 92-97.

[2] Yin XJ, Han PG. Rational Reflection on Artificial Intelligence 'Art Creation' [J] Hubei Social Sciences, 2020, (02): 47-52.

[3] Huang XW. Analysis of the potential development trend of artificial intelligence, artistic creation, and talent cultivation in a trinity [J] Modernization of Education, 2019,6 (80): 30-32.