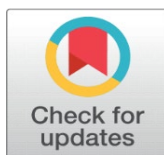# EXPLORATION OF THE IMPLEMENTATION PATH OF IDEOLOGICAL AND POLITICAL EDUCATION IN THE CURRICULUM BASED ON DEEP LEARNING THEORY AND TARGET MAP

Haibo Yi [1] ✉ , Weipeng Lin [1], Tao Qu [2], Weiping Deng [3]

[1] School of Artificial Intelligence, Shenzhen Polytechnic University, Shenzhen, China
[2] Guangzhou Urban Blockchain Industry Association, Guangzhou, China
[3] WeBank, Shenzhen, China

ABSTRACT

The integration of "knowledge impartment," "ability cultivation," and "value guidance" in vocational colleges hinges significantly on the implementation of ideological and political education. This education forms the cornerstone for nurturing high-quality technical and skilled talents. However, the current practice of ideological and political education in vocational colleges faces several challenges. These include the tendency to merely replicate undergraduate-level educational models, the lack of clarity in talent cultivation values, the disconnection between ideological and political education goals and the curriculum, the insufficient scientific precision in goal setting, and the rigid incorporation of ideological and political education. To tackle these pivotal issues, it is imperative to conduct a comprehensive analysis of the value demands specific to industrial talents. Additionally, we should devise a scientifically structured, hierarchical, and categorized ideological and political target framework. Furthermore, we must explore the implementation pathway of ideological and political education grounded in deep learning theory. This entails enhancing the cognitive processes, fostering students' higher-order thinking and practical innovation skills, and reflecting the essence of industry-education integration within vocational education.
Keywords: ideological and political education in curriculum; Vocational education; Deep learning theory; Target map; Value proposition

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1. INTRODUCTION
1.1. IDEOLOGICAL AND POLITICAL EDUCATION IN CURRICULUM AND INDUSTRIAL TALENT CULTIVATION

The new vocational education law further clarifies the integration of production and education in vocational education.

The development of vocational education needs to resonate with the adjustment of industrial structure; Vocational schools can set up majors

independently according to the needs of the industry and in accordance with the law; The state shall take measures to develop emerging specialties needed by the industry according to the industrial layout and industry development needs; The industry competent department shall strengthen the guidance of vocational education according to the demand for talents in the industry and industry, and regularly release information on talent demand.

China annually trains 10 million high-quality technical and skilled professionals for industry, and has established the world's largest vocational education system, encompassing higher vocational education, secondary vocational education, and technical vocational education. Promoting the construction of ideological and political education in vocational colleges is the fundamental task of implementing the cultivation of morality and talents, the key way to integrate "value guidance" into "knowledge impartment" and "ability cultivation", and the only way to carry forward the socialist core values and cultivate high-quality technical and skilled talents with the spirit of model workers, labor spirit, and craftsman spirit for the industry.

2. CURRENT RESEARCH STATUS OF IDEOLOGICAL AND POLITICAL EDUCATION IN COURSES

Although the concept of ideological and political education in courses has only been proposed in recent years, the patriotism, cultural literacy, moral cultivation, and other ideas inherent in it have existed since ancient times. For example, Qi Jiguang, a famous general who resisted Japanese pirates in the Ming Dynasty, wrote in "Wangquetai", "The heavy frost is all the blood in my heart, scattered over the autumn leaves of thousands of peaks," using heavy frost to metaphorize his own blood and express his unswerving loyalty to serve the country. Lu You, a patriotic poet of the Southern Song Dynasty, wrote in "Reading Books on a Winter Night to Show My Son Ziyi", "What is learned from books is always shallow; to fully understand a matter, one must experience it personally," which embodies profound educational ideas and also expresses his earnest expectations for his children. Zhuge Liang, an outstanding politician and strategist during the Three Kingdoms period, wrote in "Advice to My Son", "Without tranquility, one cannot make his aspirations clear; without frugality, one cannot achieve his distant goals," describing an attitude towards educating children, namely, to treat the pursuit of lofty goals with an ordinary mindset. Confucius believed that "cultivating oneself with reverence" is the first step to becoming a gentleman. The ideological and political education resources contained in ancient traditional culture provide rich teaching materials for the current development of ideological and political education in courses. Based on the inheritance of the essence of China's excellent culture, researchers have conducted exploratory research on the theory, teaching models and paths, and course cases of ideological and political education in courses, forming a series of research and practical achievements.

