

A Study of the Integration of Ideology and Politics into the Ultrasound Medicine Curriculum

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Abstract

In the new period, the development of higher education in China has new requirements, and the integration of curriculum ideology and politics into professional classrooms has gradually become a trend. Only by implementing ideological and political education into the personnel training system can we realize the parallel development of talents and qualities in higher education. Ultrasound medicine is an important part of the imaging medicine curriculum system, which has a lot of course content that involves a wide range of disciplines and is a rich resource bank of ideological elements. Consequently, the purpose of this article is to explore how to search for the elements of ideology and politics in the theoretical knowledge and clinical practice of various systems of ultrasound medicine and search for practical approaches to integrate political and ideological education into the curriculum so that students can acquire knowledge and skills while shaping good values at the same time.

Keywords

Curriculum Philosophy, Philosophy Elements, Sonography, Teaching

1. Introduction

In 2020, the Chinese Ministry of Education published a circular titled “Guidelines for the Construction of Ideological and Political Education in Higher Education Programs.” The circular emphasized that to build a high-level talent cultivation system, a system of ideological and political work must be incorporated. Additionally, it was necessary to grasp the concept of ideological and political education construction in the curriculum to resolve the issue of the “two skins”

that exist between professional education and ideological and political education. Finally, the only way to effectively enhance the quality of talent cultivation is by integrating the teaching of knowledge, the shaping of values, and the cultivation of skills (Ministry of Education, 2020). Previously, ideological and political education in colleges and universities was limited to ideological and political courses class times were short, and the content was relatively single and boring. This model is a little slipping behind the current high-speed development of society due to the changes in the demand for talent, especially in the age of the Internet, which is detrimental to the overall development of the comprehensive quality of the students. In a survey conducted using questionnaires and interviews to learn more about the present state of situations and problems surrounding the management of political and ideological education in colleges and universities, 24.09 percent of students agreed that the quantity of political and ideological education activities implementing place that is currently declining (Quan & Xie, 2022). When it comes to the current method of political and ideological education, 32.12 percent of students feel that the method is too traditional, and 58.03 percent feel that the lecturing style is inflexible. Therefore, the development of curriculum ideology and politics is an innovative educational concept that satisfies current national conditions in the context of education with Chinese characteristics by combining the demands of students' learning situations with the current national management requirements for ideological and political education.

Medicine is a discipline between science and humanities and is closely related to human life and health (Fu et al., 2020; Yuan, 2021). In addition to carrying out the vital task of educating medical professionals, it also has an impact on the quality of work and long-term growth of China's healthcare system owing to the overall skills and medical humanities of medical students. The doctor-patient relationship has long been an issue of tension in China (Zhu, 2017), particularly in the developed Internet era. There have been numerous instances of violence and harm to doctors on the Internet, and the media and other social groups have propagated misinformation that weakens medical students' confidence in their future medical careers and hurts their ethical principles (Xie et al., 2023). As a result, improving students' overall ideological quality is a key objective of today's educational system and social development. Ideological and political education plays a significant role in developing students' humanistic qualities because only those who possess strong morals and good ideologies will be able to work comfortably in the clinical setting in the future (Liao et al., 2023). Additionally, by easing the tense relationships that currently exist between doctors and patients in our nation, we can create a more harmonious society. Therefore, this paper aims to systematically and logically analyze the ideological and political education elements contained in each chapter of the disease in combination with the characteristics of ultrasound medicine, establish a relatively complete ideological and political resource library of ultrasound courses, and carry out ultrasonic medical teaching exploration in the course of medical students with professional

knowledge and skills and ideological and political education.

2. The Necessity of Integrating Curriculum into Ideological and Political Education

In most medical schools today, there is still a gap between the teaching of professional knowledge and ideological and political education (Zhu & Zhang, 2013). Ideological and political knowledge is taught by ideological and political course instructors; in professional courses, whether they are foundational or clinical, the instructors only focus on explaining medical knowledge and technology. This traditional teaching approach, which reflects the “emphasis on technology, light on the humanities” phenomenon, ignores the relationship between the humanities and clinical knowledge (Huang et al., 2019). As a result, students lack the ability and skills to communicate with patients and the legal awareness of self-protection when they go to clinical practice at the end of the campus learning phase. The transition of medical students from a naive campus to a clinical setting is a significant one. The complicated and demanding features of medical work, combined with the stress of the doctor-patient relationship, can easily cause anxiety in these new “recruits” and make it difficult for them to adjust to the changing environment. There will inevitably be hesitation to participate in clinical work.

