

Practice and exploration of ideological and political model in the functional experimental course of “Learning Thinking and Practicing Enlightenment”

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Abstract: Ideological and political education in colleges and universities is integrated into the whole teaching process, emphasizing the dual functions of knowledge imparts and value guidance in education. The course ideology and politics in medical education can help lead college students to set up correct world view and values, and cultivate talents with all-round medical spirit. Based on the characteristics of basic medical experiment teaching, this study uses the scientific principle and method of “learning thinking and practicing understanding” to build the ideological and political model of functional science curriculum. With the development of students as the center, through the mixed teaching method, it carries out practical exploration from three aspects: building the “main force” of teachers, adhering to the “main battlefield” of curriculum construction and making good use of the “main channel” of classroom teaching. To provide new ideas and new paths for the reform of curriculum ideological and political integration practice teaching.

Key words: Functional experiment; Learning Thinking and Practicing Enlightenment; Curriculum thought and politics; Instructional design

The foundation of colleges and universities lies in moral cultivation, and comprehensively promoting curriculum ideology and politics is a strategic measure to implement the fundamental task of moral cultivation and human development. Functional experiment is an experimental course integrating physiology, pathophysiology and pharmacology, which plays an important role in the practice of ideological and political education. The Functional Experiment Teaching Center of Harbin Medical University relies on the platform of the national basic medical experiment teaching center, adheres to the teaching mode of “student development as the center”, explores the curriculum ideology and politics of experimental teaching, and implements the ideological and political mode of functional experiment course “Learning Thinking and Practicing Enlightenment” which meets the training requirements of the school’s new medical talents. And in the hope of providing a reference for other professional courses of ideological and political curriculum.

1. “Learning Thinking and Practicing Enlightenment” is integrated into the theoretical basis of curriculum thinking and politics

1.1 Curriculum ideological and political concept of “Learning Thinking and Practicing Enlightenment”

In “Learning Thinking and Practicing Enlightenment”, “learning” refers to learning various theoretical knowledge, and “thinking” refers to thinking about the learning content, and finally applying the results of “thinking” to “practice”, and then obtaining “enlightenment” from “practice”. “Enlightenment” is a process of summary and reflection, and also an important link for continuous improvement. The principle and method of “Learning Thinking and Practicing Enlightenment” have universal applicability, and have been widely applied and practiced in ideological and political education and ideological and political courses. Based on this, the course team embedded this spirit in the construction of the curriculum system and operation mode of functional experimental science, and explored a brand new path of curriculum ideological and political construction.

1.2 The curriculum ideological and political mode of “Learning Thinking and Practicing Enlightenment” takes student development as the center

It is different from the imparting and learning of theories in the course of thinking and politics, but lies in the enlightenment of thoughts and emphasizes the improvement of professional quality. The ideological and political mode of “learning, thinking and practicing enlightenment” takes students’ development as the center and emphasizes that students are the subject of the whole teaching activity. Students apply the existing learning resources to comprehensively analyze and solve problems and improve their comprehensive ability. In the ideological and political mode of “learning, thinking and practicing Enlightenment”, students are the main body. Teachers should give timely feedback to students according to their psychological development laws, dynamic changes of ideas and mastery of professional knowledge, encourage and affirm their innovative spirit of courage to explore, and comprehensively improve their practical ability to solve practical problems.

2. The teaching design of ideological and political mode of “Learning Thinking and Practicing Enlightenment” functional experimental course

Adhere to the “main battlefield” of curriculum construction. The course team has integrated the ideological and political model of “Learning Thinking and Practicing Enlightenment” functional experimental course into the course construction. According to the requirements of each link of “Learning Thinking and Practicing Enlightenment”, it contains various specific contents, forms and carriers,

including course platform construction, target design and teaching syllabus revision, and runs through all links such as classroom teaching, teaching discussion and homework feedback.

