

Construction and Evaluation of Ideological and Political Education Effectiveness in the Procurement Management Course

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Abstract—The construction of curriculum ideology and politics embodies the fundamental requirement of cultivating morality in colleges and universities. It is conducive to the formation of an all-encompassing, whole-course, whole-person training pattern of major ideological politics. In this paper, we take the procurement management course as an example to construct the six ideological objectives of the course. Focusing on the ten major elements of political thinking, such as political identity, professionalism, national sentiment, and cooperation and win-win situation, and combining them with the knowledge points of the course, the course's political thinking materials are deeply excavated. We design the overall idea with the main line of Civics and the main line of knowledge. With four module examples of procurement awareness, bidding and procurement, government procurement, and procurement negotiation, we fully demonstrate the ideological design from the aspects of ideological elements, integration of links, integration of materials, and ideological mapping. This paper refines the characteristic integration paths of “pre-course + in-course + post-course + extracurricular practice”, “online + offline”, “theory + practice” of the procurement management programme. Finally, we use the Minnida short-form scale to evaluate the implicit nurturing effectiveness of the course Civics, and evaluate the explicit nurturing effectiveness of the course Civics from the diagnostic evaluation, process assessment, and summative assessment. By organically combining the course content with the elements of Civics and Politics, we cultivate students' professionalism, sense of social responsibility, and national sentiment, and are committed to moulding high-quality applied talents with professional ability and social commitment.

Keywords—procurement management, ideological and political education in curriculum, construction pathways, educational effectiveness

I. INTRODUCTION

Curriculum Civics is an important task of China's higher education, a key initiative to implement General Secretary Xi Jinping's important discourse on higher education and

the implementation of the fundamental task of cultivating moral integrity, as well as an inevitable requirement to promote the construction of the new liberal arts. In May 2020, the Ministry of Education issued the Guidelines for the Construction of Civics and Politics in Higher Education Courses, which takes the construction of curriculum civics and politics as a task to implement the mission of cultivating moral integrity and comprehensively improving the quality of talent cultivation, and proposes that we should “clearly define the target requirements and content focus of the construction of curriculum civics and politics, scientifically design the curriculum civics and politics teaching system, and incorporate the curriculum civics and politics into the whole process of the construction of classroom teaching.” [1]. In July 2022, the Ministry of Education and other ten departments issued the “Work Programme for Comprehensively Promoting the Construction of ‘Big Civic and Political Classes’,” pointing out that there are “hard integration” and “superficiality” in current courses, and that it is necessary to build “big classrooms”, “big platforms”, and “big teachers”, and putting forward 21 specific practical strategies [2]. Therefore, how to combine the characteristics and advantages of professional courses, in-depth refinement of the ideological values and spiritual connotations embedded in each course, and give full play to the nurturing role of each professional course, so that the professional courses and the Civic and Political Science Courses are travelling in the same direction, and the explicit and implicit education are united to form a synergistic effect, has become an inevitable trend of higher education in the new era.

Since the concept of teaching Curriculum Civics has been put forward, academics and educators have carried out research work around the themes of Curriculum Civics construction, Curriculum Civics practice, and Evaluation, and have put forward a variety of different ideas on the construction of Curriculum Civics. Li, Wu, and Lv [3] studied the influencing factors of Civic Building Work based on the VSBPC model. Zhu *et al.* [4] studied the laws and methods of implementing ideological and political education in university physical education programmes

based on the concept of Outcome-Based Education (OBE). Ma and Yan [5] took the course “Microcontroller Principles and Interface Technology” as an example, and adopted the ‘project + BOPPPS’ model to design the course philosophy. Yang [6] developed an integrated analytical chemistry curriculum civics model of analysis, design, development, implementation, and evaluation based on the ADDIE model. Tang, Song, and Zhang [7] took the Basic Accounting Practice course as an example and put forward the path of “two lines embedded, two points of convergence” for the implementation of course ideology. Kang [8] analyzed the path of integrating curriculum politics into marketing courses in the new era. Liu [9], using law courses as an example, delved into the integration of ideological and political elements in the curriculum, innovated teaching methods, improved assessment and evaluation systems, and explored pathways and strategies for integration.

As for the evaluation of Civics and Politics, Dai and Kang [10] constructed the evaluation index system of “Big Civics and Politics Course” and “Dynamic Teaching”, and based on the data analysis software, completed the fuzzy comprehensive evaluation of the teaching effect of Big Civics and Politics Course and Dynamic Teaching [10]. Wang *et al.* [11] investigated the quantification of the effectiveness of course-based Civic Education in the context of engineering education in China, and proposed a system for assessing the effectiveness of course-based Civic Education for higher education based on the graduation-required outcomes for each student. Xin *et al.* [12] adopted the preferred reporting item methodology of systematic assessment and meta-analysis to analyze in depth the impact of policy orientation, school factors, teaching factors, teacher factors, student factors, etc., on the assessment system of Civic and Political Education in Chinese higher education curricula. Chen and Yu [13] used the dimensionality reduction theory of principal component analysis to reduce the complexity of the indicators and the subjectivity of the weights, and constructed an assessment model of teaching effectiveness in the integration of physical education and ideology and politics.