2.1. CURRENT RESEARCH STATUS OF IDEOLOGICAL AND POLITICAL EDUCATION TEACHING THEORY IN COURSES

In May 2020, the Ministry of Education clarified the definition of ideological and political education in courses at the national ministerial and commission level for the first time, while academic research on it started earlier. Scholars such as Gao Deyi and Zong Aidong believe that ideological and political education in courses achieves an organic unity of "knowledge imparting" and "value guiding" in the

classroom teaching process, focusing on exploring the theoretical basis of the role of courses as the main channel of ideological and political education Chuan et al. (2022). Scholars such as Wu Xing and Gu Jianmin, from the perspective of elucidating the concept of "cultivating talent through morality," propose that "morality should come first" in courses, emphasizing the need for "cultivating morality" in addition to "seeking knowledge" Deyi & Aidong (2017). Scholars such as Chen Huifang and Qin Guixiu explore the internal relationship between the laws of student growth, the laws of teaching and educating people, and the laws of ideological and political work at the level of the laws governing ideological and political education in courses Hongyue (2021) Scholar Ke Zheng criticizes the view that ideological and political education in courses simply means integrating courses with ideology and politics, and discusses the four dimensions of ideological and political education in courses: objectives, content, implementation, and evaluation from a theoretical perspective Hua (2021). Scholar Bu Wenrui discusses the cultivation of talents in ideological and political education in applied electronic technology majors based on the Outcome-Based Education (OBE) concept Huifang & Guixiu (2019). Scholar Zhang Hongyue discusses the ideological and political education in electronic information engineering technology majors based on the concept of holistic education Jianying et al. (2021). Most relevant theoretical research focuses on the unity of cultivating talent through morality, imparting knowledge, and value guiding, conducting research on the teaching theory of ideological and political education in courses, and providing a foundation for the research on the models of ideological and political education in courses.

2.2. CURRENT RESEARCH STATUS OF IDEOLOGICAL AND POLITICAL EDUCATION TEACHING MODELS IN COURSES

The teaching model of ideological and political education in courses is the application and extension of its teaching theory and is one of the research hotspots in the field of education. Scholar Liu Shuhui discusses the effectiveness of ideological and political education in courses and proposes a teaching model that deeply integrates curriculum teaching with the Internet to enhance the affinity of ideological and political work Jie & Jing (2018) Scholars such as Yu Xinjie and Zhu Guiping propose a teaching model of ideological and political education in courses that deeply integrates information technology, building an ideological and political education system from teachers to course groups and from courses to majors, covering all aspects Jin et al. (2021). From the perspective of cultivating graduate students, scholars such as Xing Wenli and Pei Limei propose a teaching model of ideological and political education in courses based on synergy theory and circle structure theory, constructing the main body, courses, and classrooms of ideological and political education Key (2017). Scholars such as Li Wenjie and Wang Xiaofang propose a reciprocal teaching model of ideological and political education in courses combining online and offline education, focusing on the innovative development of mixed teaching in ideological and political education Mei et al. (2020) Scholars such as Yang Jin and Fan Min focus on discussing the innovative models of ideological and political education in emerging engineering majors in terms of teacher team building, teaching model implementation, and teaching quality evaluation systems Ning et al. (2021) Scholars such as Zhang Ning and Du Yunming propose a teaching model combining ideological and political education in courses with smart classrooms and illustrate it with a specific course Qiaoni (2022). Relevant research on models focuses on information technology reform, smart classrooms, mixed teaching, teacher team building, and other perspectives, conducting research on the

teaching models of ideological and political education in courses and providing a foundation for the research on the paths of ideological and political education in courses.

