

Exploration of the Practice of Ideological and Political Teaching in 'Information Technology' Course Guided by Enhancing Vocational Literacy

Liu Jing

*Yunnan Open University, Kunming, China
395966776@qq.com*

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Abstract: Information technology has become the main driving force for each country's economic and social transformation and development, and it is necessary to promote the cultivation of talent and the development of modernized countries in the new era. As a public introductory course and compulsory course in higher vocational education, the Information Technology course is significant to students' personal life, study, and future career development. In the process of teaching practice of information technology course, the course's political teaching can be integrated into the whole process of teaching by clarifying the teaching objectives, optimizing the course's political teaching content based on the actual teaching situation, introducing a variety of teaching modes to improve the effect of the course; strengthening the construction of politics resource base to enrich the course politics situation, and constructing the assessment and evaluation mechanism to enhance the level of assessment of the learning effect. We should take the analysis of the learning situation as the basis, combine the nature and characteristics of the course, take the cultivation of professional knowledge and technical skills as the main line, and closely combine the course content to find the point of Political mapping and integration, strengthen the cultivation of students' vocational literacy and vocational ethics, and help them to become qualified citizens in the digital era.

1. Introduction

Information technology covers a variety of technologies, such as information acquisition, representation, transmission, storage, processing, and application. Information technology is the main driving force of economic and social development. It is the primary support for building an innovative country, a manufacturing power, a network power, a digital China, and an intelligent society. Enhancing national information literacy and strengthening individual adaptability and creativity in the information society is of great significance to the life[1], study, and work of individuals, as well as to the comprehensive construction of a modern socialist country. Information technology courses are essential and compulsory courses in higher vocational education. The curriculum development process mainly focuses on the four disciplinary core literacies of information awareness,

computational thinking, digital innovation and development, and information social responsibility[2]. It carries out the course's theoretical knowledge learning, skills training and comprehensive application practice for students. The aim is to enhance students' information awareness, improve computational thinking, promote digital innovation and development, establish correct information society values and a sense of responsibility, and lay a foundation for their career development, lifelong learning and service to society through the teaching of the curriculum[3].

The information technology course contains rich contents of course ideology and politics, for example: by showing China's achievements in the field of computers, it enhances students' national pride and self-confidence and stimulates students' innovative consciousness and the concept of strengthening the country with science and technology; the system view is reflected in the cooperative work of hardware and software; the impact of computers on life and learning shows the idea of dialectics; the data processing of WPS forms reflects the rigorous scientific style, which can strengthen the shaping of students' craftsmanship and so on. In the process of knowledge transfer, it is necessary to fully explore the professional characteristics and advantages, refine the cultural genes and value paradigms embedded in the course, transform them into effective teaching carriers for the concretisation and vividness of socialist core values, and make full use of the resources of the Political Science course to influence and educate students silently.

In addition, in view of the nature of this course as a basic and public course, the teaching process should consider the articulation of students' learning in subsequent courses. The in-depth knowledge of corresponding modules can be strengthened according to the requirements of different majors to lay a good foundation of information technology for the learning of subsequent professional courses. In selecting the objectives of constructing the politics of the curriculum, we also try our best to carry out personalised design for different professional needs to strengthen the cultivation of relevant professional qualities and professionalism of different majors.

2. The implementation path of the course Ideology and Politics teaching

In the teaching process of the "Information Technology" course, we must be able to combine the nature and characteristics of the course, in accordance with the cultivation of professional knowledge, skills and technology as the main line, and on the basis of analysis of learning conditions, closely combine the course to identify the correct ideological and political points and maximize the educational function of the course.

The following steps will be used to implement the teaching.

2.1. Develop a questionnaire to clarify the direction of the construction of course ideology and politics

At the beginning of the course, in order to set the teaching objectives, the questionnaire can be used to carry out the analysis of the learning situation, all-round comprehensive investigation of the student's basic information, pre-study foundation, current learning needs, learning difficulties and support, etc., in order to further clarify the focus of the teaching of the information technology course, and to clarify the direction for the selection of the content of the course's politic teachings case.

