Research on the Teaching of "Digital Electronic Technology" Integrated into Curriculum Ideology and Politics

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Abstract: In order to realize"Setting up morality and cultivating talents", this paper has organically embedded education elements in the teaching syllabus, teaching content, teaching methods and course assessment, changed the traditional teaching methods of professional courses, reconstructed the teaching system which integrates ideological and political education, professional knowledge education and ability cultivation, and implement this educational idea in the whole teaching process.

Keywords: Digital Electronics Technology;Imparting Knowledge; Ability Development; Lideshu People

"Digital Electronic Technology" is a basic course for electronic and computer majors in our school. It has many knowledge points, strong theory and practice, and wide application. There are more than 400 students who choose courses every year. The ideological and political influence has a wide range, which can play the effect of moral cultivation, Therefore, it is necessary to carry out ideological and political construction of the curriculum. When teaching professional knowledge to students, ideological and political elements should be embedded to help them form a correct world outlook, outlook on life and values, and cultivate their scientific thinking, innovative consciousness and craftsman spirit.

1. Current state of teaching

The current ideological and political education and professional education teaching "two skin" phenomenon is still serious, the traditional ideological and political education generally adopts the teaching mode combining theory teaching and supporting exercises, students in the classroom are less active and have a higher phubbing rate; Most of the traditional professional courses only pay attention to the imparting of professional knowledge and training of professional skills, but pay little attention to students' state of mind and mental state As a result, they fail to achieve the ideal effect in establishing virtue and educating people. What kind of classroom ideological and political teaching system should be constructed in specialized courses is an urgent problem for colleges and universities.

2. Research on the teaching of "digital electronic technology " integrated with curriculum ideological and politics

2.1 Integrate ideological and political ideas into the syllabus

In the ideological and political construction of "digital electronic technology" course, the course syllabus should first be revised according to its course nature, ideological and political meaning and the teaching experience accumulated by the course group over the years. The new syllabus is the organic integration of educational elements and professional knowledge. In the syllabus integrated with educational elements, students should master the theoretical knowledge and professional skills of the course, establish professional confidence ; The students' usual scores are linked with pre-class preview, class performance, class check-in, in-class tests and homework, so as to cultivate their serious and rigorous learning atmosphere; Teachers select appro-

priate themes and content, and connect with the current development of Huawei electronic chips and 5G technology to guide students to establish lofty ideals and patriotic feelings, and cultivate their concept of big project and innovation consciousness; Dig the science and scientist stories in the background of the course, use the power of celebrities to train students to be not afraid of difficulties, rich in the spirit of sacrifice and dedication, and become talents with both ability and integrity who win honor for the country.

2.2 Integrate ideological and political elements into teaching methods

In order to achieve all-round education, teachers should re-examine the positioning, teaching objectives and teaching effects of Digital Electronic Technology in the curriculum system, fully integrate education elements into the teaching content and methods, and realize the professional courses and ideological and political theory courses in the same direction. Before class, teachers publish tasks on the teaching platform, and students search for materials on the Internet and complete pre-class tasks independently or by helping each other, so as to improve students' self-learning ability and ability to search for materials. In the course of teaching, according to the completion of pre-class tasks, the teacher will explain the taught knowledge in a targeted way, highlighting the key points, using independent learning, case analysis, practice training, group discussion and other teaching methods, constantly ask questions, so that students can master professional knowledge while cultivating their dialectical way of thinking and scientific world view; In practical teaching, simulation software or experiment box is used to complete practical teaching projects in groups to cultivate students' teamwork ability and communication ability;. Arrange students to visit enterprises in related fields to stimulate their enthusiasm for learning and interest in scientific exploration; Discussion, homework and chapter tests are published on the network teaching platform to deepen the understanding and mastery of knowledge points.

Table 1 Teaching methods integrating ideological and political ideas

Education module	Teaching methods
Before class	Teachers publish tasks through learning APP and QQ; Students find materials and submit assignments; The teacher checks the degree of completion of the assignment.
In class	Qr code check-in; Share tasks by random name; Practice in class.
Knowledge	Concept,law,formula,function simplification; Gate circuit and chip function; Logic circuit analysis and design.
Practice	Multisim simulation or experiment box physical connection; Finding data by group, Discussion, analysis; Enterprise visit.
After class	Publish homework in learning APP, chapter test; Understanding and mastering the knowledge point; Submit results.
Summarization	Random inspection; Student evaluation; Teacher's Comments.

2.3 Integrate ideological and political elements into classroom teaching

In classroom teaching, teachers combine the excavated education elements with professional knowledge to form an integrated teaching system of "imparts knowledge, improve ability, and lead by value", so as to improve the quality of teaching and help students establish a correct outlook on life.

Each gate circuit in combinational logic circuit can achieve a specific function, and if they are combined together according to certain design rules, various circuits that meet the functional requirements can be formed, guiding students to correctly view the dialectical relationship between individual and team, home and country, guiding students not only to give full play to the role of individual creativity, but also have a good sense of team and improve team cohesion and comprehensive innovation ability.Through the decoding display of traffic lights introduced into traffic rules, students are guided to know that there are many rules in our daily life,our rights and interests can be protected only by obeying the law . Nothing can be accomplished without rules.

Counter is a commonly used integrated module in sequential logic circuit, it can record the number of pulses according to certain rules, as long as the conditions are met, it's going to keep counting, to make the students set up where there is life, there is the spirit of struggle, establish lofty ideal, and become a new generation striving to realize the dream of a powerful nation. Different devices can design logic circuits with the same function,students are guided to know that although the schools and majors we are studying now are different, they can all contribute to the construction of a beautiful home.

2.4 Integrate education elements into the course assessment methods

The curriculum assessment and evaluation system integrating the elements of education is carried out by modules, and the comprehensive score is composed of three weighted parts: the usual grade, the practical grade and term test score. As shown

in Table 2.

Table 2. Curriculum assessment methods integrated with educational elements

Assessment module	Point of assessment	Assessment content and requirements	Assessment method
Usual grade	Class attendance	1 Sign in or ask questions randomly on the Learning APP (5 points)	Process assessment Teacher evaluation Student mutual evaluation
	Answer the question	2 Level of participation in class discussion, the degree to which you answer the teacher's questions correctly (5 points)	
	Preview before class	3 Searching for information, online video viewing (5 points)	
	Online assignments	4 Assignments and unit tests on the Learning APP (15 points)	
Practical grade	Multisim simulation or experiment box physical connection	1 Safe use of electricity, keep training room clean and tidy(labor education,2 points) 2 Software simulation, continuous debugging, fault finding and troubleshooting, experiment box physical operation(the spirit of analyzing and solving problems, 10points) 3 Answer and verify the completed project(the spirit of excellence, 5 points) 4 Teams work together to complete the project report(teamwork spirit, 3 points)	Process assessment Teacher evaluation Student mutual evaluation
Assessment of theory	Basic theoretical knowledge, comprehensive applied knowledge	Fundamentals of logic algebra, gate circuit and its application, combinatorial (sequential) logic circuits and their applications, flip-flop and its application, 555 timer and its application(50points)	Final examination, Teacher evaluation End of term

3. Conclusion

In view of the current professional courses and ideological and political courses, there is still a phenomenon of "two skins" in the aspect of establishing virtue and educating people, the research group introduced ideological and political elements into the digital electronic technology courses and reformed them from the aspects of teaching syllabus, teaching content, teaching methods and course evaluation methods, so as to form a teaching system integrating "imparting knowledge, improving ability and leading value". To carry out the fundamental task of establishing virtue and educating people.

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