2.3. CURRENT RESEARCH STATUS OF IDEOLOGICAL AND POLITICAL EDUCATION TEACHING PATHS IN COURSES

Research on the paths of ideological and political education in courses can provide direction for its implementation. Scholar Gao Yan explores the characteristics of students' staged growth from the perspective of professional learning and proposes a progressively developing teaching path for ideological and political education Rong Scholars such as Sun Jie and Chang Jing analyze the relationship between ideological and political theory courses, professional courses, and comprehensive quality courses from the school level and propose a trinity teaching path for ideological and political education Shuhui (2017). Based on an analysis of the current situation and constraints of ideological and political education in courses, scholars such as Cai Xiaochun, Liu Yingcui, and Gu Xiyao propose that promoting the construction of exemplary courses for ideological and political education is a breakthrough and effective means to strengthen teaching and educating people through ideological and political education in courses. They explore three teaching paths for ideological and political education in graduate courses by establishing pilot projects and illustrate the teaching design and implementation of these paths Wenjie & Xiaofang (2021). Scholars such as Ding Yihao, Wang Zeshen, and Wang Gang propose replicable and promotable paths for ideological and political education in various courses based on the BEACON model Wenli (2021). Taking electronic information engineering courses as an example, scholars such as Dong Xiaowei and Ye Qing explore the inherent needs of students and the ideological and political elements contained in courses, proposing a teaching path for ideological and political education in electronic and information courses Wenrui (2022). Scholars such as Fan Yu and Wu Haitao explore a new paradigm of course teaching that integrates the construction of emerging engineering majors with the collaborative cultivation of excellent engineers in ideological and political education, taking communication courses as an example Xiaochun et al. (2019)Relevant research on paths proposes teaching paths for ideological and political education in courses from the perspectives of students' growth characteristics and the effectiveness of course-based education, taking courses as the starting point, which greatly enriches the research results of ideological and political education in courses.

2.4. CURRENT RESEARCH STATUS OF IDEOLOGICAL AND POLITICAL EDUCATION TEACHING CASES IN COURSES

Course and case studies are the concentrated embodiment of the implementation of ideological and political education theories, models, and paths in courses. Scholars such as Feng Mei, Cao Hui, and Li Xiaohui precisely embed disciplinary knowledge and ideological and political elements into teaching content from the perspectives of "internalization of disciplinary knowledge" and "manifestation of ideological and political elements" Xiaowei et al. (2022) Scholar Yu Rong takes the teaching of the smart car unit in the "General English" course as a case, highlighting the effectiveness of ideological and political education through the instructor leading students on an inspection and practice at Huawei's smart automotive training base Xing & Jianmin (2019). Scholars such as Yang Jianying,

Feng Xianghong, and Xu Yakui take martial arts teaching in physical education majors as the research object, extracting ideological and political elements and teaching cases for ideological and political education Xinjie & Guiping (2021). Scholar Yang Hua takes college foreign language courses as an example, exploring cases where improving ideological and moral qualities and cultural awareness are integrated with the cultivation of foreign language skills through "telling China in foreign languages" Scholars such as Lin Yisen and Xie Ren'en take the Linux operating system course as an example, subtly guiding students to practice socialist core values in the course Yihao et al. (2021). Scholar Zhao Qiaoni takes the production and inspection of electronic products course in electronic information majors as an example, discussing the integration of the craftsmanship spirit of striving for the best and the rigorous and down-to-earth scientific spirit Yisen et al. (2021)Relevant research on course cases proposes methods for designing, developing, and integrating ideological and political education cases from the perspective of integrating ideological and political education into professional course teaching, which also greatly enriches the application results of ideological and political education in courses.

2.5. PROBLEMS IN THE TEACHING OF IDEOLOGICAL AND POLITICAL EDUCATION IN THE CURRICULUM

In the past three years, the research on the teaching of ideological and political education in the curriculum has been a hot topic in the field of education, with many related research efforts and achievements. However, there are still several key issues that have not been thoroughly studied.

Firstly, many vocational education courses simply copy the ideological and political education of undergraduate education, which leads to unclear value demands for talent cultivation and unclear characteristics of vocational education.