The Purchasing Management programme is an important compulsory course for Supply Chain Management and Logistics Management majors, covering a wide range of subject areas such as economics, management, law, and engineering. In economic activities, procurement, as an important link in the upstream of the supply chain, is susceptible to problems such as procurement corruption, procurement deviation, contractual risk, and financial risk, especially in coordination and cooperation with suppliers. Therefore, the requirements for the professionalism of procurement staff are particularly stringent, and they need to be honest, dedicated, and responsible. It is of great significance to integrate ideological and political education into the teaching of the programme, which helps students understand the national laws and regulations and strategic guidelines, cultivate the professional qualities of clean practice, moral competence, and honest service, and stimulate their sense of responsibility and patriotism.

II. OBJECTIVES OF CIVIC EDUCATION IN THE CURRICULUM

A. *Strengthening Political Identity and Establishing Correct Values*

Through studying national policies and industry norms in procurement management, students will enhance their understanding and recognition of national policies and laws and regulations, cultivate their awareness of abiding by the law and purchasing in accordance with the law, and enhance their sense of political recognition of national policies. In the course, students appreciate the role of national policies in guiding economic development in procurement activities and identify the need for procurement activities to be in line with national strategic objectives and the direction of industry development.

B. *Cultivating Professional Ethics and Practicing Integrity and Compliance*

Through the content of procurement organization and management, bidding and procurement, government procurement, etc., stressing the professional conduct and integrity and self-discipline in procurement activities, cultivating students to adhere to the professional belief of “honesty, fairness, and transparency” and the work attitude of “honesty and compliance with the law” in procurement work. The students are trained to adhere to the professional beliefs of “honesty, fairness, and transparency” and the working attitude of “integrity and law-abiding” in procurement. Through case studies, students are able to understand the rigour of procurement contracts and the importance of legal compliance, and establish a firm belief in integrity, compliance, and responsibility.

C. *Stimulating National Sentiment and Enhancing Social Responsibility*

Through the contents of government procurement and public procurement, students are helped to understand the important role of procurement in serving society, safeguarding people’s livelihood, and promoting the economy. Students are guided to realize that procurement activities are not only related to corporate and personal interests, but also directly affect the public interest, the economic development of the country, and the well-being of people’s livelihoods, thus stimulating a sense of patriotism and social responsibility among students.

D. *Enhancing Cost Awareness and Cultivating Scientific Management Skills*

Through the study of break-even method, Economic Order Quantity (EOQ), and budget management, students are helped to establish cost awareness, master scientific cost control methods, and cultivate the management concept of striving for excellence. Students are guided to focus on cost optimization and resource saving awareness in procurement activities, and to recognize the importance of scientific management in enhancing the efficiency and competitiveness of enterprises.

E. *Promoting the Spirit of Craftsmanship and Pursuing Excellence in Quality*

Through the content of Total Quality Management (TQM) and Supply Chain Quality Management, students

are helped to establish an attitude of excellence and focus on product and service quality. Students are guided to pay attention to details, continuous improvement, and pursuit of excellence in purchasing management, and cultivate the craftsmanship of “focusing on details and pursuing excellence”.

F. Establishing a Win-Win Concept and Building a Harmonious Supply Chain

Through case studies and practices such as MRP procurement projects, the course emphasizes win-win thinking in supplier development and management, and develops students' sense of collaboration and win-win concepts. It helps students to recognize the importance of building long-term trusting relationships with suppliers and to have a good mindset and ability to work with others.

III. DESIGN OF IDEOLOGICAL AND POLITICAL CONTENT IN THE PROCUREMENT MANAGEMENT COURSE

A. Overall Design Approach

Based on the six major courses' ideological and political objectives, this paper digs out the ten major courses of

“political identity, professionalism, national sentiment, win-win co-operation, integrity, honesty and law-abidingness, risk awareness, cost awareness, sustainable development, pioneering and enterprising” from the perspectives of national strategy, professional knowledge, industry demand, job competence requirements and cultural literacy. Civic and political elements. We carefully select the cases of Civics and Politics, enhance the Civics and Politics connotation of the professional knowledge points, and fully stimulate its function of educating people. By organically integrating the main line of ideology and the main line of knowledge, we can realize the dual track of ideological education and professional learning. We take representative cases as the entry point, dig deep into social hotspots, difficulties, and pain points, explore the Civics material reflected in the knowledge of procurement management, guide students to establish correct values, and achieve the effective achievement of Civics objectives, as shown in Fig. 1 below.

