Constructing the ideological and political teaching system of the Trinity course of “Classroom-Mooc-Experiment”-taking the basic course of computer software as an example

Yousheng Wang
Faculty of Information Technology Beijing University of Technology, Beijing, China

wangyousheng@bjut.edu.cn

Abstract. In the current pattern of "three comprehensive education" in universities, we will carry out teaching mode reform and innovation with "learning activities as the main line", and explore the "OBE+online open course" model; By optimizing the construction of existing online open courses, adhering to the guiding ideology of "student-centered", combining the characteristics of disciplines and majors, and integrating Chinese cultural elements; At the same time, using the course "Fundamentals of Computer Software" as the carrier, comprehensively practice the research results of this project.

Keywords: education and teaching; Curriculum ideological and political education; Open courses; Establishing Virtue and Cultivating Talents.

1 Introduction

Promoting the construction of curriculum Civics is an important task in the current reform of talent cultivation in colleges and universities. The Guiding Outline for the Construction of Curriculum Ideology and Politics in Higher Education issued by the Ministry of Education in 2020 further clarifies the requirements and paths for the construction of curriculum ideology and politics\(^{[1]}\), and opens a new pattern of comprehensively promoting the construction of university curriculum and ideology, and comprehensively improving the quality of talent cultivation. The construction of curriculum Civics is a comprehensive reform of the curriculum system, teaching content and teaching methods, focusing on the synchronicity and value-meaning isomorphism between teaching and educating people. At present, it is found that the ideological and political construction of university courses is limited to the systematic nature of the curriculum itself, and most of them focus on the construction of elements such as meaning, content, methods, and paths\(^{[2]}\). The basis of an ideological and political education program lies in its implementation, and its effectiveness is reflected in the quality of teaching and talent cultivation\(^{[3]}\). Only further into the overall pattern of curriculum construction and integrated into the complete curriculum teaching system,
curriculum ideological and political can effectively promote the substantive improvement of curriculum teaching quality\(^4\).

The computer software foundation course is a core professional foundation course for undergraduate students majoring in electronic information. Cultivate talents for the Party and the country by focusing closely on the fundamental task of establishing moral education, and combining the characteristics of disciplines and majors in the school's "Three Comprehensive Education" work pattern, we teach with a focus on integrating ideological and political content into the curriculum\(^5\), constructing a comprehensive ideological and political system with good results and achieving certain results. At the same time, improve the theoretical and practical teaching resources of the program in accordance with the requirements of the Shared Course of Excellence and MOOC, incorporating professional knowledge points and elements of ideological and political education, and build multi-level and comprehensive online course resources with rich professional knowledge and suitable ideological and political elements.

2 Reform of ideological and political education in curriculum based on OBE concept

The core concept of OBE can be summed up as “Output-oriented, student-centered, continuous improvement”. Effectiveness refers to the clear learning results that students are expected to show after learning experience. With the help of Internet and App, we can provide students with abundant learning resources, input the contents of ideological and political education, and help them to set up correct world outlook, life outlook and values.

2.1 Implementing blended teaching and strengthening the tracking and guidance of students' ideological and political learning status in the curriculum

The blended teaching approach of "offline teaching+online learning" can provide students with personalized curriculum design for ideological and political education tailored to the characteristics of their respective majors. Teachers moderately integrate the ideological and political content of the course with professional knowledge through teaching design, and publish thematic discussions related to the knowledge points of professional courses. Students discuss online based on their own professional characteristics, and teachers provide comments, avoiding simple preaching, which is more conducive to students' comprehensive development and moral education. Teachers can also monitor classes in real-time, keep track of students' learning progress, and understand changes in students' learning situations. After students make reasonable use of the preview process, teachers analyze the big data of the learning situation to identify the difficulties and weaknesses in the process of ideological and political education for students, and detailed analyses to improve the effectiveness of ideological and political education.
2.2 Clarify the goals of ideological and political education in the curriculum and fulfill the mission of "cultivating morality and cultivating talents"

Based on the OBE concept for teaching design, the educational philosophy of "ideological and political education and moral education" is used as a guide to reform the teaching of the curriculum. Through curriculum design, elements of ideological and political education, such as patriotism, cultural confidence, and personal quality cultivation are organically combined with professional and cultural knowledge transmission to promote students' comprehensive development and fulfill the educational mission of cultivating morality and talent.

2.3 Adding Chinese cultural elements and enriching ideological and political education in the curriculum

The hybrid teaching model combining "offline teaching+online learning" can effectively solve the problems that arise in traditional teaching. In blended teaching, before class, students first carry tasks to complete online learning activities. They can use their mobile phones or computers to preview or review the learning tasks uploaded or published by teachers, including cases of ideological and political topics in the curriculum, videos, audios, PPT courseware, books, etc. containing elements of Chinese culture. Ideological and political content subliminally enters students' minds; In offline classrooms, teachers carry out teaching activities such as homework feedback and Q&A, while students engage in various forms of work display, collaborative improvement, and other classroom activities. The combination of various forms enables the ideological and political content of the course to be both externalized and internalized.

3 Constructing the "Classroom+MOOC+Experiment" Trinity of Curriculum Ideological and Political Education System

Explore the construction of an offline and online hybrid teaching system that integrates ideological and political courses "classroom + MOOC + experiment", the implementation of the "moral education" fundamental task, and constantly improve the affinity and effectiveness of ideological and political theory courses.

