

# Exploration and Practice of Integrating Ideological and Political Education into Diagnostics Based on Innovative Education

Lei Wei<sup>1,a,\*</sup>, Shi Hongmei<sup>2,b</sup>, Zheng Chanjun<sup>2,c</sup>

<sup>1</sup>Department of General Medicine, The Second Affiliated Hospital of Guilin Medical College, Guilin, 541100, China

<sup>2</sup>Department of Geriatric Medicine, The Second Affiliated Hospital of Guilin Medical College, Guilin, 541100, China

<sup>a</sup>2536111030@qq.com, <sup>b</sup>hongmeishi8862@163.com, <sup>c</sup>37002533@qq.com

\*Corresponding author

**Abstract:** In order to enhance the teaching effect of diagnostics and cultivate moral and talented medical talents, this paper discusses the strategy of integrating ideological and political education into diagnostics teaching based on innovative education. Through the revision of the syllabus, quality objectives such as professional ethics and social responsibility are added; the elements of ideology and politics in the diagnostics course, such as medical humanism and ethical awareness, are explored and integrated with innovation education; innovative educational means such as online and offline hybrid teaching, PBL teaching methods, and flipped classrooms are adopted to stimulate students' interest in learning and cultivate their innovative ability; the assessment and evaluation method of the course is reformed; and a multidimensional assessment method covering the course objectives, teaching design, and students' learning effect is constructed to ensure that the students' interest in learning is enhanced. Reform the assessment and evaluation methods of the courses and build a multidimensional evaluation system covering the course objectives, teaching design, and students' learning effects. Practice shows that the application of innovative educational tools not only improves students' academic performance but also cultivates students' scientific research literacy and innovation ability, promotes the growth of teaching and learning, and has the value of popularization.

**Keywords:** Ideological and Political Education, Innovative Education, Diagnostics

## 1. Introduction

In the new era, medical education is facing the important task of cultivating medical talent with both ethics and ability. Diagnostics, as an important basic course of medical education, not only needs to teach professional knowledge and skills but also focuses on cultivating students' professional ethics and a sense of social responsibility. As a new educational concept, ideological and political education provide new ideas for the reform of medical education. At the same time, the introduction of innovative education provides an effective means for implementing ideological and political education. The purpose of this paper is to discuss how to integrate ideological and political education into the teaching of diagnostics based on innovative education, so as to provide a reference for the reform of medical education.

## 2. Definitions and Interrelationships of Ideological and Political Education, Innovative Education and Diagnostics

In the field of medical education, the importance of diagnostics as a key course connecting basic and clinical medicine is self-evident. It not only teaches the basic theory and skills of disease diagnosis but is also the core link to cultivate the clinical thinking and practical ability of medical students. However, with the continuous progress of educational concepts, pure skill transfer can no longer meet the needs of modern medical education [1]. Therefore, integrating ideological and political education and innovative education into diagnostic teaching has become an important way to improve the comprehensive quality of medical students. Within the framework of diagnostic teaching, the integration of ideological and political education aims to inject the essence of socialist core values and

professional ethics education into the process of teaching professional knowledge through subtle educational methods. This teaching mode plays a positive role in shaping the values of students in their professional learning and, at the same time, significantly improves their social commitment and historical responsibility. The integration of innovative education has injected fresh impetus into the teaching mode of diagnostics. With the help of heuristic and inquiry teaching strategies, educators can ignite students' passion for knowledge, and shape their innovative thinking and practical skills. This teaching mode not only significantly enhances students' ability to explore knowledge independently but also shapes their collective consciousness of cooperation and creative thinking enterprising [2]. The integration of ideological and political education and innovation education in diagnostic teaching can not only significantly enhance students' professionalism and skill level but also cultivate their socialist core values and professional ethics in an invisible way. The implementation of the innovative education model has injected novel teaching methods and paths into ideological and political education, making the presentation of ideological and political education more vivid and significantly improving its effectiveness.

### **3. The Current State of Teaching Diagnostics**

At present, diagnostic teaching generally focuses on knowledge transfer, but not on value leadership. The teaching content mainly focuses on theoretical knowledge and skill training in disease diagnosis, and less on the education of medical ethics and medical morality. The current teaching method is mainly based on the traditional lecture style, which leads to low student participation and difficulty effectively stimulating students' interest in learning. In addition, the teaching evaluation system is single, mainly focusing on students' knowledge mastery but neglecting the cultivation of their ideological and moral qualities.

