The Training Mode of Design Talents in Colleges and Universities from the Perspective of Artificial Intelligence

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Abstract. "Internet + "has been deeply rooted in the hearts of the people, and the development of online courses such as micro class and MOOC has become increasingly mature. However, with the rapid development of the times, the research on online teaching alone can not meet the needs of the era of artificial intelligence. From the single and interactive form of VR and visual media to the interactive form of visual art, it also presents the trend of interactive development from the traditional and visual media to the interactive form of visual art. The various possibilities brought by artificial intelligence in the field of design pose a problem to the educators engaged in design education, that is, how to better cultivate students' innovative thinking and enhance their innovative ability, instead of focusing on technology. This paper analyzes the current situation of the application of artificial intelligence in the field of culture and education, and expounds how to combine the traditional curriculum and teaching methods with artificial intelligence in the training of design talents in Colleges and universities.

Keywords: Artificial Intelligence, University Design Talent Training, Curriculum, Teaching Methods

1. Introduction
Artificial intelligence is a new technology science that studies, simulates and extends human brain power and intelligence, and applies relevant achievements to all walks of life. Its core connotation is "to make machines or robots competent for complex tasks that need human intelligence in traditional industries". In recent years, the rapid development of artificial intelligence technology in the global field, countries around the world have actively launched exploration and research, and strive to apply artificial intelligence in the period of industrial explosion to automobile, medical, culture and education and other fields. American public schools have introduced the artificial intelligence education research project. Students can get access to all kinds of knowledge related to artificial intelligence in their daily study. Japan regards artificial intelligence as the core of the fourth industrial revolution, and has established a very complete research and development system earlier. It proposes to set up programming course in primary and secondary school teaching in the future and make it a compulsory course. The AI policy of the State Council in 2017 has become the focus of AI research and development in China [1].5g technology was first put into commercial use, a large number of
cloud computing platforms and big data centers have been built one after another, and the underlying
technology system of artificial intelligence has been gradually improved, and has rapidly spread and
penetrated into all walks of life. Artificial intelligence has changed the cognitive mode, thinking mode,
production mode and life style of human beings, and enhanced the key ability of human beings to
transform the world. The industrial technological transformation and optimization and upgrading will
rely more and more on innovative, compound and skilled talents.

The development of artificial intelligence has profoundly changed the way of human life. Digital
intelligence has infiltrated into various fields and gradually replaced traditional types. The core and
extension of design science are constantly expanding [2]. At present, the teaching mode of personnel
training in Colleges and universities in China is single and outdated. Influenced by the traditional
education mode, although we have attached great importance to practical courses, the form of
curriculum design is single and the teaching effect is general. In addition, the teaching content is out of
touch with the actual situation, the adjustment and update of the knowledge system structure of
personnel training in Colleges and universities is out of touch with the actual situation, many teaching
contents are too old to meet the actual needs of enterprises, new information and knowledge can not be
obtained by students in time, and the teaching content does not match the needs of enterprises. In the
teaching process, theoretical teaching is given priority to, lack of practice as an auxiliary, the
knowledge learned can not be practiced, accumulated over time, students will question the
professional practicability [3]. In the field of education, college educators need to deeply consider and
study the education and teaching system combining artificial intelligence and education. How to use
intelligent technology to accelerate the reform of talent training mode and teaching method has
become the primary content of the research on talent training mode in Colleges and universities.

2. Method

2.1. Pay Attention to the Needs of Enterprises and Cultivate Management Talents
Artificial intelligence is created by people. Only by learning how to use it and master it as soon as
possible, can it become a new type of talents to adapt to the development of the times. In the era of
artificial intelligence, it is particularly important to change the teaching methods of professional
courses, stimulate students' innovative thinking ability, and establish an education system of
"intelligence + design". The traditional school running mode and education mode are reshaped by the
new combination of "cloud curriculum + intelligent technology + virtual reality", and digital
technology such as telepresence technology, holographic projection, virtual reality (VR), augmented
reality (AR) and hybrid reality technology (MR) will also be widely used in the field of education [4].
With the further implantation of artificial intelligence, education will present a two-way development
trend: on the one hand, the education methods tend to be intelligent, process oriented and large-scale;
on the other hand, the demand for highly skilled talents with unique ingenuity is unprecedented.
Therefore, in order to cultivate creative professional practitioners who can grow up with learning
intelligent robots, the focus of education is bound to change. In the changeable micro and
macro-economic environment, students are trained to systematically analyze the strategy of enterprises,
and make appropriate decision-making ability in line with the current economic environment through
professional judgment and professional analysis. In the era of artificial intelligence, education should
pay attention to the following aspects: strive to improve the comprehensive quality of vocational
learners, such as innovation consciousness, development consciousness, humanistic awareness and
global thinking, and cultivate high-quality professional talents with "hard technology" and "soft
power", intelligent technology and humanistic spirit [5].