3.1 Grasping the Main Channel of Ideological and Political Education in Curriculum - Classroom Teaching

Classroom teaching is the main channel and battlefield for exerting the function of "cultivating morality and cultivating people", teaching content is always the core and key of classroom teaching. Therefore, it is particularly important for professional course teachers to grasp and refine the content of ideological and political education in order to have a good class. In the teaching process of professional courses, by
strengthening the cultivation of students' correct learning awareness, students can focus on the development characteristics of education, society, and ideology to enhance their learning abilities. In the context of the ideological and political education concept of the curriculum, it is necessary to guide students to correctly carry out the relevant tasks of professional course learning through the form of ideological and political education, and avoid being influenced by external negative culture and thoughts. The integration of the teaching of professional courses with the content of ideological and political education can reflect the guiding role of ideological and political education, transform students' understanding of incorrect values and outlook on life, enhance students' understanding of the connotations and values of professional courses, and consciously abandon negative thoughts and incorrect values under the guidance of ideological and political education.

3.2 A new form of ideological and political education in innovative programs - MOOC Teaching and Learning

Due to the time and space constraints of classroom teaching, using online teaching platforms to build a digital learning environment and expand the network's second classroom - MOOC can better assist in the teaching needs and development of professional courses. Teachers not only play the role of teachers in the classroom, but also act as "virtual mentors" in the virtual learning space, which strengthens the teacher-student relationship. In addition, the course teaching management functions of virtual mentors and online platforms can also help effectively monitor and evaluate students' teaching processes. Reform of the summative assessment method, which is mainly based on the final examination, emphasis student-centredness, focuses on the learning process, relatively weakens final grades, and develops into a humane, comprehensive and motivational assessment method.

3.3 Expanding the Extension of Ideological and Political Education in Curriculum - Experimental Teaching

There is a contradiction between the implementation of ideological and political courses and the already tight theoretical course hours. If we can utilize relatively loose experimental class time or the objectively existing waiting time in experimental classes, and use carefully designed typical experimental projects as carriers to organically integrate and assist theoretical knowledge, experimental operations, and ideological and political education, and construct an educational model combining theory, experiment and ideological and political education, we can truly implement the guiding ideology of "comprehensively promoting ideological and political education in all disciplines and majors" proposed by the Ministry of Education. It is necessary to carefully set up experimental content, transform the concept of experimental teaching, expand the experimental teaching system, and explore the ways of ideological and political education in experimental classes.
4 Using computer software foundation courses as a carrier to comprehensively practice research results

Using computer software foundation courses as the carrier, comprehensive practice of the trinity ideological and political classroom teaching system, MOOCK, and experiment courses.

4.1 Adhering to the ideological and political orientation of curriculum and promoting the reform of curriculum system

There are two things that need to be done well in the reform of the curriculum system centered on the construction of ideological and political education in the curriculum. One is benchmarking, which means understanding the spirit of the document thoroughly. The curriculum bears the responsibility of educating people and should play a good role in educating people. Clarify the meaning and tasks of carrying out ideological and political development of the curriculum. The second is development, which means actively seeking the optimization path of curriculum structure and deeply developing curriculum knowledge. It focuses on the unique perspective, theory, and methods of the discipline, closely combining the historical logic, knowledge logic, and value logic of the discipline to innovate the discourse system of professional courses, striving to excavate and extract the ideological value and spiritual connotation contained in the professional knowledge system, expanding the breadth and depth of professional courses, and enhancing the leading role of the curriculum Timeliness and openness.

4.2 Optimize teaching content and methods around the teaching requirements of ideological and political courses

Curriculum-based ideological and political education is based on the implementation of specific curricula, and ideological and political education can only have a foundation if the curriculum is taught well. Curriculum ideological and political education is not a mechanical transplantation of general methods of ideological and political education into curriculum teaching, but rather a natural occurrence based on teaching and integrated with teaching content. Promoting the construction of ideological and political education in courses and optimizing the teaching content and methods of courses has the characteristics of homogeneity and interactivity. In the face of practical problems of teaching, the construction of ideological and political education on the curriculum necessarily involves the innovative reconstruction of teaching content and methods, and the careful resolution of drawbacks such as arbitrariness, superficiality, fragmentation, and low value in course teaching. Obviously, the concept, methods, and requirements of curriculum ideological and political education have a multi-dimensional breakthrough and generative effect on transforming outdated and outdated teaching content and methods.
4.3 Optimizing the construction of online open courses based on the implementation of ideological and political education in courses

The construction and application of online open courses should not simply "move" from within the classroom to outside the classroom, but actively explore blended teaching reform methods. Emphasis is placed on optimizing the selection of course content through new thinking, methods, and optimizing the design and implementation of course teaching methods through new teaching methods. This will enable the course to showcase a broader perspective, deeper connotations, and more distinctive content system, making it easier for students to learn, thereby stimulating their learning vitality and motivation.

5 Conclusion

Focusing on student development, conducting blended learning reform and innovative research, exploring the "OBE+online open course" model; Making moral education a fundamental task, by optimizing the construction of existing online open courses and combining the characteristics of disciplines and majors, integration of the "ideological and political" content is included in the curriculum in the design of syllabi, lesson plans and teaching methods; And based on typical experimental projects, we will expand the extension of curriculum ideological and political education, reasonably design the teaching content, enrich the form of curriculum ideological and political education, build a "classroom+MOOC+ experiment" trinity of curriculum ideological and political education system, effectively carry out ideological and political education throughout the whole process of teaching, and comprehensively push forward the thought of socialism with Chinese characteristics in the new era into the experiments, classrooms, and minds, so as to educate people for the Party and the country.

Acknowledgements

This paper was funded by the Education and Teaching Research Project of Beijing University of Technology(ER2022SZB02), the "Curriculum Ideological and Political" Demonstration Course Cultivation Project of Beijing University of Technology(KC2022SZ014), the 2023 Beijing University of Technology Graduate Excellent MOOC Construction Project, and the 2022 Graduate Curriculum Ideological and Political Construction Project of Faculty of Information Technology Beijing University of Technology.
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