### **4. Reasons for the Lack of Ideological and Political Education in Diagnostics**

#### ***4.1 Lack of recognition***

Some diagnostic teachers do not have enough knowledge about the importance of ideological and political education as the responsibility of civic teachers, and professional teachers only need to teach professional knowledge [3]. In addition, some teachers feel that the teaching ability of ideological and political education is insufficient, and they do not have a good grasp of the connotation and scope of ideological and political education, and do not condense the elements of ideology and politics [3]. Some students do not attach enough importance to the integration of ideological and political education in diagnostic courses, thinking that ideological and political education will take up the study time of professional courses and affect professional performance.

#### ***4.2 Inadequate teacher capacity***

##### ***4.2.1 Deficiencies in ideological and political literacy***

Diagnostic teachers are mainly educated in specialized fields, and they are at a disadvantage in terms of their ability to understand and master the contents of ideological and political education compared to professional teachers of ideological and political education. In addition, the level of political and ideological cultivation of each member of the teaching team varies greatly, further affecting the overall capacity of ideological and political education.

##### ***4.2.2 Inadequacy of the training system***

At present, the training content of college teachers tends to focus more on the improvement of professional course knowledge and the cultivation of teaching skills and techniques, whereas training for the improvement of ideological and political education ability is relatively scarce. This lack of comprehensive and systematic learning opportunities has led to difficulties in improving the level of teachers in ideological and political education [4].

#### ***4.3 Limited teaching and learning resources***

##### ***4.3.1 Inadequate teaching materials and tools***

In the teaching of diagnostics, there is a problem of insufficient teaching materials and aids. At

present, there is a lack of specially designed teaching materials and teaching aids for ideology and politics, and the existing teaching resources mainly rely on network pictures and audio-visual materials, etc. The form of these resources is relatively single and boring, and it is difficult to effectively reproduce the scene, resulting in a lack of contagiousness in teaching [4].

#### ***4.3.2 Few opportunities for practice***

Medical schools have heavy curriculum tasks and compact schedules, making it difficult to find extra time to organize students to go to patriotic education bases and other practical activities or community activities, which largely limits the effective implementation of ideological and political education [4].

#### ***4.4 Limitations of the teaching model***

The traditional diagnostic teaching mode mainly focuses on the teaching of professional knowledge, teaching methods are relatively single, mostly lecture-based, teacher-student interaction is limited, student participation is low, and it is difficult to integrate ideological and political education naturally into it [5].

### **5. The Importance of Integrating Ideological and Political Education into Diagnostics**

#### ***5.1 Cultivation of medical humanism***

As the cornerstone of the medical field, diagnostics play a crucial role in the determination of patients' conditions and formulation of treatment plans. Through the power of ideological and political education, students can be inspired to deeply understand the seriousness of diagnostic work and realize that every diagnostic conclusion directly affects the safety and health of patients. In exploring the process of history taking, it is emphasized that the physician must listen to the patient's account with persistent patience, which not only serves as an effective way of obtaining the necessary information but is also an indispensable way of reflecting the deep humanistic care for the patient. The implementation of ideological and political education is aimed at guiding students to build scientific professional values, so that they deeply realize that as a doctor, not only do they need to have excellent medical skills, but also need to abide by the noble professional ethics, and practice the spirit of "fear of life, save the patients, selfless dedication, and fraternity without boundaries."

#### ***5.2 Enhancement of professional ethical qualities***

Diagnostics are deeply embroiled in ethical issues, covering multiple complexities, such as patients' rights to informed consent and privacy barriers. Integrating ideological and political education into the teaching process can help students deeply understand the significance of ethical principles. In the learning process of imaging examinations, teachers can integrate ideological and political education into the process, emphasizing that before the examination is carried out, the purpose of the examination, potential risks, and possible results must be explained to the patient to fully guarantee the patient's right to informed consent. With the help of case studies and in-depth discussions, students are inspired to explore how to harmonize the interaction between medical ethics and clinical operations in real-life medical scenarios to shape their meticulous professional ethics and noble moral character.

#### ***5.3 Strengthening the sense of social responsibility***

With the help of ideological and political education, students can be made to realize that the professional mission of doctors is not only limited to providing medical services to patients, but also to undertake the noble duty of serving the society. On the journey of exploring diagnostic knowledge, it may be worthwhile to incorporate vivid examples of public health events - such as the New Crown Epidemic, a major event - to take this opportunity to make students deeply understand the key role played by medical personnel in the fight against epidemics, and then inspire their deep sense of mission and the spirit of commitment to society. Educators can plan and guide students to participate in community clinics and health knowledge popularization and other public welfare activities, using this practical platform to enable students to deeply perceive the sense of social responsibility of medical workers, and then inculcate and shape their concept of service to society.