Secondly, many professional courses have a disconnect between the goal of ideological and political education and the curriculum, with goals not being set scientifically or accurately enough, and without comprehensive analysis by level and classification, resulting in weak pertinence in the design, implementation, and evaluation of ideological and political education in the curriculum.

Finally, the ideological and political education in the curriculum requires that it be deeply rooted in the mind and heart. However, at present, most of the integration forms of ideological and political education in the curriculum are relatively rigid and ineffective.

Addressing the three key issues in ideological and political education in higher vocational courses, taking the major of electronics and information as an example, we will comprehensively analyze the value demands of industry talents, scientifically develop a hierarchical and classified ideological and political education target map, reflect the characteristics of industry-education integration in vocational education, explore the implementation path of ideological and political education in courses based on deep learning theory, strengthen the cognitive process of ideological and political education in courses, and cultivate students' high-level thinking and practical innovation ability.

3. CURRICULUM IDEOLOGICAL AND POLITICAL EDUCATION GOAL MAP FOR THE VALUE DEMANDS OF INDUSTRIAL TALENTS

3.1. VALUE DEMANDS OF TALENT CULTIVATION IN THE ELECTRONICS AND INFORMATION INDUSTRY

Since 2005, the total output value, total profit, and GDP share of China's electronic information industry have all shown a growth trend, significantly promoting economic growth and becoming an important component of the national economy. However, against the backdrop of Sino-US trade frictions, the key core technologies in China's electronic information industry are increasingly constrained by others, with insufficient technological innovation capabilities, unclear high-end positioning of the industry, and a large gap in industrial technology talent Yu et al. (2022), Zheng (2021)., Zhiwei et al. (2021).

In order to address the "choke point" problem and break through the blockade of Western society on the development of China's electronic information industry, innovation in information technology application has become the key to developing independent technologies for China's electronic information industry and ensuring national economic security. The information and innovation industry focuses on key areas of China's electronic information industry, consisting of four parts: basic hardware, basic software, application software, and information security that serve the autonomous, controllable, secure, and efficient supply chain of the electronic information industry chain.

The prosperity and development of the information and innovation industry also put forward new value demands for the cultivation of talents in the electronic information industry. The fundamental reason is that the information and innovation industry shoulders the responsibility of maintaining the bottom line of China's electronic information industry development security and national economic security, and has higher requirements for the worldview, outlook on life, and values of industry talents. Only by cultivating high-quality technical and technological talents in the electronic information industry who love the party, patriotism, have a sense of responsibility for the country, science and technology, rule of law, and professionalism can we ensure the rapid and safe development of China's digital economy.

3.2. CURRICULUM-BASED IDEOLOGICAL AND POLITICAL EDUCATION TARGET MAP FOR INDUSTRY TALENT DEMANDS

The primary task of ideological and political education in vocational colleges is to scientifically formulate hierarchical and classified objectives for ideological and political education in courses based on the value demands of industrial talents. The curriculum's ideological and political education goal map divides the ideological and political education goals into five dimensions: political identity, professionalism, rule of law awareness, and cultural literacy, with three levels of "fundamental goals," "core goals," and "specific goals.". The fundamental goal in the atlas is defined as a goal that requires long-term cultivation, based on the value proposition of cultivating talents in the electronic information industry, such as cultivating a sense of patriotism, a sense of responsibility to serve the country through science and

technology, a spirit of craftsmanship, an innovative spirit, high-level innovation capabilities, entrepreneurial awareness, and entrepreneurial literacy.

The core objectives in the atlas are targeted at goals that can be achieved through enhanced cognition, such as understanding the significance of the Party Central Committee's elevation of the development of the digital economy to a national strategy, the importance of developing innovative technologies for information technology applications, and the strategic significance of cybersecurity in maintaining national security.

Specific objectives are defined as objectives that are easy to implement and evaluate, such as being able to briefly describe the relationship between the courses learned and the new infrastructure, the development of the national digital economy, and compare the development process and main technical differences between domestic and foreign cloud computing companies.