2.2. Enrich curriculum resources and build a particular area for curriculum ideology and political education

The school creates a specific area for ideological and political teaching resources on the teaching platform, focusing on ideological and political education from professional, industry, cultural, national, world, and historical dimensions by integrating teaching objects, teaching objectives,

teaching plans, and teaching content.

Focusing on the integration and mapping of ideological and political education and professional teaching, we have carefully explored the elements of ideological and political education in the curriculum so as to achieve the effect of moral education by 'making things silent'. The content of the Politics course should be combined with the direction of students' future career development, and on the basis of guiding students to abide by the information ethics, it should strengthen the content of the professional ethics of relevant industry practitioners, laws and regulations, advanced stories of the industry, hot topics of current events, new developments in information technology and other resources, so as to guide the students to become qualified citizens with good professional qualities and professional ethics in the digital era. Examples of resources in the Politics area of the course[4]: in the teaching of the chapter 'WPS Word Processing', through the introduction of the origins of Chinese characters, Chinese input methods, etc., students can be promoted to further strengthen their cultural self-confidence and technological level; in the chapter 'WPS Forms', through the data functions of WPS Forms, students will be able to learn about the functions of WPS Forms and the contents of WPS Forms. In the chapter of 'WPS Forms', through the statistical analysis function of the data function of WPS Forms, we can refine cases with the theme of ancient poems to guide students to love the traditional culture of our country; in the chapter of 'Big Data', through the actual scenario of the big data of Yunnan Province's floriculture industry, we focus on the development of China's digital economy, and encourage students to integrate the small into the big, and actively participate in the construction of the country; In the 'information security' chapter, before the students carry out the practical task of configuring 360 antivirus software, through the introduction of '360 enterprises to practice digital security to protect the national information security' as a case study to expand, improve the students' sense of conviction of scientific and technological strength of the country. It also stimulates students' patriotic feelings and national pride, guides them to strengthen their professional learning, improve their professional ability and professionalism, and contribute to the country's prosperity and national rejuvenation.

2.3. Focus on the effectiveness of human education and strengthen the content of practical teaching sessions

Teachers can integrate elements of ideological and political education into classroom teaching, case studies, and other aspects. Integrate ideological and political education throughout the entire teaching process, guide students to discuss hot issues, and strengthen the education of students' excellent ideological consciousness such as patriotism and innovative spirit. The programme also enhances students' professionalism in rigour, pragmatism, innovation, perseverance and perseverance. This teaching method also cultivates students' scientific spirit and rigorous attitude, accurately positions ideological and political education courses, and improves teaching effectiveness.

3. Political teaching design of the course

Political teaching design of the Information Technology course should be based on the learning situation, determine the teaching objectives, be student-centred, emphasize the 'combination of learning and training, a combination of lessons and certificates, combination of quality and ability', take into account the teaching of knowledge, skill cultivation, literacy and value guidance, and systematically select and condense the teaching cases from the perspectives of digging out the elements of politics, integrating them into the elements of politics, and evaluating their effects.

3.1. Define the teaching objectives and integrate the Politics of the curriculum into the whole process of teaching

In the process of designing the teaching of politics, on the basis of clear teaching objectives, politics are organically integrated into each teaching link with the professional content of the course. Taking the information security chapter as an example, based on determining the teaching objectives of information technology courses, teachers integrate ideological and political courses into the entire teaching process in combination with students' actual situations, thereby cultivating students' awareness of information security, information ethics, and scientific and technological awareness. For example, in the introductory part of the course teaching, students can be guided through the introduction of personal information security-related cases and famous public information security events around them to enhance students' interest in learning, trigger students' independent thinking, and further enhance students' awareness of self-prevention of information security. In the process of exploring new knowledge, computer viruses, network hackers, privacy leakage and other knowledge points are introduced to help students enhance their awareness of laws and regulations and strengthen their belief in compliance with the law; in the process of introducing the role and working principle of firewalls, the "case of medical personnel building a firewall of health for the people during the period of resistance to epidemics" is cited to guide students to establish a high sense of responsibility. In the case teaching section, teachers help students establish correct information security awareness through cybercrime cases; Teachers complete the practical task of "National Anti Fraud APP Installation and Registration" through group cooperation, helping students enhance team awareness and cooperation spirit; In post class exercises, by reading the external book "Comrade Lei Feng: I am willing to be a screw forever", students are guided to learn Lei Feng's craftsmanship spirit and apply it to their future work.