2.1 Build a digital simulation platform

In the online virtual simulation experiment, we focus on strengthening the humane education of doctors. While cultivating students' hands-on ability, we guide students to always put people's life safety and health in the first place; After the completion of the experiment, through the students to discuss the experimental results, training students communication, communication and expression skills, to respect life, respect patients, improve students' comprehensive quality and humanistic cultivation, to be a good doctor trusted by the people.

2.2 Revision of course syllabus

The course team fully explored the ideological and political elements of the course itself, paid attention to the effective integration of professional goals and ideological and political goals, explicit education and implicit education, and carried out the teaching design of knowledge goals, ability goals and accomplishment goals in three dimensions according to Bloom et al. 's teaching goal classification theory. Revised the teaching syllabus, focusing on in-depth exploration of quality objectives, forming school, college and discipline characteristics of the ideological and political content, to promote students to campus culture and patriotism love the people love the school feelings, improve students' humanistic quality.

2.3 Integrate into typical characters around

According to the particularity of the experimental course of kinesiology in the construction of new medical science, the team teachers discussed, summarized and improved the Collection of Ideological and Political Cases of the Course (2nd edition), focusing on exploring typical characters around them as positive education cases, such as integrating the report of Gao Songyong, an outstanding alumnus of our school, saving a drowning woman, and Zhao Jingha, a graduate, kneeling down to save the popular circle of friends of tourists at the West Railway Station.

2.4 Evaluation reflects the quality goal

The curriculum team evaluates the teaching effect from the perspective of knowledge goal, ability goal and quality goal, and selects the teaching evaluation method of "formative evaluation". Students' performance in the flipped classroom, group experiment discussion and experiment report writing were comprehensively evaluated, and the students' knowledge and ability were timely fed back with language and text. Through questionnaires, the course can timely understand the teaching information of teachers and the experience of students' thinking improvement. The course team sorts out and counts the keywords mentioned in students' self-evaluation, mutual evaluation and experience, and carries out word frequency analysis to observe the achievement degree of the accomplishment goal of the course design.

2.5 Expand ideological and political thinking in the second class

According to the teaching characteristics of functional experiments, students should be trained to use experimental animals for scientific research, enhance the concept of science and technology power, and enhance the sense of mission and responsibility. Every year, the "Experimental Animal Day" series activities are held. Students express their gratitude to experimental animals by writing essays, reciting poems and making videos.

3. Practical application of ideological and political model of "Learning Thinking and Practicing Enlightenment " functional experimental course

Make good use of classroom teaching "main channel". Curriculum thought and politics is not a simple combination and superposition of functional experiment and thought and politics, the key is to respect students' main position in learning activities. The ultimate goal of comprehensive curriculum ideological and political teaching reform is to give full play to the function of practical education, cooperate with ideological and political courses, jointly improve the teaching effectiveness of medical colleges, and better play the experimental course and ideological and political theory courses in the same direction, forming a synergistic effect.

3.1 Be diligent in study

Classic case reading, study of important policy documents and video learning materials in the course; The Edinburgh Declaration is introduced in the course content section. Through independent learning, students make it clear that medical students will become an attentive listener, careful observer, keen conversationalist and effective clinician, rather than being satisfied with only treating certain diseases; Students learn the national virtual simulation experiment teaching first-class course "Electrocardiogram Basic and Clinical", through watching videos of virtual people, how to give patients electrocardiogram in clinical, improve their doctor-patient communication ability and practice ability of electrocardiogram. Through practical observation of the difference between normal and abnormal electrocardiogram, improve students' ability to correctly understand problems, analyze problems and solve problems.

3.2 Be quick to think

Students should dare to think, want to think and be willing to think, and guide students to discuss topics such as "How to integrate basic knowledge". The experimental teaching of functional science has its comprehensive practicality. For example, in the experiment of acute moderate hemorrhagic shock, the teacher guides students to construct thinking and brain map, synthesize knowledge of various disciplines, and introduce ideological and political content of the course to cultivate students' scientific research thinking. Improve students' level of linking theory with practice, give full play to their autonomy and creativity, cultivate the spirit of continuous exploration and innovation, understand the social value of innovation, and enhance their sense of responsibility, mission and achievement.