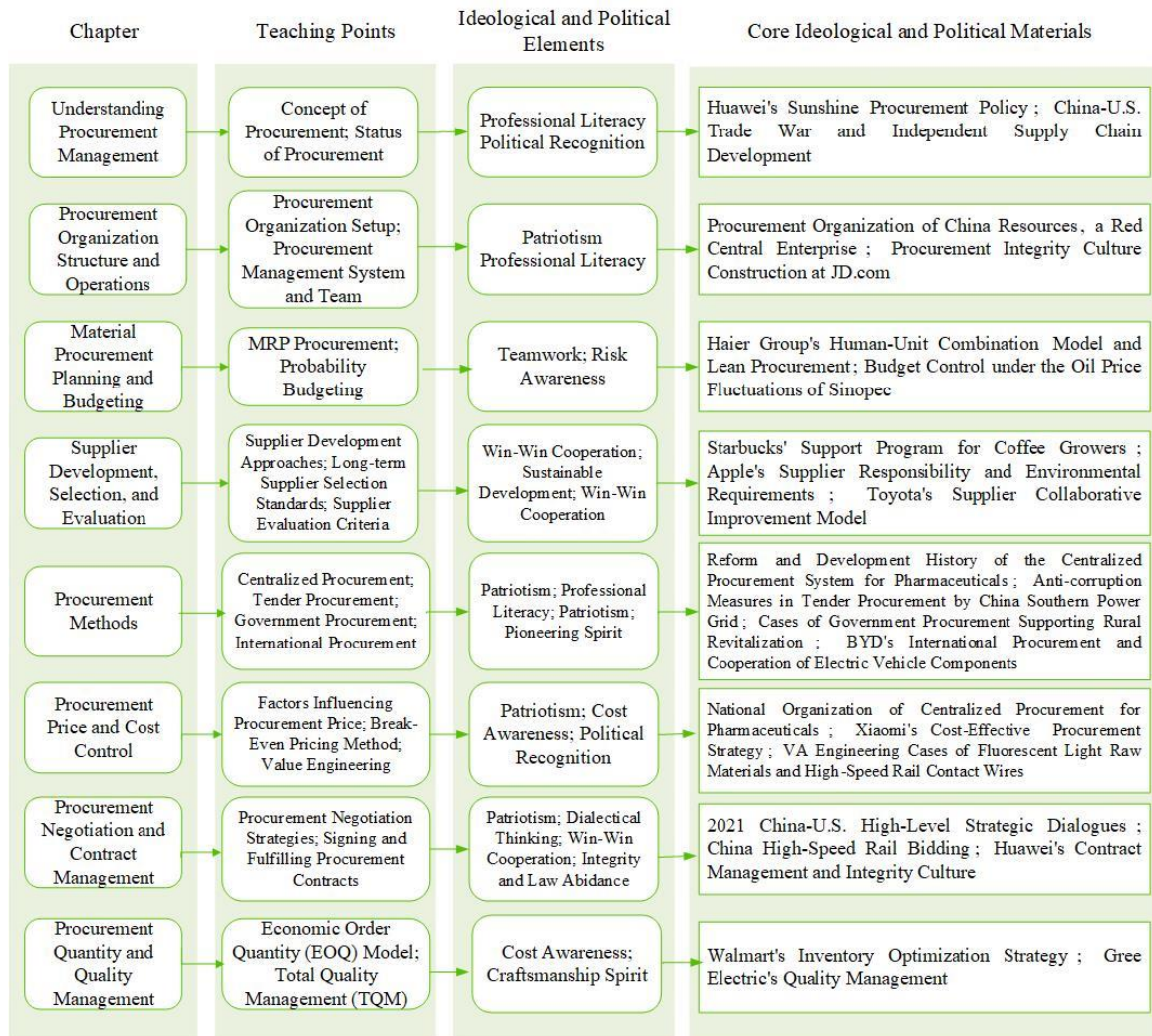


Fig. 1. Main content and ideological and political elements in procurement management course chapters.

B. Design Approach

1) Procurement cognition module

The design of the Procurement Awareness Module for the course Civics is shown in Fig. 2 below. Before the class, through case analysis and watching the video series “Exhibition of Excellent Traditional Chinese Culture”, students were helped to recognize the importance of professional skills and ethics, while enhancing their understanding of the procurement profession from multiple perspectives and boosting their cultural confidence. In the class, through knowledge explanation and case discussion, students are guided to deeply understand the concept, status, and development history of procurement, combined with Huawei’s “Sunshine Procurement” policy and the national strategy, to further deepen the students’ identification with the national strategy and independent innovation. After the class, through assignments analyzing industry trend reports, students were encouraged to actively explore the future development direction of procurement and supply chains. Additionally, through extracurricular activities such as company visits and professional competitions, students’ professional qualities and political identity were strengthened, while their confidence in the profession and patriotism were enhanced.

2) Tendering and procurement module

The design of the course Civics for the Tender and Procurement module is shown in Fig. 3 below. Before the class, through discussions of bidding and procurement corruption cases, students’ awareness of procurement transparency and fair competition was strengthened, while their consciousness of professional ethics and standards was improved. During the class, cases and practical training operations of Southern Power Grid are combined to strengthen the understanding of the bidding and procurement process and anti-corrosion measures. After the class, students are guided to pay attention to campus procurement practice and enhance their professionalism and national sentiment through standard interpretation and group work. Students’ comprehensive ability and practical

experience are further enhanced through enterprise visits and competitions.

3) Government procurement module

The design of the course Civics for the Government Procurement module is shown in Fig. 4 below. Before the lesson, students are guided to understand the role of government procurement in promoting rural revitalization and transparent governance, and to build up a professional code of integrity through studying government procurement policy documents. During the class, the concept, scope, and characteristics of government procurement are combined, and with the help of videos and policy documents, specific measures to enhance transparency are explored, so as to enhance students’ policy comprehension and sense of social responsibility. After class, students deepen their understanding of government procurement in supporting people’s livelihood and economic development through the study of the Government Procurement Law and case analyses. Social investigation outside the classroom further strengthens students’ practical ability and sense of nationalism.