#### ***5.4 Promote the organic integration of curriculum ideology and professional education***

The integration of ideological and political education can add more humanistic care and social value to the teaching of diagnostics, making the teaching content richer and more three-dimensional. In the process of elaborating diagnostic techniques, it may be worthwhile to incorporate elements of ideological and political education to trace the evolution of these techniques and the researchers' style behind them, so that the students, while mastering the professional skills, can deeply understand the magnificence and difficulty of scientific exploration. By integrating the elements of ideology and politics, abstract professional knowledge can be integrated with vivid social practice, which not only reduces the difficulty of students' understanding but also improves the effectiveness of teaching.

#### ***5.5 Cultivating an all-around growing healthcare elite***

Ideological and political education integrated into the classroom plays an indispensable role in shaping the comprehensive quality of students, not only helping them to consolidate the foundation of professional knowledge but also synchronizing the nourishment of humanistic connotations, refining ethical demeanors, and reinforcing social responsibility. For example, in the process of learning diagnostics, through the guidance of ideological and political education, students can better understand the relationship between medicine, humanities, and society to improve their comprehensive quality. This kind of comprehensive development of medical talent is more in line with modern society's multiple requirements for medical talent, and can be more adaptable to the future development trend of the medical industry.

### **6. Application of Innovative Educational Means in Diagnostics Program Ideology and Politics**

In different chapters of Diagnostics, innovative educational means can be skillfully used to integrate the ideological and political education of courses into teaching. In the introductory part, online and offline hybrid teaching methods can be adopted, providing video materials of famous diagnostic cases in medical history through online platforms and organizing discussions in the offline classroom to guide students to think about the social responsibility and professional ethics of medical practitioners. For example, we can combine the touching stories of medical workers during the Xin Guan Pneumonia epidemic to cultivate students' sense of nationalism and dedication. In the chapter on consultation, Problem-Based Learning (PBL) teaching methods can be applied to design clinical cases containing ethical dilemmas so that students can think about the importance of doctor-patient communication in the process of problem solving. For example, a case involving the protection of patient privacy can be designed to lead students to discuss how to find a balance between respecting patient privacy and obtaining the necessary information. The flipped classroom teaching method is an effective strategy to be adopted in the teaching of physical examination. Prior to class, teachers can allow students to learn the knowledge and skills related to physical examinations independently through online learning platforms. This kind of pre-learning can enable students to focus more on practical operations and discussions in the classroom, thus improving their practical abilities and depth of understanding. For example, a case involving the examination of a special part of the body can be designed to lead students to discuss how to find a balance between respecting the patient and completing the examination, thus cultivating empathy and professional ethics. In the chapter on laboratory diagnosis, the case-teaching method can be applied to design clinical cases that contain ethical issues, so that students can think about how to reasonably select tests and avoid overmedication in the process of analyzing the cases. For example, a case involving expensive tests can be designed to guide students to discuss how to make a trade-off between medical costs and diagnostic accuracy, reflecting the concept of patient centeredness. In the teaching of ECG identification, a hybrid teaching method can be adopted, providing a large number of ECG cases through the online platform and organizing discussions and analysis in the offline classroom. For example, a case involving emergency ECG recognition can be designed to guide students to discuss how to keep calm and make accurate judgments in emergency situations to cultivate students' emergency response ability and sense of responsibility. In the teaching of medical record writing, students' sense of responsibility and rigor can be cultivated through the use of the flipped classroom and peer assessment. By allowing students to review each other's medical records and discuss common problems in medical record writing, we can emphasize the importance of medical records as legal documents, and cultivate students' legal awareness and professionalism.

## **7. Evaluation System of Classroom Ideological and Political Education**

### ***7.1 Overall framework of the evaluation system***

Ideological and political education systems should cover the following aspects: course objectives and content: evaluation of the course's ideological and political education objectives are clear and specific, whether closely related to the curriculum, and whether to fully consider the learning situation [6]. Teaching design and implementation: Evaluate the match between the content and form of the course, whether the teaching mode is in line with the requirements of the course, and whether the evaluation mechanism matches the course objectives and content [6]. Students' learning effect: Evaluates the development of students' ideological and political education, including the improvement of knowledge, thought, and ability [6]. Teachers' teaching ability: Evaluation of teachers' teaching attitude, teaching content, teaching methods, etc., to determine whether they can effectively guide students [7].

### ***7.2 Evaluation methodology***

Quantitative evaluation is used to infer the effectiveness of the construction of course ideological and political education through quantitative analysis, while qualitative evaluation is used to reveal the meaning of course ideological and political education through behavioral observations and records [8]. Combination of formative evaluation and summative evaluation: Formative evaluation is used to improve the construction of course ideological and political education in stages, and summative evaluation is used to comprehensively assess the final effect [8]. Multiple evaluation subjects: increase students' self-assessment, mutual assessment, group assessment, etc., to ensure the objectivity of the evaluation subjects and effectiveness of the evaluation results [8].