2.2. Enhance the Diversity of Disciplines and Cultivate Interdisciplinary Talents
With the passage of time and the continuous advancement of technology, artificial intelligence
technology will accelerate the derived new design field. The traditional design major and the
construction and development process of design industry pay more attention to the discussion between
design form and practical function. When artificial intelligence is fully applied to the teaching of design major, the contents of social innovative service-oriented design and integrated innovative design with the theme of "catering to social needs" have been formed. Artificial intelligence has developed its powerful ability of interdisciplinary collaboration and problem solving [6].

In the intelligent era, the cultivation of talents is more inclined to individual learning, personality learning and creative ability cultivation, focusing on the cultivation of compound talents with professional knowledge and multiple skills, which is more in line with the requirements of this era. To promote the deep integration of students' fixed learning, online learning and offline learning, and strive to build a personalized vocational learning system and ubiquitous vocational learning system that can be learned from time to time and everywhere, so that education can better serve vocational learners in school and workers who need to learn new skills. Personnel training in Colleges and universities should tend to train students to interpret their own design works from the perspective of individual and logic [7]. In terms of artistic expression, we should think deeply and expand the depth of cultural and social factors. Colleges and universities should not only cultivate students' learning ability, but also cultivate their innovative thinking ability. Colleges and universities should open more interdisciplinary and interdisciplinary "second classroom", and give students more choices.

2.3. Combine Theory with Practice to Cultivate Applied Talents

The teaching reform in Colleges and universities is the inevitable result of the development of the times. At present, the teaching mode of colleges and universities has been unable to meet the needs of the development of the times, especially with the popularization of artificial intelligence and the formal arrival of the era of knowledge sharing and data sharing, teaching reform is imminent. As an independent school aiming at cultivating applied talents, it should adapt to the times, change the original teaching pattern, and cultivate application-oriented talents for the society [8]. Traditional teaching is based on course explanation and takes teachers as the main body of teaching. Students are lack of practical operation and can not meet the needs of practical work. There are many problems in the work of college graduates, such as slow start-up and weak practical operation. Therefore, colleges and universities should cultivate students' ability to find, analyze and solve problems. Schools should strengthen the training of practical courses, not only to complete the practice of professional ability through short-term practical courses, but also to make overall planning and reasonable arrangement of practice time [9].

Artificial intelligence is the arrival of the times, which provides favorable conditions for students' autonomous learning and creative research. The subject of teaching has changed from teacher to student, and the subject of teaching has changed from student group to individual student. With the help of artificial intelligence, targeted construction of learning environment, creating knowledge context, promoting the reform of teaching objects, so as to improve students' practical ability, autonomous learning ability, creativity and innovation ability, and meet the needs of students' personalized learning [10]. Colleges and universities must keep up with the pace of the times in the formulation of talent training objectives, use Internet +, big data and other resources to improve the curriculum system, focus on social needs, cultivate new application-oriented professionals in line with the needs of the times, combine students' professional knowledge with the development of artificial intelligence, and make artificial intelligence become an effective tool to improve students' employment.

3. Discussion

Artificial intelligence and innovative design, one representing science and the other representing art, are constantly integrating. The creative thinking and humanistic temperature of designers are still the dominant factors in the development of design. It is worth thinking about how to integrate these problems into the teaching of artificial resources.

In view of the disadvantages of the traditional teaching system and the needs of the artificial intelligence era, college teachers must seize the opportunity of the times, improve their personal ability,
explore the possibility of new teaching reform under the demand of artificial intelligence, and train students to be excellent graduates who can skillfully use artificial intelligence technology in their respective industries. The multi-dimensional realization ability of artificial intelligence provides more experimental bodies for the expansion of creative thinking in design, and provides a more diversified expression scheme for the performance of design art[11]. When training design talents, we should further expand the creative dimension, participate in the in-depth integration and learning of artificial intelligence technology, deepen the professional integration of interdisciplinary, promote the deep integration of industry, University and research, and cultivate real combat oriented high-end intelligent talents.

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