

Teaching design and practice of Ideological and Political Theories Teaching in all Subjects -- taking “Game Theory” as an example

Hui Chen

Minjiang University, Fuzhou 350108, China

Abstract: As an important way to implement the “3-all Education”, Ideological and political theories teaching in all subjects is an important embodiment of the fundamental task of “cultivating morality and cultivating people”. This article puts forward the basic ideas of ideological and political theories teaching in all subjects teaching design from the four aspects of “what to teach”, “whom to teach”, “how to teach” and “how well to teach”, explores the ideological and political elements combined with the characteristics of “Game Theory” course, and takes the teaching fragments in the chapter of “Complete information dynamic game” as a case to conduct practical exploration of the process of ideological and political theories teaching in all subjects teaching design. The research results can provide reference for the ideological and political teaching reform of other courses.

Key words: Ideological and Political Theories Teaching in all Subjects; game theory ;teaching design;

Ideological and political theories teaching in all subjects is an advanced educational concept that carries out moral cultivation as the fundamental task of education, closely combines knowledge and ability training with three aspects of education, and realizes the unity of instrumental rationality and value rationality, so as to realize the all-round development of Marxism and the “purpose of education. In 2020, the Ministry of Education issued the Guiding Outline of ideological and political theories teaching in all subjects Construction in colleges and Universities, which requires that “to carry out the fundamental task of moral education, value shaping, knowledge imparting and ability cultivation must be integrated and inseparable.” Therefore, how to integrate ideological and political content into classroom teaching organically, and how to coordinate the three to achieve curriculum teaching goals needs constant practice and exploration.

1. Ideological and political theories teaching in all subjects teaching design ideas

Ideological and Political Theories Teaching in all Subjects teaching design ideas basically follow the “teach what?” -- teaching objectives, “who to teach” -- learning situation analysis, “How to teach?” -- Teaching process, “how to teach” -- four steps of teaching reflection, interlocking and closed-loop feedback, so as to combine teaching and educating, and achieve the same frequency resonance of value shaping and knowledge imparts and ability cultivation.

1. Teaching objectives

Establishing teaching objectives is a clear “What to teach?” The teaching goals under the ideological and political theories teaching in all subjects teaching reform not only include knowledge goals and ability goals, but also need to further help students establish correct political thoughts, values and outlook on life from the perspective of “three whole education”, that is, establish ideological and political goals, cultivate outstanding talents with innovative spirit, practical ability and social responsibility, so as to adapt to the rapidly changing social and economic needs. To promote social development and progress.

2. Teaching process

Learning situation analysis is to clarify “who to teach”, and the teaching process is to further establish “how to teach?” On the basis of fully understanding the ideological characteristics and knowledge structure of the teaching object, further excavating the ideological and political elements in combination with the important and difficult contents of teaching, looking for the appropriate ideological and political materials, and achieving the ideological and political goals based on penetration, empathy and recessive education, so that knowledge, ability, ideological and political mutual promotion and the same direction.

3. Teaching reflection

“How to teach” refers to teaching reflection after class. Ideological and Political Theories Teaching in all Subjects teaching reflection mainly focuses on the degree of achievement of ideological and political goals and the smoothness of ideological and political materials into the teaching process. There are many quantitative evaluation methods in traditional teaching design, but the quantitative evaluation of ideological and political goal achievement is the focus of teaching reflection.

2. The ideological and political elements mining and material matching

As a professional course, Game Theory mainly studies the strategic interaction and balanced decision making among multiple actors, which is the basis of mechanism design and behavior analysis, and has a wide range of applications in economic society. How to integrate “the basic principles of being a man and doing things, the requirements of socialist core values, and the ideal and responsibility of realizing national rejuvenation” into the teaching objectives and teaching processes of the course, dig and refine the ideological and political elements in the knowledge points of the course, and give full play to the “main channel” of classroom teaching, is the focus of this course’s ideological and political elements mining. Combined with the main content of Game Theory teaching, the ideological and political elements and materials can be mined from the following aspects:

1. Cooperation and competition: Game theory mainly focuses on the relationship between cooperation and competition, guiding

students to think about the relationship between collective interests and individual interests, and how to achieve common goals through cooperation and coordination. Cultivate students' collectivism consciousness, emphasize the responsibility and role of individuals in the collective, and then think about how to combine personal goals with the realization of the great rejuvenation of the Chinese nation.