The hierarchical ideological and political objectives of the ideological and political target map are derived from the inside out in the form of "1+X+N": one fundamental objective determines X core objectives, which are further decomposed into N specific objectives. In this way, we can scientifically formulate the objectives of ideological and political education in a hierarchical and classified manner from the top down. At the same time, given the differences in the difficulty of achieving hierarchical goals in the ideological and political goal map, it is possible to provide feedback from bottom to top during the teaching implementation process, ultimately meeting the value demands of industry talents.

4. EXPLORATION OF THE TEACHING PATH OF IDEOLOGICAL AND POLITICAL EDUCATION BASED ON DEEP LEARNING THEORY

The theory of deep learning originated in the 1970s. Compared to shallow learning represented by mechanical memory, its outstanding feature is that learners actively incorporate knowledge into a knowledge framework and can transfer and apply knowledge to solve practical problems. The application of deep learning theory in the teaching of ideological and political education in higher vocational courses strengthens the cognitive process and is one of the key ways to integrate ideological and political education into the mind and heart. The teaching of ideological and political education based on deep learning theory must be based on professional courses and the value demands of industrial talents. Its teaching path includes four steps: formulating the objectives of ideological and political education in courses based on different levels and categories, designing the main line of ideological and political education in courses based on the combination of explicit and implicit teaching methods, implementing ideological and political education in courses across the first and second classrooms, and conducting comprehensive evaluation of ideological and political education in courses throughout the entire process.

4.1. ESTABLISH THE OBJECTIVES OF IDEOLOGICAL AND POLITICAL EDUCATION IN COURSES BASED ON STRATIFICATION AND CLASSIFICATION

The teaching goal of ideological and political education in the curriculum is part of the teaching goal of the curriculum. Based on the talent training plan and curriculum positioning, combined with the analysis of student learning situation,

the ideological and political education teaching objectives of the curriculum can be determined from five dimensions and three levels.

Among them, specific goals can be achieved within one lesson or one course unit; The core objectives can only be achieved through the entire course or a complete course project, and the complexity of implementation and evaluation is significantly higher than that of specific objectives. The fundamental goal can only be achieved through the combination of in-class and out-of-class teaching activities, such as combining "second class" expert lectures, science and technology salons, club activities, volunteer services, skill competitions, innovation and entrepreneurship, and other forms.

As shown in Table 1, under the dimension of political identity, the fundamental goal of "cultivating a sense of pride in achieving high-tech self-reliance and self-improvement" was formulated through stratification and classification, and two core goals and three specific goals were identified through the "1+X+N" ideological and political goal radiation and derivation approach.

4.2. COMBINATION OF EXPLICIT AND IMPLICIT DESIGN AS THE MAIN LINE OF IDEOLOGICAL AND POLITICAL EDUCATION IN THE CURRICULUM

In the teaching path of ideological and political education in the curriculum, the design of the main line of teaching is the key, which can be divided into three parts: designing the main line of ideological and political education, exploring ideological and political elements, and designing ideological and political activities.

Design the main line of ideological and political education: Determine the main line of ideological and political education teaching based on the fundamental goal of ideological and political education in the curriculum. For example, the main line of ideological and political education in the course Introduction to Communication can be through specific cases, allowing students to deeply understand and appreciate the leading role of Chinese enterprises in 5G communication; The main line of ideological and political education in the course of "Integrated Circuit Technology" can correctly compare and evaluate the level of domestic and foreign chip technology, understand the importance of chips to national security, and deeply understand the importance of developing independent and controllable chip technology; The main line of ideological and political education in the course of "Innovative Thinking" can be to cultivate students' innovative consciousness, spirit, and ability in combination with professional characteristics.

