

Practice and Exploration of Conducting Artificial Intelligence Teacher Training in Universities under the Background of Industry Education Integration

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Abstract: With the vigorous development of information technology, artificial intelligence has become a hot research topic in current development. At present, the integration of industry and education is the main trend in the development of higher education, and promoting the coordinated development of industry and education is an effective way to ensure the improvement of education effectiveness. The development of artificial intelligence courses requires teachers to have high cognitive abilities and strong professional skills of the times. Therefore, strengthening teacher training is an important guarantee measure for current higher education. This article will delve into the effective ways to carry out artificial intelligence teacher training in universities under the background of industry education integration.

1. Introduction

Artificial intelligence courses have become a hot topic in major universities. Its courses include modern methods of artificial intelligence, natural language processing, robots, etc., which are closely connected with the development of modern informatization and industry. Based on the nature of this course, teachers need to possess high contemporary thinking, professional technical skills, and professional cognition. In the context of the integration of industry and education, the development of teacher training can flexibly utilize diverse industrial resources to create diverse teacher training activities, allowing teachers to develop their personal comprehensive abilities through actual participation, and achieving effective development of the teacher team.

2. Interpretation of the Concept of Integration of Industry and Education

The so-called "integration of industry and education" refers to the integrated development of relevant social industries and education. Specifically, it refers to the use of industrial resources, content, and characteristics to innovate educational activities and complete educational theme content. This concept is a new concept pointed out by the teaching reform in the new era. At present, the development of practical teaching courses and order classes based on this concept are representative innovations. The concept of industry education integration in this article is mainly applied to the training of university teachers, utilizing the advantages of modern industries to promote the effective

improvement and development of the professional ability and educational literacy of university teacher teams.

3. The main content of artificial intelligence teacher training activities

3.1. Teacher's curriculum is industry oriented

Industry cognition is an essential quality for university teachers. After 12 years of knowledge, culture, and theoretical learning, university students begin to learn in a targeted manner during their university years. Different majors and courses will bring students different development prospects in different directions in the future. The course of artificial intelligence is a necessary learning content for talent cultivation in the current era of intelligence development.[1] Therefore, the development of related teacher training work must enable teachers to have a deeper understanding of the artificial intelligence industry and ensure the effectiveness of educational work.

3.2. Teachers' professional and technical abilities in the curriculum

Artificial intelligence course is a type of information intelligence course, which is a practical course content. Such course content requires the teacher team to have strong professional and technical abilities. Due to the need for AI courses to keep up with the times, developing teachers' own professional and technical abilities in AI teacher training activities is an important development content.[2]

4. Advantages of Artificial Intelligence Teacher Training in the Context of Industry Education Integration

4.1. Ability to develop teachers' industry awareness

The training of university teachers is the main means and approach to develop their professional abilities and educational cognition, ensuring the orderly implementation of related educational work. For courses such as artificial intelligence, which have a strong sense of the times, there is a higher requirement for teachers to have a better understanding of the times and industry. Teachers need to understand the practical application and significance of this course, as well as the characteristics of industry development. Under the background of industry education integration, it is possible to effectively guide teachers to understand the development of the artificial intelligence industry based on the activities and content of the display industry, promote teachers' own cognition, and promote the effective development of the artificial intelligence era and the implementation of education.[3]

4.2. Able to exercise teachers' practical abilities

As a highly practical course, the development of artificial intelligence education is aimed at developing students' professional abilities, which requires teachers to have strong practical abilities and literacy. From this, it can be seen that the training work of the artificial intelligence teacher team needs to effectively focus on the experience perception of teachers, and carry out diversified training activities based on the development of teachers' comprehensive abilities, so that teachers can develop and improve through participation.[4] In the context of the integration of industry and education, it is possible to effectively guide teachers into actual industries based on industrial activities, allowing them to participate in practical environments, effectively cultivating their own professional skills and abilities in artificial intelligence courses, enabling them to exert strong professional abilities in actual educational work, effectively cultivating students' practical literacy, and promoting the effective

development and implementation of higher education, Achieve good educational and teaching objectives.

5. Approaches to Developing Artificial Intelligence Teacher Training in Universities under the Background of Industry Education Integration

5.1. Building a collaborative team based on the integration of industry and education

Under the background of industry education integration, industrial human resources are representative and excellent educational resources. The professional level of the teaching team is the key to the development of various majors in universities.[5] In the context of industry education collaboration, the development of the teaching team should be comprehensively innovated, and the advantages and resources of industrial development should be rationally applied. Guided by the concept of industry education integration, the teaching team should be restructured to effectively improve the professionalism of the teaching team, Ensure that universities have a high-quality and highly capable teacher team, forming a good guarantee for the in-depth development of subsequent education work, maintaining the effective development and implementation of university education, and realizing the value and significance of industry education collaboration.

The biggest characteristic of the integration of industry and education is the ability to rationalize the power of various industries and educational work, thereby maximizing the value of education. Cooperation is an important development trend that is currently being called for, and it is also the key to the coordinated development of industry and education at this stage. How to promote the integration of industry and education is an important issue that needs to be considered. For example, for the team of artificial intelligence course teachers in universities, team training and organizational work from the perspective of industry education integration can be strengthened through the abundant human resources in the industry. For example, it is possible to first establish basic subject teachers based on artificial intelligence courses, and at the same time, utilize the advantages of industry education collaboration to invite professionals from some industries as professional teachers. Appoint them to teach professional courses and be responsible for cultivating students' professional skills. Through the collaboration of university teachers and industry technicians, we aim to jointly build a strong team of artificial intelligence teachers, laying a solid foundation for the development of related professional education work and ensuring the orderly development of related education undertakings and work.