4) Procurement negotiation module

The design of the course Civics for the Procurement Negotiations module is shown in Fig. 5 below. Before the class, students are guided to understand the importance of national comprehensive strength in the diplomacy of great powers and build up a sense of patriotism and responsibility by watching the video of the high-level strategic dialogue between China and the United States. During the class, through the explanation of procurement negotiation procedures and strategies, scenario simulation, and debate activities, students will cultivate their dialectical thinking and resilience in complex negotiations. After the class, students’ practical ability in software procurement negotiation is enhanced through case interpretation and group work. Extra-curricular practice further enhances students’ international outlook and sense of cooperation through case studies of multinational procurement project negotiations.

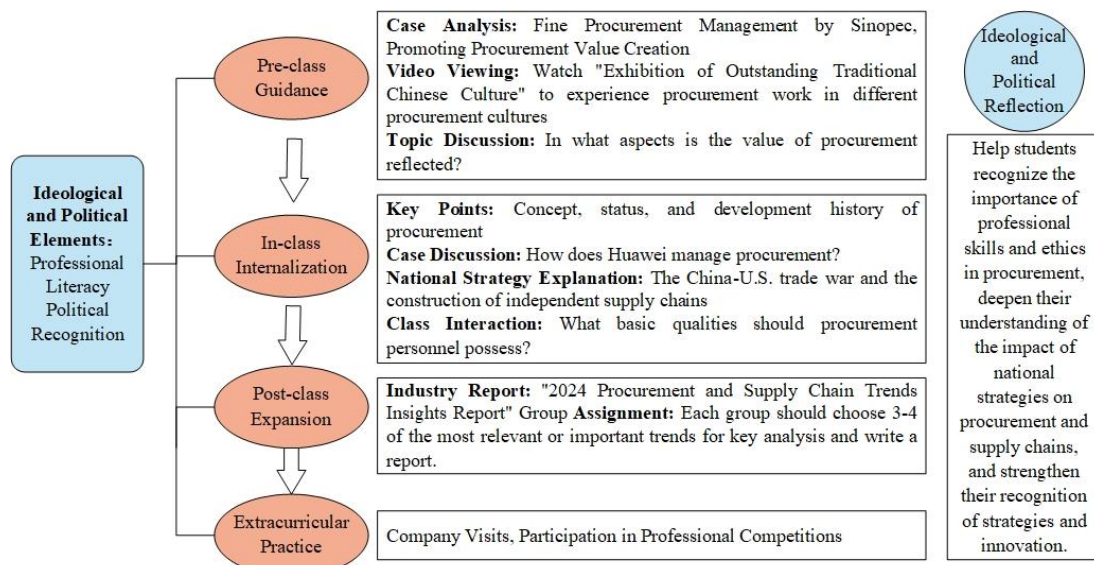


Fig. 2. Design of ideological and political content in the procurement cognition module.

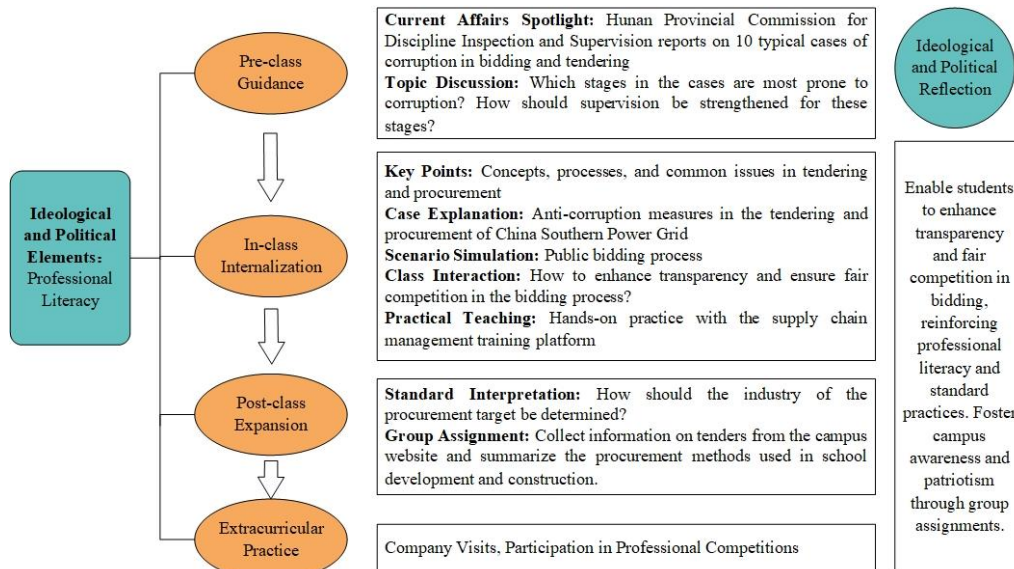


Fig. 3. Design of ideological and political content in the tendering and procurement module.