Mining ideological and political elements: After determining the main line of ideological and political education, it is possible to targetively mine ideological and political elements in the course content. Generally speaking, ideological and political elements can be divided into explicit and implicit ones. For example, in the course Introduction to Communication, it is introduced that Chinese enterprises play a key role in the process of 5G standard setting; In the course of "Computer Application Foundation", introduce the contributions made by Yao Shizhi, the winner of the Turing Award, to the development of computer technology and the cultivation of computer talents in China; In the course of Computer Network Technology, the development history of Huawei and the role of Huawei products in society and people's livelihood are introduced; Introduce relevant content of the "Cybersecurity Law of the People's Republic of China" in the course of "Computer Network Security", and introduce illegal cases such as "deleting databases and running away" and "selling personal privacy data"; Introduce the great significance of domestically

produced chips for national security in the course of Microelectronics Technology; In the "Introduction to Cloud Computing Technology", the key role of cloud computing services in providing online office and learning during the epidemic prevention and control period is introduced. And implicit ideological and political elements such as cultivating team spirit in completing projects through teamwork; Cultivate competitive spirit in one-on-one PK competition; Cultivate a rigorous scientific attitude through practical participation. When exploring ideological and political elements, in addition to focusing on the correlation between ideological and political elements and ideological and political goals, it is also necessary to consider the fit with the teaching content, so as to better guide the ideological and political teaching of the curriculum.

Designing ideological and political activities: Designing ideological and political activities based on ideological and political elements. The most common activity is research, such as having students research in groups before class about stories of scientists inheriting and carrying forward the glorious traditions and excellent qualities of the Chinese nation related to the courses they are studying, as well as major scientific and technological achievements in the field of China's electronic information industry related to the courses they are studying, and writing research reports; Select excellent research teams to report and present their research results during class, and the teacher summarizes and evaluates them. This form is more suitable for tasks that require self-study, independent research, team collaboration, and take a long time. Secondly, group discussion is also a common form of ideological and political education in the curriculum. For example, comparing the advantages and disadvantages of 2-3 information and innovation products related to the course with foreign products, discussing historical accidents caused by improper operation of information technology related to the course, etc. Teachers participate in group discussions, observe students' performance, and encourage students to summarize the results of the discussion. This form is more suitable for tasks that do not require research and require less time. The above two activities belong to the explicit curriculum ideological and political education teaching design. In addition, implicit curriculum ideological and political education activities can also be adopted, such as requiring students to explain the use of images and content from others when writing experimental reports, tidying up the laboratory desktop after the experiment, preserving the experimental environment, and working harmoniously with teammates in group assignments. This kind of teaching activity belongs to the strengthening of ideological and political education goals in existing teaching activities, and can be achieved by simply reconstructing or improving the original teaching activity arrangements.

4.3. IMPLEMENTATION OF IDEOLOGICAL AND POLITICAL EDUCATION IN THE FIRST AND SECOND CLASSROOM FULL COVERAGE COURSES

The implementation of ideological and political education in the curriculum requires the combination of explicit and implicit ideological and political education in the first and second classrooms to effectively implement ideological and political education.

The first classroom implements explicit curriculum ideological and political education teaching: in classroom teaching, it is necessary to avoid "lecturing", "copying mechanically", "filling the classroom with information" and other forms. All curriculum ideological and political education teaching implementations should

involve students, who are the main body and beneficiaries of teaching implementation. For example, when introducing the relevant laws of the "People's Republic of China Cybersecurity Law", avoid directly "copying" the laws, and can adopt the format of "Today's Law" to showcase cases, student speeches, and teacher comments to bring the law into the classroom and into the minds of students; Role-playing can also be used, where students personally play the roles in the case and interpret the content of the case, gaining first-hand knowledge of relevant laws and regulations, thereby deepening their awareness of the rule of law. On the other hand, the implementation of ideological and political education in the curriculum can use the theory of "deep learning" to continuously strengthen ideological and political education in the curriculum through pre-class, in-class, and post-class activities, allowing students to gradually move from simple "memory" and "understanding" to "application" and "analysis", and then to "evaluation" and "creation", strengthening the cognitive process of ideological and political education in the curriculum and improving students' critical thinking skills. In addition, it is also possible to make more use of digital resources and information technology equipment, such as Study the Great Nation, Easy Class, and People's Open Class, and to build a case library of ideological and political education in the curriculum, and play red images to assist in the implementation of ideological and political education in the curriculum.

