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Research on the Optimization of Electronic Information General Curriculum System under the Background of "Artificial Intelligence+"

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Abstract: Under the background of "artificial intelligence +", the integration and development of artificial intelligence and curriculum system of colleges and universities have been accelerated. This paper focuses on the application of electronic information technology in artificial intelligence. Based on the application of electronic information technology in artificial intelligence, this paper discusses the optimization of the general curriculum system of electronic information .This paper mainly analyzes the basic idea of optimizing the general curriculum system of electronic information, which highlights the application of "artificial intelligence + electronic information technology". The basic methods and steps of curriculum system optimization are clarified, and the optimization and implementation of curriculum system are considered. It provides a new idea for the optimization and development of the general curriculum system of electronic information.

1. Introduction

In the Government Work Report of 2024, the action of "artificial intelligence +" was mentioned for the first time, which means that China is strengthening its top-level design. Accelerate the formation of new productivity with artificial intelligence as the engine [1].The proposal of "artificial intelligence +" will inevitably further promote the deep integration of "artificial intelligence +" and education. In this context, the general curriculum of electronic information must constantly promote the construction of curriculum system to focus on the future intellectualization, which intelligence as the traction, information as the basis and data as the driving force. In this way, the training can meet the needs of new quality productivity talents represented by "artificial intelligence +".

Electronic information general course is a basic course for different majors to understand the methods and means of electronic information technology. Information technology is the basis of intelligent technology. Under the background of "artificial intelligence +", the main direction of the optimization of the general curriculum system of electronic information is to take "artificial intelligence +" as the traction and establish the relationship between "artificial intelligence +" and

the basic knowledge of electronic information. Through the integration of teaching objectives, content, structure, training and evaluation, the curriculum system is optimized.

2. Basic Ideas for Optimizing the General Curriculum System of Electronic Information under the Background of "Artificial Intelligence +"

At present, the research on curriculum system is usually divided into broad and narrow perspectives [2] [3].In a broad sense, the curriculum system is based on certain educational values to achieve the goal of professional training in the way of arrange and combine the various elements of the curriculum; In a narrow sense, the curriculum system is the curriculum structure, which is the combination and coordination of all kinds of courses and the core of the teaching plan [2] ~ [6].This paper mainly studies the optimization of curriculum system in a broad sense. It is how to optimize the teaching objectives, content, structure, implementation and evaluation of general courses of electronic information.

No matter which definition of curriculum system is adopted. They are all based on certain educational concepts and objectives to implement the optimization of the curriculum system. The methods of curriculum system optimization usually include career orientation and quality orientation. Career orientation is usually oriented to students' future career needs, which focus on improving students' knowledge and ability in a certain field through the optimization of the curriculum system [2] [5] [7].Quality orientation usually pays more attention to the cultivation of students' professional quality. It emphasizes that the quality of students in a certain professional direction can be improved through the optimization of curriculum system [3] [8] [9].

Under the background of "artificial intelligence +", the career orientation and quality orientation of the optimization of the general curriculum system of electronic information should be focused on both "The cultivation of electronic information technology knowledge and ability of "artificial intelligence +" and the cultivation of electronic information literacy. To put it simply, It is to think about the development and construction of curriculum specialty and the application of curriculum knowledge and ability under the background of "artificial intelligence +", and establish the typical application scenarios, application methods, main actions and effects of electronic information under the "artificial intelligence +" environment. The corresponding relationship of the system elements can realize the optimization of the general curriculum system of electronic information.

2.1. Take "Artificial Intelligence + Information Application Task" as the core to refine the teaching objectives of the course

Under the background of "artificial intelligence +", the intelligent application of electronic information technology emerges in endlessly. The intelligent tasks that can be accomplished by means of electronic information technology are also growing. Electronic information technology is more closely integrated with intelligent application scenarios. Therefore, the teaching objectives of general courses of electronic information need to be adjusted in time according to the changes of practical application scenarios. We must conform to the development momentum of "artificial intelligence +" and start with the typical tasks of electronic information technology application, and then increase and optimize the teaching objectives with high correlation, strong pertinence and high urgency with artificial intelligence. It is further refined and perfected from the aspects of knowledge, ability and quality. Thus, the "artificial intelligence +" orientation of the course teaching objectives is more distinct, and more focused on "artificial intelligence + information application tasks".

2.2. Optimize the teaching content and structure of the course based on "artificial intelligence + information application scenario"

Under the background of "artificial intelligence +", the application scenario of electronic information technology has gradually changed to intelligent application. The teaching content of electronic information courses must also focus on the transformation of the application scenario of electronic information technology. According to the current electronic information technology, the application scenarios of artificial intelligence are constantly adjusted and optimized. Then, we can construct the teaching with typical scenarios of artificial intelligence application and the main technical means and methods of electronic information in artificial intelligence application as the main content, and take typical artificial intelligence application scenarios as the main line to determine the structural relationship of teaching content. By the way, the teaching content can matches the typical AI application scenarios. The teaching content structure is consistent with the application method and process of electronic information technology in typical artificial intelligence application scenarios.

3. Optimization and Implementation Steps of Electronic Information General Curriculum System under the Background of "Artificial Intelligence +"

Under the background of "artificial intelligence +", the optimization of electronic information general education curriculum system is a typical application of electronic information technology in artificial intelligence. The teaching objectives are refined from the aspects of basic concepts, technical means, application of methods and quality requirements of electronic information. Based on the needs of teaching objectives, we should further improve the teaching content, improve the teaching mode, refine the assessment methods, and condense the ideological and political elements. It takes the typical scenario of the application of electronic information technology in artificial intelligence as the main line. Last, we can establish the mapping relationship between teaching content and teaching mode, teaching mode and evaluation criteria, ideological and political course and teaching process.