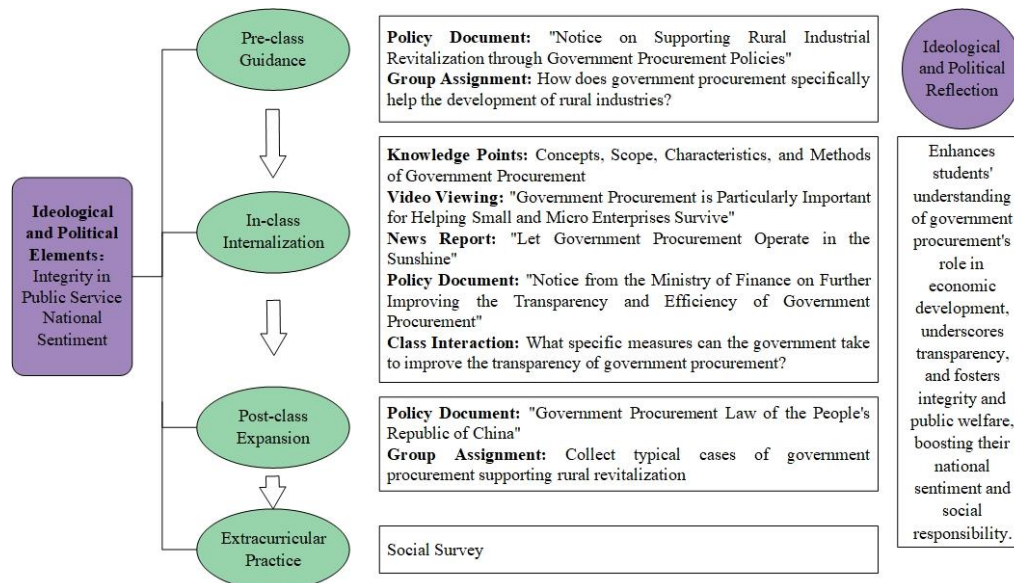


Fig. 4. Design of ideological and political content in the government procurement module.

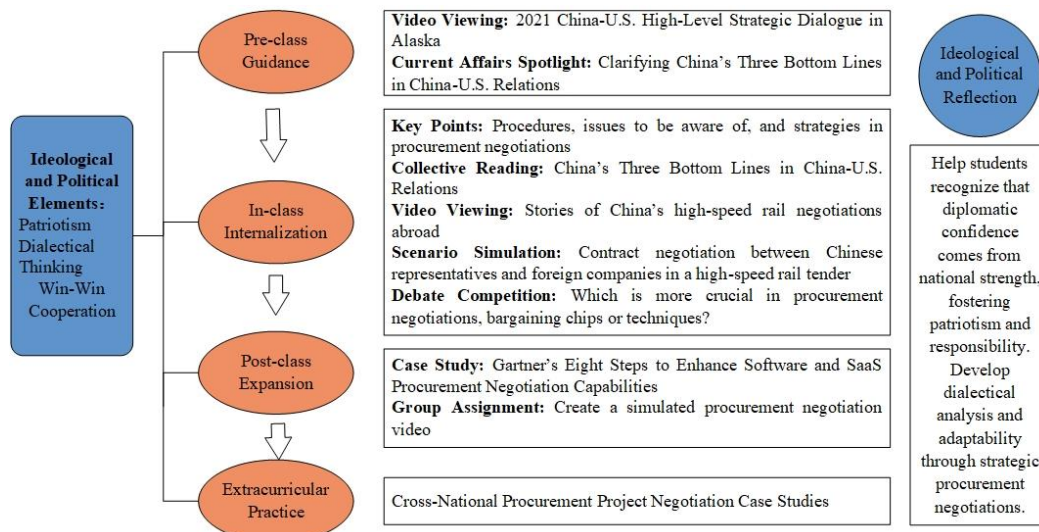


Fig. 5. Design of ideological and political content in the procurement negotiation module.

IV. PATHS FOR INTEGRATING IDEOLOGICAL AND POLITICAL CONTENT INTO THE PROCUREMENT MANAGEMENT COURSE

The course deeply explores and refines the ten ideological and political elements contained within, such as political identity, professional quality, national sentiment, and win-win cooperation, scientifically and reasonably expanding the course's breadth, depth, and relevance. The integration of ideological and political elements in teaching is achieved through a comprehensive approach that includes "pre-class + in-class + post-class + extracurricular practice", "online + offline", and a deep fusion of "theory + practice". Before class, students engage in online reading of news materials, watch current affairs videos, and study policies. During class, integration occurs in three phases: target-specific integration, moral integration in the classroom, and emotional integration in context. Various

engaging learning formats—such as discussions, debates, experiential learning, immersion, and teamwork—are employed to weave ideological and political elements into specific scenarios or cases, eliciting knowledge resonance, emotional connection, and value alignment among students. This approach fosters students' comprehensive qualities and professional attributes, including innovation, collaborative awareness, dedication, and integrity. After class, students extend their learning through online resources on policies, regulations, and industry reports, broaden their reading of ideological and political materials, share insights, participate in procurement and supply chain competitions, visit corporate procurement departments, and engage in social surveys, thereby reinforcing value guidance through practical experience. The path of Civic Integration in the Purchasing Management Programme is shown in Fig. 6 below.

