Research on the Deep Integration Mechanism of Industry-Academic Integration and Ideological and Political Education Courses in Universities under Digital Empowerment

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Abstract: In the digital age, the field of education is facing new changes and challenges. This article focuses on the deep integration of Industry-Academic Integration and IPECU (ideological and political education in colleges and universities) under digital empowerment, and probes into its related mechanisms. Through theoretical analysis, this article studies the theoretical connotation of digital empowerment, Industry-Academic Integration and IPECU course, and makes clear the close internal relationship among them. This article analyzes the necessity of deep integration, including improving the quality of personnel training, meeting the needs of industrial development and strengthening the effectiveness of IPE (ideological and political education). At the same time, it expounds its feasibility, including policy support, technical conditions and the transformation of educational ideas. On this basis, a deep integration mechanism such as goal collaboration, resource sharing, teaching collaboration and evaluation feedback is constructed, which provides a concrete path for realizing the organic combination of Industry-Academic Integration and IPECU curriculum. It is of certain significance to promote the innovative development of higher education and cultivate compound talents to meet the needs of the times.

1. Introduction

With the rapid development of information technology, the digital wave has swept through all fields in an unprecedented situation, and the education industry has also been deeply affected by it [1]. Under this background, the development of Industry-Academic Integration and IPECU curriculum is facing brand-new opportunities and challenges [2]. How to realize the deep integration of the two with the help of digital empowerment has become an important issue that needs to be studied and solved urgently in the education sector. Industry-Academic Integration, as a talent training mode that closely combines industry and education, aims to break down the barriers between education and industry, so that talent training in universities can accurately meet the needs of the industry and deliver high-quality talents with practical ability and innovative spirit to the society [3-4].

There is a certain degree of disconnection between the traditional Industry-Academic Integration and the IPECU course in the implementation process [5]. Industry-Academic Integration pays more attention to the cultivation of professional skills, while IPE courses are insufficient in integrating industrial elements and improving students' professional quality [6]. They also lack effective coordination in teaching resources, teaching methods and evaluation system. Digital empowerment provides a new way to solve these problems [7]. Through digital technology, we can integrate the resources of Industry-Academic Integration and IPE courses, innovate teaching methods and optimize the evaluation system, so as to realize the deep integration of the two.

It is of great theoretical and practical significance to study the deep integration mechanism of Industry-Academic Integration and IPECU curriculum under digital empowerment. Theoretically, it is helpful to enrich and improve the theoretical system of Industry-Academic Integration and IPE in universities, and provide new perspectives and ideas for subsequent research. From a practical point of view, it can provide a useful reference for the reform of education and teaching in universities,

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guide universities to better cultivate compound talents to meet the needs of the development of the times, and promote the coordinated development of industry and education. This study will focus on the deep integration mechanism of Industry-Academic Integration and IPECU under digital empowerment, in order to contribute to the high-quality development of education.

2. Digital empowerment, Industry-Academic Integration and theoretical explanation of IPECU course

Digital empowerment refers to the use of digital technologies, such as big data, artificial intelligence and cloud computing, to provide new impetus and new ways for the development of various fields. In the field of education, digital empowerment can break the time and space constraints, realize the efficient allocation and sharing of educational resources, and provide technical support for the innovation of teaching mode. It makes education more personalized and intelligent, and helps to meet the diverse needs of different learners.

Industry-Academic Integration is an organic combination of industry and education. Its core lies in the precise connection between industrial demand and education supply. Through the cooperation between schools and enterprises in personnel training, technology research and development, internship and employment, the seamless connection between personnel training and industrial demand can be realized. Industry-Academic Integration emphasizes practical teaching and pays attention to cultivating students' practical operation ability and professional quality, so that students can quickly adapt to their jobs after graduation and inject fresh blood into industrial development.

IPECU course is the main channel of IPE for college students. Guided by Marxist theory, it helps students to establish correct ideals and beliefs and cultivate their patriotism, collectivism and social responsibility through systematic course teaching. IPECU course pays attention to the combination of theory and practice, aiming at guiding students to internalize theoretical knowledge into their own values and codes of conduct.

There are close internal relations among them. Digital empowerment provides technical means for the deep integration of Industry-Academic Integration and IPECU course. Through the digital platform, industrial resources can be integrated into IPE course teaching, and IPE can also better penetrate into all aspects of Industry-Academic Integration. Industry-Academic Integration provides rich practical materials for IPE courses, making IPE more targeted and effective. IPE courses train talents with correct value orientation for Industry-Academic Integration and ensure that industrial development meets the needs of the country and society.