3.3 Dare to practice

After the completion of the experiment, students carry out routine teaching experiment courses in the form of individuals or groups, summarize and report the experiment content, and carry out innovative design experiments according to what they have learned, so as to enhance students' practical operation ability, innovation spirit, creative consciousness and entrepreneurial ability. Nurture excellent works to participate in college students' innovation and entrepreneurship projects and "Internet +" and other innovation and entrepreneurship competitions. In the process of experimental operation, teachers always pay attention to students and guide them in the way of "micro-thinking and politics". In the process of practice, they pay attention to guidance at any time, timely feedback and imperceptible, and strive to achieve the "salt dissolves in water" of curriculum thinking and politics in the form of penetration, experience and reflection.

3.4 Good at understanding

After class, collect students' learning experience after writing lessons, short videos and paintings of protecting experimental animals. After the course, the teacher collected the experiences of 216 students majoring in clinical medicine, preventive medicine and pharmacy from grade 2019 to grade 2021 in the study of functional learning experiment, and effectively replied the 216 experiences and experiences in an open and anonymous way. Among the students' gains from the perspective of thought growth, the statistical analysis of high word frequency showed that: in 2019, 2020 and 2021, the percentage of scientific research thinking accounted for 70.3%, 81.9% and 81.3% of the total number of questionnaires, respectively; The percentages of high frequency words were 75.7%, 80.9% and 83.3%, respectively. Medical spirit accounted for 47.3%, 68.1% and 54.2%; The oath of medical students accounted for 40.5%, 52.1% and 60.4%; Harbin Medical University gene 67.6%, 61.7%, 56.3%. In the class that did not carry out the ideological and political mode of functional experiment "Learning, thinking and Practicing Realization" course, 242 students of clinical medicine, preventive medicine, pharmacy and other majors from 2016 to 2018 had their experiences and experiences, and 242 valid responses were collected. In the class of 2016, 2017 and 2018, the proportion of scientific research thinking was 60.8%, 66.7% and 65.2%, respectively; Experimental animals accounted for 89.2%, 72.9% and 79.2%, respectively; Medical spirit accounted for 36.5%, 33.3% and 40.3%; The oath of medical students accounted for 40.5%, 40.6% and 37.5%; The gene of Harbin Medical University was 41.9%, 52.1% and 50%, and the analysis of GraphPad Prism 6 showed that the high frequency words of scientific research thinking, doctors' spirit and Harbin medical university gene had statistical significance (*P<0.05). Through the analysis of high-frequency words, the practice of ideological and political mode in the course of functional experiment "Learning Thinking and Practicing Enlightenment" is conducive to students' thinking after practice, the achievement of quality goals, and the integration of ideological and political thinking in the course.

4. Epilogue

The four links of "learning, thinking and practicing enlightenment" of the ideological and political course of functional experiment are linked and opened up one by one, so that teachers and students can achieve the unity of knowledge and practice in this comprehensive training, teaching and learning, and it is also conducive to the achievement of the goal of functional experiment literacy. Using the methods of learning and thinking, thinking and practicing, practicing and realizing, and realizing and spiraling improvement, students are guided to practice, feel, explore and summarize, and internalize the external universal law into a personal unique idea through the spark of consciousness and smart practice. Let contribution to social development and achievement of personal value integrate into one, complement each other, so that the implementation of curriculum ideology and politics and teaching experiment teaching complement each other, moisten things silently. The disadvantage of this study is that it only makes longitudinal comparison without horizontal comparison with parallel classes. In future studies, attention should be paid to carrying out diversified questionnaires and improving the research of curriculum ideological and political teaching mode.

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