3.1. To refine the teaching objectives and strengthen the ability and quality training of "artificial intelligence + electronic information technology"

According to the previous research results and market research data, the application of electronic information technology in artificial intelligence is analyzed and sorted out. According to the principle of "knowing the application, knowing the method and strengthening the intelligence", the teaching objectives are refined. Based on the understanding of electronic information technology in artificial intelligence, the students can understand the basic concepts and connotations of electronic information, such as basic definition, means classification, technology division, and so on, ant the define the knowledge goal of course teaching. This Paper takes the application of electronic information technology in artificial intelligence as the main line, and analyzes the application of electronic information technology in artificial intelligence. This way can strengthen the ability to use knowledge, analyse and solve problems in learning and life, and clarify the ability objectives of curriculum teaching. In the process of sorting out the logical relationship between electronic information technology and artificial intelligence applications, we can build the mechanism of electronic information technology in the application of artificial intelligence as the criterion, which can continuously improve the quality training of "artificial intelligence + electronic information technology" for students and clarify the quality objectives of course teaching.

3.2. To sort out and optimize the teaching content and training methods, and highlight the application ability and consciousness formation of "artificial intelligence + electronic information technology"

On the basis of teaching objectives, the optimization and adjustment of teaching content should be clarified. According to the relevant knowledge, ability and quality requirements of electronic information technology in the application of artificial intelligence tasks, the teaching content is summarized. Sort out, improve and supplement the teaching content. The teaching contents are classified according to the objectives of knowledge, ability and quality. Based on the application tasks and methods of artificial intelligence, the key and difficult points are divided, and the teaching content and knowledge points are further refined.

Based on the principle of combining the theory of electronic information technology with the application of artificial intelligence tasks, the optimization and adjustment of teaching mode are realized. In the paper, we established a "task + problem" dual-driven teaching mode to realize the two-way cultivation of knowledge ability and professional accomplishment. Task-driven enables students to independently complete the design of electronic information technology in artificial intelligence scenarios and realize the construction of knowledge and ability. Problem-driven enables students to think independently about the theoretical development and practical application of electronic information technology in artificial intelligence scenarios, and then to realize the cultivation of information literacy and intelligence consciousness. The dual-driven teaching mode can accelerate the supplement and improvement of case teaching model, situational immersion teaching model, and the integration of theory and practice teaching model. It further highlights the characteristics of student-oriented teaching mode and serving artificial intelligence.

The application effect of electronic information technology in artificial intelligence is the main body to realize the optimization and adjustment of assessment elements. Focus on the application effect of electronic information technology in artificial intelligence. This paper constructed the index system which covers the basic knowledge of electronic information technology, basic application ability, application ability of typical artificial intelligence tasks, information literacy and artificial intelligence, and comprehensive use of questionnaires, online assessment, offline examination, program design, practical examination and other assessment methods. It realizes the comprehensive assessment mode of the whole process, all elements, multi-orientation and multi-means. The way of optimization and adjustment of assessment elements can ensure that the final comprehensive evaluation conclusion can reflect the students' basic theory of electronic information technology, application design ability, information literacy, Artificial intelligence awareness and other aspects of learning effectiveness.

Situational integration is the main way to realize the ideological and political optimization and adjustment of the curriculum. Situational cognition theory based on the organic integration of knowledge and skills, process and method, emotion, attitude and values. Combining with the current hot issues of artificial intelligence, this paper refined the ideological and political elements during the process of optimizing and perfecting the teaching content and teaching mode, which from the perspective of the awareness of the application of electronic information technology in artificial intelligence, the intelligent development of electronic information technology, and the promotion of "artificial intelligence +". The ideological and political elements are transformed into complete ideological and political content.

3.3. Constructing the mapping relationship of the elements of the curriculum system, focusing on the thinking cultivation of "artificial intelligence + electronic information technology"

After completing the optimization of the elements of the curriculum system, It is necessary to systematically decompose and describe the tasks of the application of electronic information technology in artificial intelligence. The application task is decomposed into a series of typical

application scenarios. The course teaching content, course teaching mode and course ideological and political content related to typical application scenarios are mapped. By this way, we can establish the application of teaching mode, which can natural integration of content knowledge points and ideological and political education, and then deepen students' understanding and acceptance. At the same time, the relationship between typical application scenarios is established according to the complete system and application process. Form the corresponding mapping relationship of curriculum content, teaching mode, curriculum ideological and political education, etc. Students are guided to connect the theoretical knowledge, practical application ability, artificial intelligence thinking, information literacy and other elements of the course. In this way, it can strengthen students to establish a structured, modular and relevant knowledge system.

4. Conclusion

This paper discusses the basic ideas and implementation steps of the optimization of the general curriculum system of electronic information under the background of "artificial intelligence +".Combined with the actual situation, the optimization and application of the curriculum system are considered. The optimization method of electronic information general curriculum system under the background of "artificial intelligence +" can better promote the curriculum system to focus on artificial intelligence, better promote students to integrate electronic information technology into the direction of artificial intelligence, and better enhance students' artificial intelligence literacy. The optimization method also can stimulate students' enthusiasm and enthusiasm for learning, and strengthen students' artificial intelligence thinking. The proposed ideas and methods of curriculum system optimization can also provide new ideas for other types of curriculum system optimization.

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