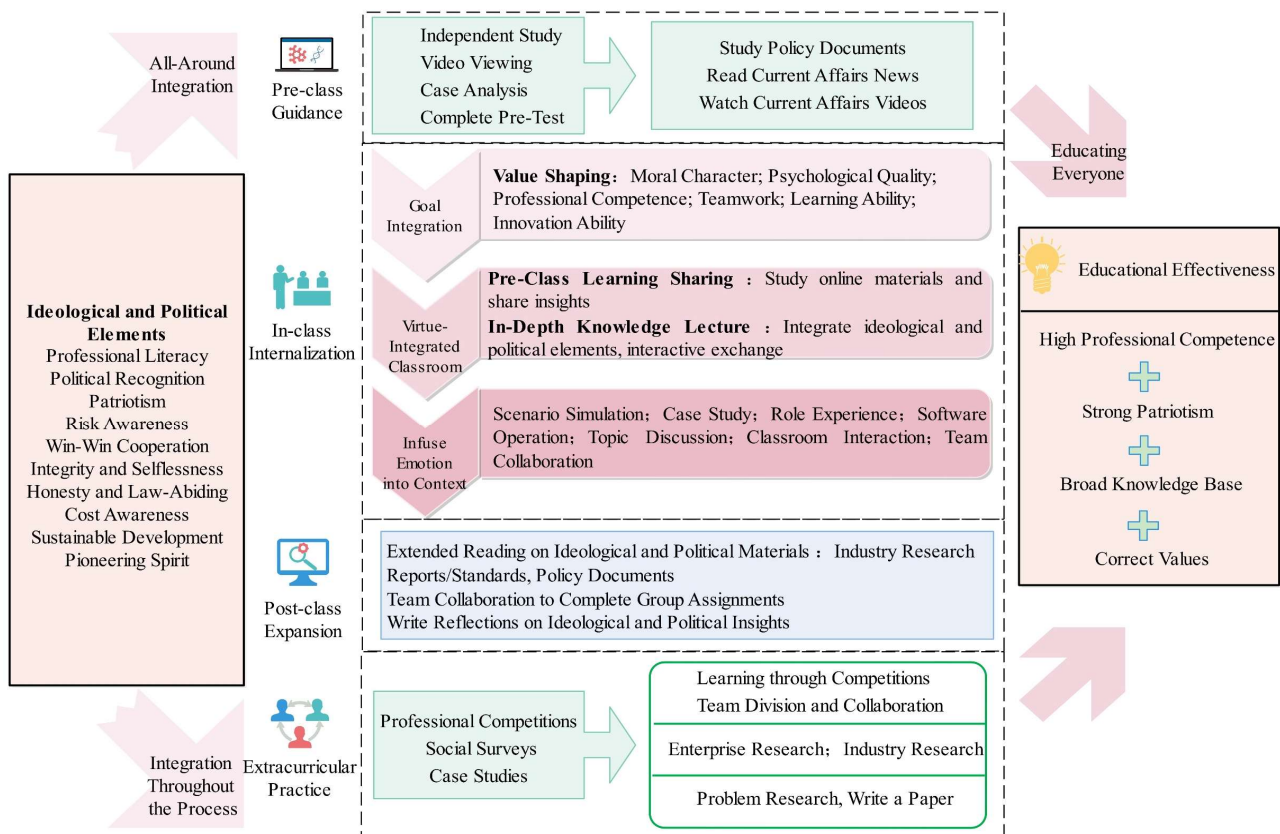


Fig. 6. Pathways for integrating ideological and political education into the course.

V. EVALUATION OF IDEOLOGICAL AND POLITICAL EDUCATION EFFECTIVENESS IN THE PROCUREMENT MANAGEMENT COURSE

A. Implicit Educational Effectiveness

The effectiveness of implicit education is primarily reflected in achieving the ideological and political objectives of the course, which include cultivating students' outlook on life, values, and worldview. This process is

long-term and complex. In this paper, the Minnesota Short Form Scale is adopted, designed around six ideological and political objectives and their corresponding teaching content. Six subscales are developed, comprising a total of 20 questions, as shown in Table I. Each question offers five response options: Strongly Disagree (1 point), Disagree (2 points), Agree (3 points), Somewhat Agree (4 points), and Strongly Agree (5 points).

TABLE I. MINNESOTA SHORT FORM SCALE FOR SATISFACTION WITH IMPLICIT IDEOLOGICAL AND POLITICAL EDUCATION EFFECTIVENESS

Goals	Questionnaire Content
Goal 1: Strengthen Political Recognition and Foster Correct Values	1. I realize the strategic importance of procurement management in safeguarding national economic security.
	2. I understand that enhancing efficiency through resource optimization and technological improvement is part of corporate social responsibility.
Goal 2: Cultivate Professional Literacy and Practice Integrity and Lawfulness	3. I understand that integrity and transparency are foundational for building trust and improving efficiency in procurement work.
	4. I recognize that procurement professionals must possess both professional skills and ethics to fulfill procurement management duties.
	5. I deeply understand that integrity and lawfulness are not only the foundation of cooperative relationships but also essential for the long-term development of an enterprise.
	6. I realize that integrity and fairness are prerequisites for maintaining the fairness of procurement and public trust.
Goal 3: Inspire Patriotism and Enhance Social Responsibility	7. I deeply feel that procurement is not just an economic activity but also relates to national development and public well-being.
	8. I perceive the positive role of government procurement in promoting social equity and supporting economically disadvantaged groups.
	9. Through the national drug procurement policy, I understand the country's efforts and responsibility in ensuring safe medication and reducing drug prices for the public.
	10. Centralized drug procurement can effectively lower drug prices, allowing more patients access to fair healthcare coverage.
Goal 4: Improve Cost Awareness and Develop Scientific Management Skills	11. I recognize that scientific pricing strategies and cost control can effectively enhance an enterprise's market competitiveness.
	12. I understand that rational inventory management can significantly reduce operating costs and improve business efficiency.
	13. I realize the importance of maintaining risk awareness and scientific forecasting in procurement decisions.
Goal 5: Promote the Spirit of Craftsmanship and Strive for Excellence	14. I understand that continuous improvement and teamwork are key to enhancing efficiency and quality in procurement management.
	15. I recognize the importance of pursuing excellence and embodying the spirit of craftsmanship to improve product and service quality.
	16. BYD's focus on technological innovation through parts procurement and partnerships in the international market has shown me the spirit of enterprise in exploration and excellence.
	17. I understand that win-win cooperation with suppliers is a critical strategy for ensuring supply chain stability and long-term development.
Goal 6: Foster a Win-Win Cooperation Concept and Build a Harmonious Supply Chain	18. I realize the importance of environmental protection and social responsibility in supplier selection to achieve sustainable development.
	19. Toyota's "Collaborative Improvement" model demonstrates the win-win concept of fostering supply chain development through close supplier cooperation.
	20. I understand that achieving win-win cooperation through negotiation helps control costs while safeguarding public interests.