The implementation of hidden curriculum ideological and political education in the second classroom: The fundamental goal of ideological and political education in the curriculum requires the combination of in- and out-of-class teaching activities to achieve the goal, which requires the combination of expert lectures, science and technology salons, club activities, volunteer services, skill competitions, innovation and entrepreneurship, and other forms of "second classroom". For example, we can invite experts from major countries with expertise related to the course content to give lectures, so that students can deeply experience the spirit of craftsmanship; Students hold science and technology salons to improve their organizational and management skills during the activities; Carry out community activities, self-study and explore scientific issues, and enhance scientific spirit and critical thinking ability; Participate in volunteer activities such as epidemic prevention and garbage classification to enhance students' volunteer spirit and service awareness; Organize or lead students to participate in skill competitions to cultivate the spirit of courageously climbing the heights of science; Carry out innovation and entrepreneurship activities, from an idea to a product plan to a prototype to a finished product, to enhance students' innovation ability and entrepreneurial spirit.

4.4. CONDUCTING THE EVALUATION OF IDEOLOGICAL AND POLITICAL EDUCATION IN THE WHOLE PROCESS OF MULTI-DIMENSIONAL CURRICULUM

The teaching effect of ideological and political education in courses is the primary criterion for evaluating ideological and political education in courses. In the evaluation process, in addition to the participation of teachers and students, it is also necessary to reflect the characteristics of the integration of production and education in vocational education, and introduce enterprises and social organizations to participate in the evaluation.

Evaluation of ideological and political education in diverse courses: Firstly, the subject of evaluation can be the teacher, the student himself or herself, or other students. At the same time, it can consider introducing enterprise evaluation or social evaluation. For example, teachers can conduct quantitative or qualitative evaluations on the research report on the development of Chinese chip companies

completed by students before class; Students evaluate their own satisfaction with the two challenges of algorithm programming; Students think critically and compare their learning outcomes with those of other students; The enterprise evaluates the scientific and technological works completed by students; Social organizations evaluate the satisfaction of students' voluntary activities.

Evaluation of the whole process of ideological and political education in curriculum: For specific and explicit ideological and political education objectives in curriculum, evaluation is often conducted through teaching activities to achieve measurable and assessable goals. For example, in the cloud computing course, students can be evaluated on whether they can name 2-3 cloud products independently developed by Huawei. For specific and implicit objectives of ideological and political education in the curriculum, one can observe and record students' learning processes, such as whether they can harmoniously coexist with other students in team activities, whether they can identify errors and problems in evaluating other students' assignments, and whether they do not copy others' assignments. For the core or fundamental goal of ideological and political education in the curriculum, on the one hand, we can collect students' learning data throughout the entire process, and on the other hand, we can set milestones for students to gradually achieve their goals in the form of tackling challenges and checking in.

In the evaluation of ideological and political education in the curriculum, targeted evaluation methods are needed for different objectives, combining explicit and implicit evaluations, which are ultimately reflected in the overall teaching evaluation. In addition, because the teaching of ideological and political education in courses is often not independent or indivisible, it is necessary to clarify the basis, form, and standards for teaching evaluation of ideological and political education in courses, so that students can clearly understand the purpose and evaluation criteria of course teaching.

5. CONCLUSION

This article takes the major of electronics and information in higher vocational education as an example, based on the theory of deep learning, comprehensively analyzes the value demands of industry talents, and draws a hierarchical and classified curriculum ideological and political goal map. Taking professional courses as the starting point, this study explores the implementation path of curriculum-based ideological and political education teaching, which includes four steps: formulating curriculum-based ideological and political education teaching objectives based on different levels and categories, designing the main line of curriculum-based ideological and political education teaching through a combination of explicit and implicit methods, implementing curriculum-based ideological and political education teaching in both the first and second classrooms, and conducting comprehensive and multi-faceted evaluation of curriculum-based ideological and political education teaching. This can provide guidance for the implementation of curriculum-based ideological and political education teaching in this major or other majors.

CONFLICT OF INTERESTS

None.

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