2. Integrity and social values: Integrity is one of the core values of socialism. By learning the integrity problem in game theory, we will think about the value and significance of integrity in society, explore the role of integrity in building trust, promoting social harmony and promoting social development, and deeply think about how to practice integrity values in daily life as an individual.

3. Fairness and justice: In game theory, fairness and justice are important considerations in decision making and allocation of resources. By studying game theory, think about the definition and realization of fairness, and explore the meaning of social equity and justice.

4. Decision and responsibility: Game theory studies the responsibilities and consequences borne by individuals and groups when making decisions, and guides students to think about the impact of the consequences of decisions on individuals, teams and other relevant parties and the responsibilities shouldered by decision makers, so as to cultivate their sense of responsibility to others and society.

3. Teaching cases

“The credibility of strategy” and “Solving finite complete and perfect information dynamic game by backward induction” in the course of “Game Theory” are the teaching focuses in the chapter of “Complete information dynamic Game”. The following will take this as a case to explore and practice the ideological and political teaching design of “Game Theory” course.

1. Teaching objectives

(1) Knowledge objectives

Master the general method of solving finite complete and perfect information dynamic game by backward induction; Understand the role of “credibility” in dynamic game analysis; And understand the logical underpinnings of backward induction.

(2) Ideological and political goals

Guide the socialist core values of “patriotism, dedication, integrity, friendliness” of the basic moral code of citizens to identify, build honest work, keep promises, treat people with sincerity and other basic principles; To guide the establishment of a personal credit system and establish a scientific concept of consumption. To understand how sound laws and regulations can improve social and economic efficiency.

(3) Capability objectives

By learning the “gold mining game” model, we can analyze the phenomena in daily life and economic life with game theory.

2. Teaching design process

The specific instructional design process is shown in Table 1:

Table 1 Teaching design cases

Units	Teaching content	Teaching method	Ideological and political materials	Ideological and political elements
1	Discussion of current Events	Group report, brainstorming discussion	To explore the current survival crisis of small and medium-sized enterprises “as the theme, assign group current affairs hot topics to discuss tasks.	To train students to pay attention to the characteristics of the current social development and the progress of The Times, penetrate the sense of patriotism and national rejuvenation, establish a sense of social responsibility to serve the country and the people, and take the initiative to shoulder the heavy responsibility entrusted by The Times.
2	Pre-class test: Which of the following factors do you think should come first for an enterprise or an individual: (1) economic interests; (2) integrity; (3) quality of products or services;	Information-based teaching: rain class secret ballot	Through the data statistics of pre-class and after-class tests, the achievement degree of ideological and political goals of this course is analyzed	Through the test, to understand the students for the ideological and political focus of this course “honesty” basic cognition.
3	Course Introduction 1. “How to solve the problem of financing difficulties for small and medium-sized enterprises”. 2. “Making unremitting efforts to alleviate the difficulty and high cost of financing for smes”.	Case analysis, question inspired explanation, question-and-answer interaction between teachers and students	People’s Daily: How to Solve the financing difficulties of small and medium-sized Enterprises “, China Government website: “What measures to Help small and medium-sized enterprises solve the financing problem”, People’s Daily “Fujian Province set up a new 10 billion yuan special loan for micro, small and medium-sized enterprises” and other social news	(1) Help students understand the role of “credibility” in dynamic game analysis through hot social news and group discussions such as personal loans and financing difficulties for smes, thus leading to the basic moral norms of citizens of “patriotism, dedication, integrity, and friendliness” in the core values of socialism, and further emphasize the basic principles of honest labor, keeping promises, and treating people with sincerity. (2) Through the problems faced by the development of small and medium-sized enterprises in our country, the state departments and municipal governments frequently introduce special loans for small and medium-sized and micro enterprises rescue, fiscal and tax support, open source and expenditure support policies, to help small and medium-sized and micro enterprises tide over difficulties, and praise our motherland.