3. The Clinical Characteristics of Ultrasound Medicine

Being one of the hospital’s key auxiliary departments, the ultrasound department must regularly communicate with emergency, outpatient, and inpatient patients. Consequently, doctors need to possess not only a strong foundation of medical knowledge but also strong interpersonal skills and humanistic beliefs (Li & Ren, 2021). Doctor-patient disagreements and even conflicts among doctors can easily arise if the doctors are not skilled in communicating with the patients (Zhang et al., 2019).

Furthermore, ultrasound is considered an auxiliary department when compared to clinical departments. Some patients view ultrasound technicians as technicians rather than doctors, and ultrasound is given less importance in hospitals. This can lead to a sense of inferiority complex among ultrasound students who have yet to experience the clinical work. In summary, to realize the same direction of the medical course and the ideology and politics education, teachers should intentionally, purposefully, and logically integrate the morality, ideological values, and political viewpoints advocated by the current society into the learning of each chapter and knowledge point of the professional course. Additionally, they should make the professional course serve as both a medium for delivering knowledge and a guide for values so that the result is an education that is one plus one and one is more than two. As a result, it is crucial that training in ultrasonography medicine includes ideological and political education.

4. Course Content Outline for Ideological and Political Education in Ultrasound Medical Professional Knowledge

To cultivate the medical spirit of “respecting life, saving the dying and healing the wounded, willing to contribute, and great love for no borders” in students, medical professional courses must concentrate on strengthening the teaching of medical ethics and medical style. Additionally, doctors should focus on enhancing their benevolence education. This was highlighted in the notice “Guiding Outline of Ideological and Political Construction of Curriculum in Colleges and Universities. Promoting in students the values of always putting people’s lives, health, and safety first; respecting patients; being adept at communicating; enhancing comprehensive literacy and humanistic development; improving the capacity to respond to serious public health emergencies following the law; and becoming good doctors who are trusted by the public and the Party. Accordingly, along with the unique features of ultrasound medicine, this article systematically and logically analyzes the political and ideological components found in each chapter of diseases. It also incorporates political and ideological education into professional courses in ultrasound medicine using a variety of teaching techniques, creating a database of relatively complete political and ideological resources for ultrasound courses. **Table 1** provides details on the intellectual and political components that were introduced.

4.1. Gain Professional Knowledge and Cultivate an Attitude of Study and Exploration

Medical ultrasound imaging encompasses various fields, including anatomy, physiology, pathology, and more. It is imaging based on the processing of human tissues and organs and objective anatomy (Wu et al., 2022). Medical students who are unfamiliar with this subject may find it slightly abstract. To fully comprehend the fundamental imaging principle of ultrasound and the formation principle of ultrasonic image features of different diseases, medical students must possess a solid anatomical foundation and spatial understanding ability. Ultrasound medical imaging is changing along with medicine. Type A ultrasound can only identify the lesion’s structure based on its amplitude; type B ultrasound can show the lesion’s brightness in two dimensions; and later ultrasonic technology includes color and spectral Doppler ultrasound. These significant advancements in ultrasonic medical technology are the result of the ultrasonic community’s constant innovation and toughness. In classroom teaching, the background of the development process of ultrasound medicine is taught, combined with the great contributions of predecessors in ultrasound medicine, and medical students are inspired to be objective, rigorous, knowledgeable, and innovative. The curriculum combines ultrasonic professional expertise with political and ideological knowledge. Vivid character stories are skillfully incorporated into political and ideological knowledge in the professional knowledge course to broaden the learning environment and boost students’ interest in the entire process.