After the conclusion of the 2023 academic year, a questionnaire was distributed to 95 students through the Wenjuanxing platform, with 93 valid responses collected. An online SPSS statistical analysis through Wenjuanxing indicated an overall questionnaire reliability of 0.978, demonstrating a well-constructed and credible survey. The results showed that the average score for each question exceeded 4.00, indicating that the implementation of

ideological and political strategies supported the achievement of the six main educational objectives. Through the process of learning professional knowledge, students' sense of professional ethics, social responsibility, awareness of sustainable development, scientific development principles, and critical thinking skills were enhanced, clearly reflecting the effectiveness of the educational approach.

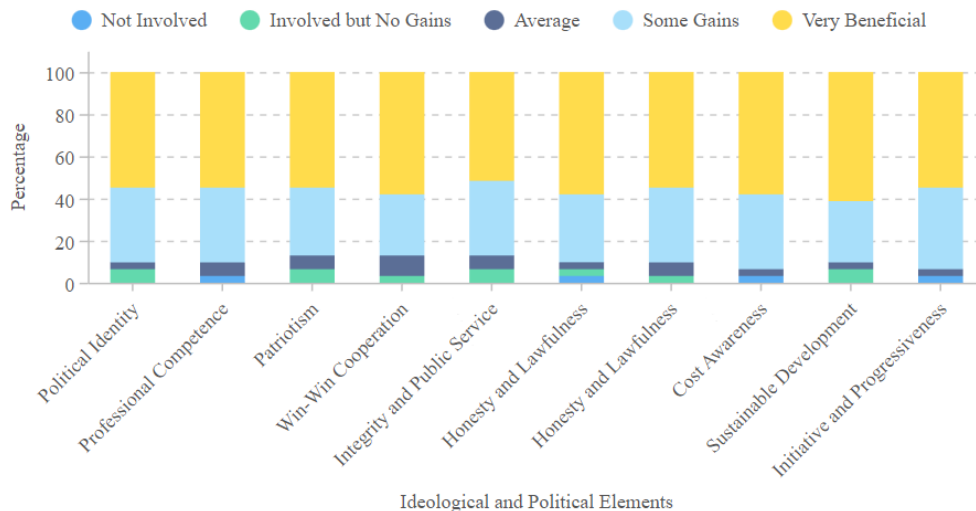


Fig. 7. Survey results on the sense of gain from ideological and political dimensions in the curriculum.

At the same time, we surveyed students' gains in the ten ideological and political dimensions, using a scale of 1 to 5 to indicate: 1-Not Involved, 2-Involved but No Gains, 3-Average, 4-Some Gains, 5-Very Beneficial. The survey results are shown in Fig. 7.

From the average scores of the ten ideological dimensions, students believe that the greatest gains from this course are in Cost Awareness and Sustainable Development, followed by Win-Win Cooperation, Risk Awareness, and Initiative and Progress. This indicates that students made the most gains in these four ideological dimensions. The scores for Integrity and Public Service, as well as Love for One's Country and Family, are relatively lower compared to the other dimensions, suggesting that future teaching should strengthen education in these two ideological dimensions.

B. Explicit Educational Effectiveness

The effectiveness of ideological and political education in the course is evaluated through the results of the performance assessment. The procurement management performance evaluation scheme is shown in Table II. The performance evaluation includes diagnostic evaluation, process assessment, and final assessment. The diagnostic evaluation, weighted at 20%, consists of pre-tests, in-class exercises, chapter quizzes, and a midterm test. The process assessment, weighted at 40%, incorporates diverse evaluations such as learning attitude, class discussions, group tasks, practical assignments, research reports, awards in procurement and supply chain competitions, as well as reflective observations after company visits in extracurricular activities to deepen ideological insights. The summative assessment, weighted at 40%, primarily comprises a final exam.