3.2. Based on the realistic teaching situation, actively optimise the teaching content of the political course

The construction process of course ideology should be based on the teaching materials without being limited by the teaching materials. Most of the current teaching materials are not designed with solid course ideology teaching content, which requires the teachers to improve the content of course ideology based on the characteristics of the actual teaching and learning situations and to reconstruct further and optimise the course. For example, the primary content of the textbook in the chapter on information security mainly consists of three parts: an overview of information security, information security threats, and information security technology. In the course design process, the content can be further optimised and adjusted according to the following links based on the textbook setting and talent training programme. First of all, for common information security problems, the relevant legal knowledge is added to enhance the legal awareness of students further; according to the results of the analysis of the learning situation, to accurately grasp the key points of the course, delete the length of the introduction of non-focused content, increase the critical chapters of the explanations; to strengthen the practical aspects of the task set, highlighting the nurturing effect of the one course; carefully select the course of the ideology and politics of the case, to ensure that the theme of the case with the organic combination of chapter knowledge points.

3.3. Introducing various teaching modes to improve the effect of the course's ideological and political cultivation

Regarding teaching design, an 'online and offline combination' can be adopted by the 'Pre-lesson introduction - explore new knowledge - strengthen practice - timely summary - supervise the

application'. Throughout the entire teaching process, students are the main body. Teachers can choose vivid teaching content based on the characteristics of the curriculum and students' values, helping students understand and identify with the core values of the curriculum, and internalize them into their own ideological consciousness. In addition, teachers should fully mobilize students' learning enthusiasm, guide them to think and discuss more, and design multiple practical tasks to help students improve their practical abilities [5].

3.4. Strengthening the construction of the Political Resource Base and enriching the context of Political cultivation in the curriculum

The teaching team can build and share the Politics Teaching Resource Library of Information Technology Courses by focusing on the content of the key chapters of the courses. The resources are presented in various forms, such as text, web pages, courseware, pictures, videos[6], etc., to enhance students' interest in learning further and improve the teaching effect.

3.5. Constructing assessment and evaluation mechanism to improve the assessment of learning effect

The course construction fully applies the combination of formative and summative assessments, focusing on the role of assessment and evaluation in the learning process at all stages. Firstly, students' basic knowledge and skills can be assessed through classroom performance, homework, stage extensive homework and final online test; secondly, students' comprehensive ability can be evaluated through practical operation, project reports and group discussion; finally, students' learning effect can be comprehensively assessed through students' self-assessment and teachers' evaluation. Regarding technical means, 'Learning Channel' and 'WPS Vocational Skill Level Exam Simulation Test' software are applied to participate in the review, which further enhances the level of intelligence and convenience of the assessment and evaluation.

4. Next Steps

As a public foundation course and compulsory vocational education course, constructing the 'Information Technology' programme is a long way to go. According to the nature of this course, the selection of the objectives of the course's political construction should be individually designed to meet the vocational needs of different teaching majors to strengthen the cultivation of relevant vocational literacy and professionalism. In addition, in the setting of the content of the course, close attention should be paid to the cases around the students, which are closely related to their study and life, to enhance the student's sense of identity, improve the effect of political cultivation, and help the students better realise the goal of applying what they have learnt to their daily lives.

In the process of practical exploration in the future, we can continue to give full play to the role of the information technology teachers and achieve resource sharing by constructing a course teacher pool to form a synergy, give full play to their strengths, and make a breakthrough. At the same time, we can cooperate with social practice and ideological and political resources to strengthen the combination of theory and practice to truly realise the function of educating people. For example, inviting experts in the field of information technology to give professional lectures. Social resources can also be fully utilized to carry out ideological and political practice teaching activities, including red education bases, museums in various places, etc., allowing students to directly visit and learn on-site. Based on enhancing students' interest in learning, the unity of classroom teaching and practical teaching can be achieved to improve the effectiveness of political education further.

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