4	<p>1. "Gold Mining Game" three versions. 2. Credibility problem is a central problem in dynamic game analysis. 3. Backward induction 3.1 Logical basis of backward induction 3.2 The general method of backward induction 4. There are problems between backward induction and chess refined Nash equilibrium</p>	<p>Traditional multimedia teaching, inspiration guide method</p>	<p>(1) Evolution process of three "gold mining games"; (2) Zhou Dunyi in the Northern Song Dynasty in "Tongshu Chengxia" cloud: "Sheng, sincere only Yi. Honesty is the root of the five constants and the source of 100 lines."</p>	<p>(1) With the help of the "gold mining" model, in-depth analysis of the important role played by "credit" in social and economic activities, to understand how sound laws and regulations can improve social and economic efficiency; (2) Excellent Chinese traditional culture education: Honesty is the symbol of sanctity, the foundation of benevolence, justice, propriety, wisdom and trust, and the root of various virtues such as filial piety, fraternity and loyalty. To reach the realm of sincerity, one can naturally achieve benevolence, justice, propriety, wisdom, and faithfulness, and his words and deeds are all reasonable.</p>
5	<p>Assign the task of reading academic literature before class, and organize the analysis and discussion of literature content based on what you have learned in this course in class.</p>	<p>Group discussion, interactive discussion, task-driven</p>	<p>"Dynamic Game Analysis of Perfect Information in the Consumer Credit Market of College Students" academic paper discussion;</p>	<p>Guide students to use what they learn in class to discover and analyze the social and economic phenomena or problems existing around them, and encourage students to write and publish academic papers. From the content of the paper, the discussion of the current consumer credit problems of college students will be extended, and attention will be paid to the construction of personal credit system and the establishment of scientific consumption concept.</p>
6	<p>After class test: Which of the following factors do you think should come first for a business or an individual: (1) economic interests; (2) integrity; (3) quality of products or services;</p>	<p>Information-based teaching: rain class secret ballot</p>	<p>Through the data and statistics of the test before and after class, the degree of achievement of the ideological and political goals of this section is analyzed</p>	<p>Through the pre-class and after-class test data, we can understand the students' achievement of the teaching goal of "honesty", which is the main ideological and political focus of this course.</p>

3. Teaching reflection

(1) Topical reporting and brainstorming discussion are adopted in the discussion of current affairs, which requires teachers to have a large amount of knowledge reserve before class. In the brainstorming discussion process, teachers should always grasp the rhythm and direction of discussion and try to pay attention to each student.

(2) The teaching method of this course is mainly heuristic, taking social phenomena as material, inspiring students to think about the nature behind the phenomenon, focusing on guiding students to find contradictions, explore the true ability, and cultivate students' true-seeking and pragmatic spirit. How to mobilize the whole class students to think positively, guide the students to explore the right outlook on life, values, and give birth to the values of integrity, need to further think and improve in teaching practice.

(3) How to judge the achievement of the main ideological and political goals of this course according to the test data before and after class? It is necessary to constantly adjust the ideological and political content, teaching methods and means according to the characteristics of students in different majors and classes.

4. Conclusion

Game Theory mainly introduces methodology and has a wide range of applications. This paper puts forward the basic ideas of ideological and political teaching design of curriculum. Taking Game Theory as an example, it explores the potential ideological and political elements from four aspects, including cooperation and competition, integrity and social values, and explores the teaching methods, teaching design process and teaching reflection in combination with teaching cases. The research results can provide references for the ideological and political teaching reform of other courses.

Bibliography

[1] Hongjuan He. The internal logic and construction strategy of the development from "Ideological and Political Curriculum" to "Ideological and Political Theories Teaching in all Subjects Curriculum" [J]. Research on Ideological and Political Education, 2017, 33(5): 60-64

Fujian Province Young and Middle-aged Teachers' Education and Research Project (Science and Technology) in 2021 (Project number: JAT210328) : Research on the precise embedding of college students' curriculum Ideology and politics driven by big data.

2021 Young and Middle-aged Teacher Education Research Project (Social Science) (Project number: JAS21266) : Research on the implementation path and effect evaluation of college ideological and political theories teaching in all subjects based on the perspective of college student group survey

Demonstration course project of school-level ideological and political theories teaching in all subjects of Minjiang University in 2022: 《Game Theory》