TABLE II. GRADING EVALUATION SCHEME

Assessment Type	Assessment Content	Scoring Criteria	Weight
Diagnostic Evaluation	Pre-Test	Pre-class preparation and test	5%
	In-Class Exercises	Small quizzes during class	5%
	Chapter Tests	Tests on key knowledge points per chapter	5%
	Midterm Test	Comprehensive test on course knowledge points	5%
Process Evaluation	Learning Attitude	Attendance, diligence, and participation	5%
	Class Discussion	Activities such as Q&A, topic discussions, and offline interactions	5%
	Group Tasks	Group assignments, role-playing, and case analysis	10%
	Practical Tasks	Software operation related to procurement stages	5%
	Research Report	Social or corporate research	5%
	Awards in Procurement Competitions	Awards in procurement and supply chain competitions	5%
	Reflection on Company Visits	Company visits with reflective insights	5%
Summative Evaluation	Final Exam	Understanding and application of knowledge points	40%

TABLE III. OVERVIEW OF THE EXAM FOR THE 2022 PROCUREMENT MANAGEMENT COURSE

Items	Data
Number of participants in the assessment	47
Number of absentees	0
Instructor	Min Lu
Standard deviation	7.33
Assessment method	Closed book
Average score	77.26
Highest score	89
Lowest score	61
90–100	0
80–89	23
70–79	14
60–69	10

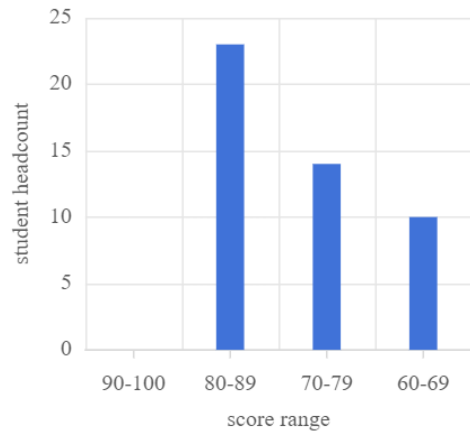


Fig. 8. Score range for the 2022 procurement management course.

Both diagnostic evaluation and process assessment are conducted via the Learning Pass platform, utilizing digital tools to awaken students' intrinsic motivation, effectively enhance their learning interest, and increase engagement. Through the comparative analysis of Table III and Fig. 8 with Table IV and Fig. 9, it can be seen that the average score and the number of high-level students in the 2023 ideological and political education pilot class have increased, and the overall performance is even better. This suggests that the integration of ideological and political education helps students better master professional knowledge and skills. The new assessment model stimulates students' creativity, moving beyond traditional single-exam evaluation methods.

TABLE IV. OVERVIEW OF THE EXAM FOR THE 2023 PROCUREMENT MANAGEMENT COURSE

Items	Data
Number of participants in the assessment	47
Number of absentees	0
Instructor	Min Lu
Standard deviation	8.43
Assessment method	Closed book
Average score	78.83
Highest score	93
Lowest score	61
90–100	4
80–89	20
70–79	16
60–69	7

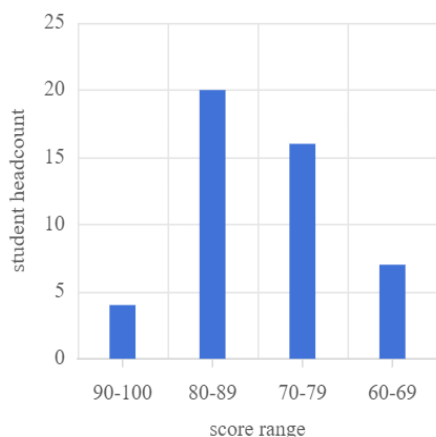


Fig. 9. Score range for the 2023 procurement management course.

The course team has established a multi-dimensional course evaluation mechanism, which includes self-assessment by the instructor, evaluation by supervisors, peer evaluation, student feedback, and alumni feedback. First, the instructor analyzes student exam papers and grades, combining this with regular assignments and classroom performance to conduct a self-assessment of the course. In addition, university and college supervisors periodically attend classes, providing feedback and assigning scores on the course content and teaching methods. Furthermore, each year, the course team invites industry experts, student representatives, and alumni representatives to hold discussion sessions, where they provide in-depth evaluations of the course quality and suggest recommendations for continuous improvement.

VI. CONCLUSION

With the fundamental goal of “educating people” and the fundamental question of “what kind of people to train, how to train people, and for whom to train people”, Civics and Politics in the curriculum organically combines the shaping of values, the teaching of knowledge and the cultivation of abilities, which is the innovation and sublimation of the education concept in the new era. As a core course in Supply Chain Management, the Purchasing Management course should take on the burden of value shaping while imparting professional knowledge. According to the requirements of the Guideline for the Construction of Civic and Political Construction in Higher Education Courses, this paper constructs six major objectives of course civic and political education and refines ten major elements of course civic and political education. We deeply excavate relevant materials from current news, national conditions, policies, industry standards, and enterprise cases, etc., to organically integrate the main line of Civics and the main line of knowledge, and realize the dual-track parallelism of Civics education and professional learning. In teaching practice, we adopt the characteristic path of integrating Civics and Politics of “before class + during class + after class + extracurricular practice”, “online + offline”, “theory + practice”. We promote the standardization, unification, and process development of the procurement management course. In the future, the course team will synthesize the

feedback from the assessment, continuously update the teaching materials, and explore the effective integration of knowledge, skills, and moral education, so as to promote the realization of the goal of ‘three-pronged education’. At the same time, we will lead students to self-directed exploratory, seminar, experiential, and immersive learning to enhance the innovative, high-order, and challenging nature of the Purchasing Management programme.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

AUTHOR CONTRIBUTIONS

Min Lu: Conceptualization, data acquisition, data analysis/interpretation, drafting manuscript, methodology; Tianlong Luo: Design, analysis, securing funding, project administration, writing – review & editing; both authors contributed to the writing of the article, read and approved the final version of the manuscript.

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