5.2. Organize industrial learning to enhance professional awareness

Teacher training is aimed at improving teachers' professional and educational abilities. For information technology courses such as artificial intelligence, the primary task to ensure the development of teachers' educational abilities is to enhance their professional cognition. Especially in the university environment, only teachers who keep up with the development of the times and understand the characteristics and characteristics of artificial intelligence can ensure the development and effective implementation of related education work. For application-oriented undergraduate colleges, their own positioning is to cultivate more practical and applied talents, and develop their comprehensive literacy and professional abilities. For schools, it is a very important task to cultivate technical talents in the new era and strengthen teachers' professional cognitive training. The industry education integration platform is an organic integration of educational content and modern industries, constructing diverse learning and exploration paths for teachers, providing multi-level development space for teachers, and effectively developing the comprehensive educational ability and educational literacy of the teacher team.

For example, the training work of artificial intelligence teacher teams can be related to industries related to artificial intelligence, such as robot development positions, program writing positions,

debugging positions, etc. in various industries. Collaborate and communicate with them, organize a team of teachers from universities to enter the industry cluster, and have professional technical personnel and industry experts introduce the current prospects and regions for the development of artificial intelligence. Through such professional learning and participation activities, it is possible for the AI faculty team of that university to further enhance their understanding of the AI curriculum and provide professional answers and guidance for students in future education work, ensuring the development of higher education. This will enable them to gain a deeper understanding of the impact of the emergence of artificial intelligence on society, life, and various industries.

5.3. Carry out industrial practice and develop professional skills

With the development of educational work, practical activities have received high attention, and among the effective ways of collaborative development between industry and education, practical activities are the most prominent. This is because comprehensive practical activities can examine and improve the comprehensive quality of teaching staff in various aspects such as ideology, skills, and knowledge. This training environment can bring teachers a stronger sense of authenticity, and the development of teacher work in the new era has put forward the requirements and principles of professional skills to support theoretical teaching. Only when teachers master professional skills can they ensure the creation of an effective educational environment for students in future work. Therefore, exercising teachers' professional abilities in practice is an important task for current activities. In this regard, the development of teacher training in universities can flexibly leverage the advantages of industry education integration to create an environment and opportunities for practical learning for teachers.

For example, currently applied undergraduate universities adopt an order based model to cultivate students, and industrial resources can also be applied to teacher training in the training work of teacher teams. Firstly, the school can reach a teacher training cooperation agreement with relevant industries, and organize teachers to enter different positions in the industrial cluster on time during teacher training work, working together with professionals to have a deep experience in the work content and positions related to artificial intelligence. At the same time, the university teacher team can grasp the key points and characteristics of artificial intelligence courses, effectively developing the professional abilities of the teacher team. Based on this approach, the work of the university teacher qualification training team should strengthen the introduction and application of industrial resources and strength, and through practical participation, relevant teacher teams should improve their professional level, ensure the orderly development of teacher work and related education, and maintain the development of university education.

5.4. Introduce professional lectures and conduct regular training

In addition to basic communication between superiors and subordinates, theoretical learning, and practical participation in exploration, teacher training can also be carried out based on traditional lecture activities. By using professional educational lectures to share more educational knowledge and experience with teachers, we can deepen their understanding of artificial intelligence courses, draw on excellent teaching cases for effective learning of teaching methods, and promote the effectiveness of teacher training work in this way, achieving the development and enhancement of the strength of the teacher team. Under the background of industry education integration, lecture activities can be mainly shared by industry development professionals to ensure the implementation of integrated promotion effects.

For example, in the development of university campuses, a team of artificial intelligence teachers can be organized to participate in professional lecture activities. Schools can invite industry professionals with educational experience to share their own experiences in education and artificial intelligence work. The main content of the lecture activity is the professional's own experience,

helping the relevant teaching team draw strength from experience and develop personal qualities through practical participation. In this way, more teachers can perceive the characteristics and power of the artificial intelligence industry, understand the future development of higher education work, and summarize effective strategies and approaches suitable for teaching artificial intelligence courses in universities based on their own teaching experience and abilities.

5.5. Improve assessment criteria to ensure comprehensive development

The ultimate goal of teacher professional development is not to improve their teaching ability, but to enhance their core competencies through their learning and training of professional knowledge. This includes various aspects such as the teacher's professional knowledge, teaching ability, and personal qualities, which have a direct impact on the growth of college students. With the continuous advancement of the new curriculum reform work, the requirements for teachers continue to rise, and the professional requirements of the artificial intelligence teacher team continue to rise. In the training work of the teacher team, it is not only necessary to strengthen learning and practical activities, but more importantly, to seize evaluation activities and carry out timely evaluation of the teacher team. On the one hand, to develop the comprehensive ability of teachers, and on the other hand, to guide the learning and development of teachers. From the perspective of industry education integration, it is necessary to strengthen the application and integration of industry evaluation forces, in order to effectively ensure the effective implementation and implementation of teacher training work in promoting industry education integration, and ensure the effective development of related education undertakings.

6. Conclusion

In summary, for higher education, teacher strength is an important educational influencing factor. Especially for contemporary courses such as artificial intelligence, it requires teachers to have strong ability to keep up with the times, in order to provide students with modern professional knowledge literacy and developmental guidance in practical educational work. Therefore, universities should comprehensively analyze the needs for the development of artificial intelligence education work, and rationally apply the new concept of industry education integration to bring more learning and development space for teachers. In the integrated environment of production and sales, promote teachers' understanding, theoretical understanding, and practical learning of the development of artificial intelligence, and comprehensively improve their educational and teaching abilities and literacy.

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