### ***7.3 Evaluation implementation***

Clarify the evaluation methods and indicators before the beginning of the course, emphasize the importance of ideological and political factors, and clarify the composition of the total final grade and the proportion of the ideological and political elements [9]. Continuous improvement mechanism: According to the evaluation results, the content and methods of teaching ideological and political education will be continuously improved to ensure the scientificity and effectiveness of the evaluation system [9].

### ***7.4 Specificity of Civic Evaluation of Medical Specialty Programs***

In the evaluation of ideological and political education in medical courses, special attention should be paid to the cultivation of students' professional moral quality, humanistic spirit, and sense of social responsibility [9]. For example, the evaluation index system of ideological and political education for medical master's degree students includes four primary indicators, 11 secondary indicators, and 37 tertiary indicators, which comprehensively cover all aspects of ideological and political education in medical courses [10].

Through a scientific, systematic, and comprehensive evaluation system, we can better promote the construction of curriculum ideological and political education and realize the educational goal of "making people moral".

## **8. Conclusion**

Integrating ideological and political education into diagnostic teaching based on innovative education is an important direction for medical education reform in this new era. Through innovative educational means, the organic integration of ideological, political, and professional education can be effectively realized to cultivate moral and talented medical talent. However, this process also faces many challenges and requires the joint efforts of teachers, students, and teachers. In the future, theoretical research should be further strengthened, practical programs should be improved, and continuous exploration and innovation should be carried out to promote the construction of ideological and political education for diagnostics to develop in depth and contribute to the cultivation of high-quality medical talents.

**References**

- [1] Changjia Wang. *Research on the integration of Ideological and Political elements into the mathematical analysis course under the concepts of integration and education*[J]. *Knowledge Window*,2024(4):24-26.
- [2] Ding Lishan. *Research on the value and strategy of reinforcing aesthetic education in culinary specialty of middle school*[J]. *Education Science Forum*,2024(27):77-80. DOI:10.3969/j.issn.1673-4289.2024.27.018.
- [3] Cai Xiaohong and Xiaorong Qian. *Practice and exploration of ideological and political education teaching in a clinical medical diagnosis course*[J]. *Journal of Suzhou Institute of Health Professions and Technology*, 2021, 52(1):7-9.
- [4] Tan Xiaoyu,Liu Guangnan,Li Wentao. *The practice and discussion of carrying out ideological and political education in the diagnostic course*[J]. *University*,2022(3):132-135. DOI:10.3969/j.issn.1673-7164.2022.03.033.
- [5] Gao Dan, Li Yanjun, Zhao Zhiguo, et al. *Practice and exploration of experimental diagnostics course ideological and political education in the context of "new medical science"*[J]. *Health Career Education*, 2022, 40(21):29-32.DOI:10.20037/j.issn.1671-1246.2022.21.11
- [6] Wei Hui,Liu Suhui,Gu Tingting,YANG Jing,et al.*The Construction and Practice of Course Ideological and Political Evaluation System: Taking the Course of "Facility Environment and regulation " as an example* [J].*Journal of Shandong Agricultural Administrators' College*, 2024,41(6):124-128. DOI:10.3969/j.issn.1008-7540.2024.06.021.
- [7] School of Marxism, Zhengzhou University, *The construction and application of "three-in-one" quality evaluation system for efficient classroom-centered Civics and Politics courses*. (2024)(2025-02-09). <https://www5.zzu.edu.cn/mkszy/info/1015/5186.htm>
- [8] Liu Jian'an,Min Shuhui,Liao Kai. *Research on the construction of an evaluation system of Ideological and Political teaching in professional course curriculum*[J]. *Heilongjiang Education (Higher Education Research and Evaluation Edition)*,2022(1):26-27.
- [9] Meng Fang, Wang Shilei,Xu Jicheng. *Research progress on the evaluation of teaching and learning of the course ideology of politics in the field of medical education*[J]. *Chinese Journal of Medical Education*, 2024, 44(12):948-952. DOI:10.3760/cma.j.cn115259-20240111-00043.
- [10] Li Xiaomin, Zhang Wenyu, DUuan Yifei, et al. *Construction of an evaluation index system of ideological and political education of medical master's degree students*[J]. *Chinese Journal of Medical Education*, 2024,44(8):629-633. DOI:10.3760/cma.j.cn115259-20240305-00211.