3. Necessity and feasibility of deep integration of Industry-Academic Integration and IPECU curriculum under digital empowerment

Under the wave of the digital age, it is of great significance to explore the necessity and feasibility of the deep integration of Industry-Academic Integration and IPECU curriculum for promoting the development of higher education and cultivating talents to meet the needs of society.

3.1 Necessity

With the rapid development of industry, the demand of society for talents is increasing day by day, which requires not only professional skills, but also good ideological and political literacy and professional ethics. The traditional Industry-Academic Integration focuses on the cultivation of professional skills, and the IPE courses are relatively independent, which is difficult to meet the needs of the industry for compound talents. Through deep integration, IPE can run through the whole process of Industry-Academic Integration, cultivate students' professional quality and moral concept, and improve the quality of personnel training. For example, in the engineering field, engineers should not only master advanced technology, but also have a sense of social responsibility to ensure the positive impact of engineering projects on society and the environment. At present, the digital transformation of industry is accelerating, which requires a large number of talents who know both technology and correct values. Enterprises expect the students trained in

universities not only to adapt to their jobs quickly, but also to uphold the correct concept in their work and promote the sustainable development of enterprises. Deep integration can enable universities to adjust the content of IPE according to the needs of the industry, cultivate talents in line with industrial values, and provide strong support for industrial development.

The traditional teaching method of IPE course is relatively simple, and students' participation is not high. Combining IPE with Industry-Academic Integration, with the help of real cases and scenes in industrial practice, IPE can be more vivid and attractive. Students personally experience the importance of IPE in practice, thus improving the effectiveness of IPE. See Figure 1 for the comparison of the impact of deep integration of Industry-Academic Integration and IPECU courses on personnel training under digital empowerment:

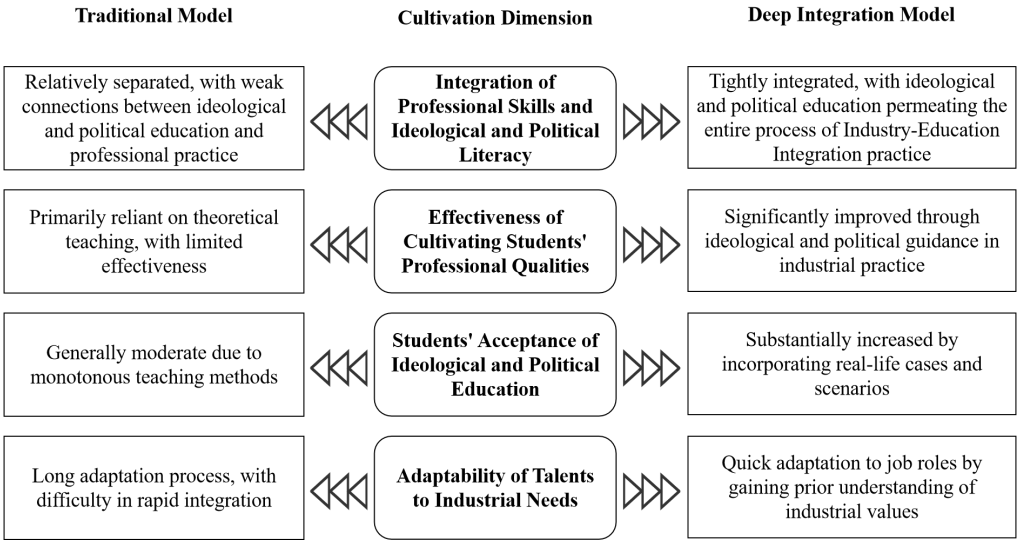

Figure 1 Comparative Analysis of the Impact of Deep Integration between Industry-Academic Integration and IPECU Courses on Talent Cultivation

3.2 Feasibility

1) Policy support: The state has issued a series of policies to encourage Industry-Academic Integration and IPE reform. For example, the Implementation Plan of National Vocational Education Reform emphasizes deepening the integration of industry-education, and relevant documents on strengthening IPE in universities are constantly issued, which provides policy guidance and guarantee for the deep integration of the two.

2) Technical conditions: The development of digital technology provides strong support for deep integration. Big data can analyze industry demand and students' learning situation, and provide accurate guidance for teaching. Artificial intelligence can realize personalized learning and intelligent tutoring. Online education platform breaks the time and space constraints and facilitates the integration and sharing of industrial resources and IPE courses.