Table 1. Outlines of integration of the Ultrasound medicine course and ideological and political elements.

chapters	Ideological and political elements and teaching objectives
General Introduction to Ultrasound	Understanding the history of ultrasonic medicine and the principle of imaging technology, through the development of ultrasonic medical technology, inspires students to be knowledgeable, and innovative, and cultivate a rigorous scientific spirit.
Cardiovascular	To describe the value of cardiac ultrasonography in the diagnosis and treatment of fulminant myocarditis in the new crown epidemic, and to cultivate students' sense of professional identity and the professional spirit of sticking to one's post and saving lives.
Digestive system	Actively educate students about the prevention and screening for hepatitis, introducing the Healthy China value concept. Discuss how overeating is a common cause of acute pancreatitis, encouraging students to follow a healthy diet, as well as improving their ability to think critically and coping skills in the process.
Urinary system	To lead students toward healthy shopping and respect for life, the popular narrative of "selling kidneys to buy iPhones" is combined with current events when teaching the anatomy of the kidney.
Gynecology and obstetrics	It highlights the magnificence of a mother's love through professional knowledge about pregnancy; in conjunction with current affairs like illegal surrogacy, which emphasizes the importance of following the law. Obstetric ultrasonography discourages non-medical fetal sex determination and supports the humanitarian principles of equality between men and women.
Superficial organ	Breast ultrasound protects patients' privacy and inspires students to become highly qualified medical talents with both ethics and talent; when talking about the symptoms of hyperthyroidism, students are guided to treat patients more patiently and gently to establish a more harmonious doctor-patient relationship.

4.2. Strengthen Political and Cultural Education for Students

The ideological and political curriculum is fundamentally to do students' work, surround students, serve students, and constantly improve students' ideological level, political consciousness, and cultural accomplishment (Xi, 2017). Medical students' political and cultural literacy is correlated with the quality of the national health cause's development since they are the cause's successors. Therefore, to intentionally deliver political and cultural education in their regular lessons, teachers must integrate every chapter and knowledge point of ultrasonography professional expertise. In 1958, for example, Zhou Yongchang of Shanghai Sixth People's Hospital and Yao Jinzhong of Shantou Ultrasonic Instrument Research Institute collaborated to create China's initial ultrasonic diagnostic instrument, which was then used to diagnose clinical illnesses. This establishment established the foundation for the subsequent growth of ultrasonic medicine in China. It leads to the great rejuvenation objective of cultural power and the "Chinese dream" through the growth of ultrasonic medicine and the fusion of

medical culture. It also teaches students the fundamental socialist core values and the confidence of the Chinese culture.

4.3. Cultivate the Humanistic Qualities, Medical Ethics, and Professional Confidence of Medical Students

The goal of medicine is to integrate the ethical and practical aspects of medical technology, as the latter can influence the former's advancement (Olivieri, 2018). As a result, society has higher expectations for the moral education of medical professionals, who always have to put the lives and health of their patients over their own and possess both good professional quality and the professional ethics of humanistic care (Chen et al., 2023). Being a doctor entails more than just professional knowledge; as Steven pointed out, medical education in the twenty-first century should highlight the importance of the humanities for both doctors and patients (Wartman, 2021). For instance, in the professional class, stating the development process and the ultrasound performance of diseases like hepatitis, cirrhosis, and liver cancer, teachers should gently encourage students to follow healthy lifestyle choices, avoid staying up late, and take note of their patients' well-being. In keeping with the popular scientific understanding of national health, we should also actively teach students about hepatitis prevention, screening, and the injection of the hepatitis B vaccination. The chapter on thyroid diseases of superficial organs highlights the clinical manifestations and ultrasound imaging of patients with hyperthyroidism, including symptoms such as irritability and crankiness, which can guide medical students they be more patient and gentle with patients with hyperthyroidism and establish a more harmonious doctor-patient relationship in their future work. Protecting female patients' privacy and strengthening medical students' humanistic patient care are key points in the ultrasonography course on breast and gynecological illnesses. Cardiac ultrasonography is crucial for the detection and management of critical patients with conditions such as explosive myocarditis and heart failure during the new coronavirus pneumonia. Students can improve their identity and learning enthusiasm for ultrasound medicine, get rid of their professional sense of inferiority towards ultrasound medicine as an auxiliary department, and develop their professional self-confidence by realizing the significance of ultrasound medicine in clinical practice (Yin & Ding, 2023). Ultrasonic diagnosis technology has become a routine diagnosis method in modern clinical medicine, which has more and more important clinical value in the diagnosis and treatment of clinical diseases. The course investigates the knowledge of ideological and political knowledge in professional knowledge and integrates it into everyday teaching in a flexible manner. However, the process should be natural and logical rather than ambiguous and fantastical.

