Research on the Innovation of Artificial Intelligence Training Mode for New Engineering Majors in Higher Vocational Colleges

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Abstract. The "new" of the new economy is mainly reflected in two aspects. First, information technology (including cloud computing, big data, Internet of things, artificial intelligence and other technologies) is widely used in social material production and spiritual and cultural fields. The new form of social culture and material production has the characteristics of high efficiency, changeability and cross field. Second, the wide application of new materials and bioengineering technology will greatly change the relationship between man and nature (including the material characteristics of human beings), and make the living state and living space of human beings have essential changes different from those of any previous era. With the prosperity of China's industrial manufacturing industry, the industrial chain of artificial intelligence is developing rapidly. The purpose of AI interface research is to realize human-computer communication. Therefore, scholars must make efforts from both theoretical and practical aspects to solve the functional problems of computer's understanding and translation of words and languages, and self-expression. [1] Due to the research and application of intelligent interface technology, the development of computer technology has been greatly promoted, and the operation speed and human-computer communication have been greatly improved.

1. What factors should we consider in cultivating talents under the new artificial intelligence background?

The innovation of business forms promotes the transformation of university education. The traditional science and engineering curriculum has been unable to adapt to the changes of the times. We need to reconstruct some core knowledge and update the old knowledge. "New project" is the cross integration of science, humanities and engineering. To cultivate compound and comprehensive talents. Students should have comprehensive ability, global vision, leadership ability and practical ability. How to make a complete professional construction program, that is, what is the professional core? Where are the course resources? We can't build cars with the door closed. We need to cooperate with industry university research institute to provide a batch of high quality curriculum resources for teachers and students. Systematic training of university teachers. How to let teachers use practical experience (such as: big data, artificial intelligence and other cutting-edge technologies) to teach students. The key elements of the combination of education and practice are as follows.
2. The development of new talents under ARTIFICIAL intelligence should have abilities in those aspects

Education and application cannot be separated, and education and actual combat should be closely combined. When the "ivory tower" of colleges and universities is pushed down, when students can get access to real industry cases on campus, and when business needs promote the further deepening of scientific research, such education will be meaningful and students will be competitive.

2.1 set up a thinking model

Heisenberg's principle of uncertainty if we use examples to illustrate Heisenberg's uncertainty principle is to let us further understand the laws of the world and understand the importance of mastering probability theory for understanding the world. Because, if we want to use artificial intelligence to cultivate talents, we need to improve our statistical intuition, because the artificial intelligence world is a probability system, and the output response is expressed in statistical terms. To really understand how AI works and how it will affect our lives, we need to develop an intuition about how models simulate the world. We should work out a talent training plan, establish a teaching curriculum system and develop teaching resources. We should work together to build a contingent of teachers, establish and improve professional teachers. We should jointly improve the practical teaching conditions, build joint laboratories, and undertake the tasks of teaching, scientific research and mass entrepreneurship and innovation activities.

2.2 Cross the fusion

Cross integration is a strict challenge for liberal arts. In the context of the era of artificial intelligence, Chen Xiaoming believes that "in our future era, in the era of intelligent technology, cross integration may be the most severe challenge facing liberal arts." he said that an era has an era of liberal arts. The traditional liberal arts education has completed its historical mission; the new liberal arts education is a new mission entrusted by the times, and the two are not simple substitutes. New liberal arts is the promotion of traditional liberal arts, trying to break professional barriers and disciplinary barriers. The new liberal arts, based on a broad academic vision, broad problem awareness and profound academic
accumulation, will provide quality training more suitable for the future talent training needs of modern society. Since the birth of artificial intelligence, the theoretical research and technical level have become increasingly mature, and the application fields have been expanding. In the near future, the technological products brought by artificial intelligence will be the "incubator" of human intelligence. Artificial intelligence can simulate the information process of people's consciousness and thinking. Artificial intelligence is not human intelligence, but it can think like human beings and even surpass human intelligence.

2.3 Continuous lifelong learning
Flexibility and adaptability many people think that the half-life of knowledge is decreasing, which is why you need to learn for life, not just in college. One of the problems in current education is that what is easy to teach becomes easy to digitize and automate. The age of artificial intelligence is more about what we can create with what we already know. Therefore, the focus of current and future education must be shifted so that people can become lifelong learners, continue to learn, abandon outdated skills and relearn. When the environment changes, they can combine the real work world with the learning content. Many people are afraid of change, because change means breaking habits and routines and learning new things\(^2\). However, in today's world, the rapid development of technology means that the world will change faster and faster. In an ever-changing world, it is very important to constantly improve our understanding of new technologies, open up new markets and new opportunities. Using pervasive computing technology to realize the integration of physical space and virtual space, based on artificial intelligence technology as an intelligent engine, the intelligent perception ability and service ability supporting diversified learning needs are established, and the ubiquitous learning with ubiquitous, social, situational, adaptive and connectivity as the core features is realized.

2.4 Interdisciplinary integration
In a brief history of the future, Yuval herali believes that as time goes on, it becomes easier to replace humans with computer algorithms, not only because algorithms will become smarter, but also because humans are becoming more and more specialized. For artificial intelligence, to squeeze human beings out of the job market, it only needs to surpass human beings in specific abilities required by specific industries. His analysis is very delicate, and simply reveals the characteristics of artificial intelligence and the nature of division of labor produced by modern industrialism\(^3\) At the same time, it also reminds us of a very important point: Artificial intelligence can be an "expert" in various fields, but it is difficult to become a "generalist" in a certain period of time. The world is one, our various disciplines are just different prisms, reflecting a unified whole, there are universal connections between things. The contemporary curriculum focuses on specialization, which will lead to a result that students are easy to become "myopic", only understand things in their own field, only observe phenomena and analyze problems according to specific methods and forms, or still use the methods they are used to in the face of problems in other fields, resulting in problems and prejudice, etc. To cultivate future generalists, we need to train students to study a single topic from a multi-disciplinary perspective, and be good at using the existing and available professional knowledge to observe, analyze and solve problems from an overall and comprehensive perspective\(^4\)

Figure 3 Artificial intelligence promotes the development of talents
3. Conclusions
In other words, we should keep pace with the times, recognize, embrace and adapt to the changes, and learn the new requirements brought about by changes. That doesn't mean everyone has to face the challenge of becoming a data scientist in a training camp. We need to update existing skills, abandon outdated ones and learn new ones so that we can remain relevant in the future economy. 2019 of the world economy BBS published report on the work of the future forecast said: by the artificial intelligence, robot technology and life sciences dominate the fourth revolution under the impact of the work, most of the existing professional will disappear, will emerge at the same time there is no new career, and all of these new jobs need people to have a new job skills. [5] It can be seen that good learning ability is also more important in the era of artificial intelligence. Learning ability promotion is no longer the memory and accumulation of knowledge, method of control and system building, help children establish a knowledge framework, the knowledge from textbooks, best can combine with actual life, eventually master learning method, way of thinking, so in the face of new challenges, the children can quickly grasp the key points and solve problems. With the support of various artificial intelligence technologies, cognitive model, knowledge model and situation model are constructed. On this basis, various scenarios in the learning process are intelligently supported to form support tools in the learning process, [6] such as intelligent subject tools, intelligent robot partners and toys, intelligent assistant for special education, so as to realize the communication and integration of learners and learning services Cooperation, reconstruction, collaboration, exploration and sharing.

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