3) Transformation of educational concept: Universities and enterprises have deepened their understanding of personnel training and paid more and more attention to the improvement of students' comprehensive quality. Universities realize the importance of synergy between IPE and professional education, and enterprises also actively participate in talent training, creating a good conceptual foundation for deep integration. All parties have gradually reached a consensus and are willing to jointly promote the deep integration of Industry-Academic Integration and IPECU courses to meet the needs of the development of the times for talents.

4. Construction of deep integration mechanism between Industry-Academic Integration and IPECU curriculum under digital empowerment

Under the background of digital empowerment, it is very important to construct a scientific and effective deep integration mechanism between Industry-Academic Integration and IPECU curriculum, which is very important to promote educational innovation and cultivate high-quality

talents with all-round development.

4.1 Target coordination mechanism

Industry-Academic Integration aims to cultivate professionals who meet the needs of the industry, while IPECU focuses on shaping students' correct values and ethics. Deep integration requires the coordination of the two goals. Universities should refine the goal of IPE into specific professional quality requirements according to the industrial development trend and demand, and integrate it into the talent training goal system of Industry-Academic Integration. For example, for the science and technology industry, not only the cultivation of innovation ability is emphasized, but also the ideological and political elements such as honesty and trustworthiness and intellectual property protection are included in the goal to ensure that the trained talents can not only promote technological progress, but also have good ethics. In this way, students can make clear the direction of common development of professional learning and ideological and political cultivation, and lay a solid foundation for future career development.