4.4. Strengthen the Rule of Law Education for Students

Medical schools' curricula are seriously out of balance since educating medical talent frequently involves higher professional standards than training in engi-

neering or the arts (Dai, 2015; Zhong, 2015). A limited percentage of university education is devoted to humanities and rule of law courses, and there is a lack of information regarding the application and interpretation of laws and regulations relating to the medical professions. In addition to excellent medical technology, medical workers trained in this education mode lack the legal knowledge to be responsible for themselves, which may bring medical risks to themselves. For instance, during middle and late pregnancy ultrasounds in obstetrics and gynecology, many expectant mothers will inquire about the sex of the fetus out of curiosity. If the doctor satisfies the woman's needs during this time, it will be illegal and in violation of national laws and regulations that forbid non-medical activities related to fetal sex identification. With the continuous development of society, patients' awareness of safeguarding their rights is gradually strengthening (Huang et al., 2019). If doctors do not have certain legal literacy and ability in the new era, they will not be able to effectively deal with patients' unreasonable or reasonable needs. Therefore, medical students can develop standardized thinking about medical treatment in the classroom, improve the rule of law education, reduce doctor-patient conflicts, and eliminate medical risks through the rule of law education that underlies common clinical cases in the course.

5. The Measures of Integrating Curriculum Ideology and Politics into Ultrasonic Medicine

The two main aspects of the ideological and political teaching reform of the ultrasonography medical course are as follows: On the one hand, it is necessary to strengthen the reform of teachers' teaching consciousness. Teachers are the engineers of the human soul, which is an important factor for the natural integration of curriculum ideological and political education into the classroom. One of the current challenges facing college educators in our nation is that teachers of medical courses hold degrees from medical universities and possess substantial professional knowledge, but they are deficient in humanistic knowledge (Wei, 2016). Medical students are unable to effectively combine professional education with ideological and political education and make use of it to their full potential because the teachers who teach this subject hold degrees from non-medical colleges and are skilled at imparting this knowledge. However, they do not possess an in-depth comprehension of medicine. Only by strengthening the theoretical training of ideological and political theory to professional teachers can we ensure the synergy between ideological and political education teaching and ideological and political theory courses (Zhang, 2021). As a result, educators ought to receive their education before everyone else (Ma et al., 2018). First and foremost, educators must rethink how they approach teaching. This includes a fundamental shift in the understanding that political and ideological education is now the essential duty of all instructors of professional courses, not just those who teach courses in these subjects. Teachers can only become more effective leaders of students' knowledge, skills, and value shaping by enhancing the comprehensive

quality and taking on the role of the communicator of ideology, values, and culture in the modern period.

On the other hand, it is vital to enhance the research of the educational program: The course of ideological and political education is not simply to add another ideological and political course, nor to mechanically add some general ideological and political elements to specialized courses according to the text, but to master the knowledge of ideological and political knowledge, conduct in-depth research on the teaching plan, and specifically study the goal of ideological and political education for each chapter and each knowledge point. Excavate from all aspects of professional knowledge and naturally integrate ideological and political elements, so that professional courses can play a broader functional value of educating talents and people, and lead students to develop morally, intellectually, and physically.

6. Conclusion

To sum up, the ultrasonography medicine curriculum is an important instrument for political thinking and teaching because it is full of critical thinking elements. Concerning the ideological and political teaching reform of ultrasound medical courses, teachers of specialized courses still must seek out the most effective teaching strategies as well as the particular objectives of ideological and political education in ultrasound medical courses. They should also work to better integrate ideological and political education throughout the entire ultrasound medical teaching process to develop highly qualified medical professionals for the nation.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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