4.2 Resource sharing mechanism

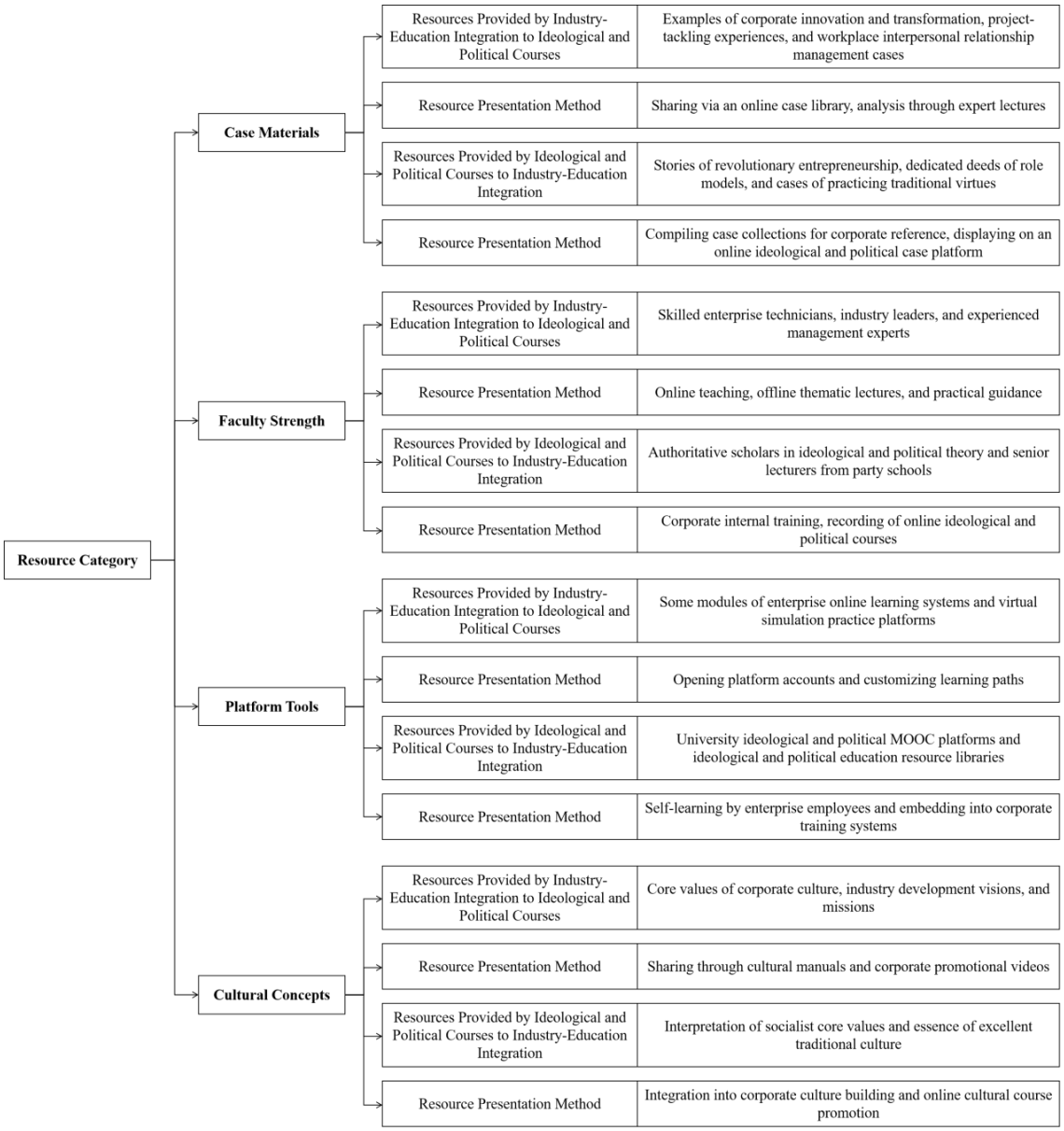

Figure 2 Content and Methods of Resource Sharing between Industry-Academic Integration and IPECU Courses

Digital technology breaks the time and space limitation of resources and creates conditions for

Industry-Academic Integration and resource sharing of IPE courses. Practical cases, expert experience, cutting-edge technology and other resources in the industry can be introduced into the ideological and political classroom through the online platform to enrich the teaching materials. For example, the innovation and development process of enterprises and the strategies to deal with challenges can vividly show the values and social responsibility of enterprises. The resources and research results of ideological and political theory in universities can also provide support for employee training and cultural construction in enterprises. Figure 2 shows the content and mode of resource sharing more clearly.

4.3 Teaching synergy mechanism

Under the digital empowerment, the teaching collaboration mechanism can realize the innovation of teaching methods. Using new technology to create a virtual industrial scene, so that students can feel the industrial environment in the course of IPE, and at the same time integrate IPE into practical teaching. Teachers can set up ideological and political teaching points such as professional ethics and teamwork in the simulated enterprise production scene. Online and offline mixed teaching mode can also effectively promote the integration of the two. Online theoretical knowledge learning and discussion, offline practical operation and group discussion, to ensure the close integration of IPE and professional practice, and improve students' participation and learning effect.

4.4 Evaluation feedback mechanism

Constructing a scientific and reasonable evaluation feedback mechanism is an important guarantee for deep integration. The evaluation system should give consideration to professional skills and ideological and political literacy, and adopt diversified evaluation methods, including students' self-evaluation, mutual evaluation, teachers' evaluation and enterprise evaluation. In the evaluation of students' internship practice, enterprises not only pay attention to their professional ability, but also evaluate their professional ethics, professional attitude and other ideological and political aspects. Collect evaluation data from all parties through the digital platform and feed back to universities and enterprises in time. Universities adjust the content and teaching methods of IPE courses according to the feedback, while enterprises adjust the talent training needs and cooperation methods. Such a circular feedback mechanism can continuously optimize the effect of deep integration and ensure the continuous improvement of talent training quality.

5. Conclusions

This study focuses on the deep integration mechanism of Industry-Academic Integration and IPECU under digital empowerment, and has made a series of achievements through in-depth discussion in many aspects. In the part of theoretical explanation, the connotation and internal relationship of digital empowerment, Industry-Academic Integration and IPECU course are clarified, and the key supporting role of digital empowerment in promoting the integration of the two courses is revealed.

Through in-depth analysis of the necessity and feasibility of integration, we can see that deep integration is an inevitable requirement to improve the quality of personnel training, meet the needs of industrial development and strengthen the effectiveness of IPE, and it is feasible in terms of policy support, technical conditions and educational concept transformation. This laid a solid foundation for the construction of the subsequent integration mechanism. By constructing the goal coordination mechanism, we can ensure that the Industry-Academic Integration and the objectives of the IPE course are closely matched, so that the personnel training can develop synergistically in terms of professional skills and ideological and political literacy. With the help of digital means, the resource sharing mechanism realizes the two-way circulation and integration of industrial and IPE resources, enriching the teaching content. Teaching collaboration mechanism uses digital technology to innovate teaching methods and improve students' participation and learning effect. The evaluation feedback mechanism continuously optimizes the fusion effect through diversified

evaluation and timely feedback.

Generally speaking, the construction of the deep integration mechanism of Industry-Academic Integration and IPECU courses under digital empowerment provides a new direction for higher education reform. In the process of implementing the mechanism, it may face challenges such as the adaptability of technology application and the difficulty of cooperation among all parties. Future research can further focus on how to optimize the operation details of the mechanism and improve the actual effect of integration, so as to better promote the development of higher education and cultivate high-quality talents to meet the needs of the times.

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