

Design and Practice of Ideological and Political Teaching of "Introduction to Airworthiness"

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Abstract. Curriculum ideological and political education is the basic requirement of the current university personnel training, but also for the party and the country to educate the important way. The core of curriculum ideological and political education is moral education, which is an important subject for whom and what kind of people to train. How to achieve the organic integration of curriculum ideological and political teaching and the close coupling of knowledge points and ideological and political education are not only the basic requirements for teachers, but also the key to test the effectiveness of a course teaching reform. As a required course for airworthiness major, "Introduction to Airworthiness" systematically plans the course ideological and political objectives, carries out the course ideological and political teaching design, follows the teaching ideas of "moral education first, teaching as the leading, learning as the main body", finds the correct value positioning, deeply digs ideological and political elements, and uses ideological and political cases. In the course teaching process, all the staff carried out ideological and political courses, integrated ideological and political elements into the whole process, comprehensively expanded the ideological and political effects, and achieved practical results in strengthening ideals and beliefs, strengthening patriotism, cultivating combat style, helping knowledge learning, and improving comprehensive quality. In teach students professional knowledge and skills at the same time, also planted the seeds education in students' heart, help students set up the correct world outlook, the outlook on life, values, opened the road to success, for the participants to adults, have become "a window", lead students to think deeply about how to khalid, "shall I khalid" to "I want khalid" thought transformation, Form "active moral, comprehensive moral, sincere moral" action consciousness.

Keywords: Curriculum ideology and politics; Ideological and political elements; Ideological and political cases; Teaching design; Khalid education.

1. Introduction

Curriculum ideology and politics are the requirements of college education from the strategic height of "who to train, how to train and for whom to train". As for the significance of ideological and political work in the curriculum, General Secretary Xi Jinping made it very clear at the 2016 National Conference on Ideological and Political Work in Universities: "With a good classroom teaching the main channel, to adhere to in the improvement of ideological and political theory to strengthen and improve ideological and political education and targeted affinity and meet the demand of students' growth development and look forward to, other each lesson is to keep a canal, a kind of good responsibility farmland, make all kinds of courses with the direction of ideological and political theory, form synergies." In [1], in order to fulfill the curriculum ideological and political requirements, domestic colleges and universities have carried out in-depth research and systematic planning, formulated feasible measures and methods, and promoted the curriculum ideological and political integration into practice, which ushered in a new opportunity for development. As a specialized course, How to plan ideological and political goals, how to carry out ideological and political teaching, how to carry out teaching design, how to optimize the path and method, and how to achieve effective results are the problems that the teaching team of professional courses must think and study and solve, and are also the key issues concerning the moral education of students of airworthiness major.

2. Ideological and political objectives of the course "Introduction to Airworthiness"

Introduction to Airworthiness is a professional degree course for students majoring in aircraft airworthiness technology. It is a new course focusing on airworthiness knowledge system, airworthiness certification regulations, airworthiness development and cutting-edge dynamics, playing a leading and foundational role in airworthiness professional talent training system. It mainly explains the concept connotation, origin and development of civil airworthiness, airworthiness legislation system, airworthiness organization and management, airworthiness certification, continuous airworthiness management, civil airworthiness cases, airworthiness concept of military airworthiness, airworthiness model practice of military airworthiness, etc. Emphasis is placed on cultivating students' ability of airworthiness cognition, airworthiness thinking and airworthiness management, so as to improve students' ability of airworthiness examination, analysis and problem solving, and cultivate airworthiness technical and management professionals to meet the needs of the post.

In [2], the military education policy of the new era is based on the principle of "adhering to the absolute leadership of the Party over the army, serving for a strong country and a prosperous army, establishing morality and cultivating talents, cultivating talents for war, and cultivating high-quality and specialized new military talents with both political integrity and ability". And the school-running orientation, aircraft airworthiness technology specialty characteristics and military strengthening strategy, meet the requirements of the national standards for aviation and aerospace teaching quality and the actual combat training outline for graduates. Centering on "cultivating talents through Virtue" and "Cultivating talents for war", the course objectives are established as follows:

1) Ideological and political objectives: Through the exploration and integration of ideological and political elements in the field of aircraft airworthiness, students are cultivated with the concept of airworthiness, dedication, patriotism, responsibility and conscientious and responsible professionalism.

2) Knowledge objective: To enable students to systematically master aircraft airworthiness professional knowledge, airworthiness regulations and technical standards, airworthiness certification procedures and requirements, airworthiness management requirements and job responsibilities, typical model airworthiness certification cases and other knowledge, and understand airworthiness professional development frontier and research hotspots.

3) ability goal: to make students have found the problem, the ability to analyze and solve problems, to the integrated use of major knowledge, authorized and airworthiness management, application of seaworthiness and the practical work, to be able to apply what they have learned professional knowledge, airworthiness concept and scientific thinking, to realize the formation of independent learning and lifelong learning ability.

4) Accomplishment objectives: Trainees should have the spirit of scientific inquiry, serious and responsible professional ethics, meticulous craftsman spirit, dedication to serve the country, and be able to actively participate in actual combat training based on the actual position, cultivate excellent fighting spirit, and become qualified revolutionary soldiers.

3. Ideological and political design of course "Introduction to Airworthiness"

"Airworthiness introduction" course education target, is for students to teach the airworthiness professional knowledge at the same time, lead the students a thorough understanding of airworthiness discipline development, to establish the airworthiness management idea, strengthen the feelings of patriotism, science and technology feeling airworthiness talents scientists spirit, the spirit of craftsman in seaworthy model research and development team equipped with security personnel's professional dedication and combat the quality, In order to cultivate the students' feelings of home and country, patriotic enthusiasm, scientific spirit and professional ethics, so that

they can better adapt to the job requirements, lay a solid foundation for career development, become a qualified revolutionary soldier and engineering and technical personnel.

3.1 Adhere to moral education first

Moral education is the highest requirement for students to become talents and adults, and also the soul of ideological and political teaching. Only by firmly establishing the root of moral education, integrating the essence of moral education into the whole process of course teaching, selecting the ideological and political elements correctly, and telling the ideological and political stories well, can we truly move the students, deeply inspire the students, and truly affect the students, so that the curriculum ideological and political can be truly implemented and effective.

3.1.1 Cultivate the morality of loving the Party and the country

In [3], general Secretary Xi Jinping has stressed the need to work hard to foster patriotism in students, so that the spirit of patriotism will firmly take root in their hearts, and educate and guide students to love and support the CPC, aspire to listen to and follow the PARTY, aspire to take root in the people, and contribute to the country. To cultivate a qualified cadet, first of all, is to educate people for the Party, the country, to serve the strong army and the prosperous army, through patriotism education, revolutionary tradition education, party history and military history study, so that the love of the party and the country become the ideological consciousness of the cadets.

3.1.2 Cultivate the morality of dedication to mission

The army is an armed group that performs revolutionary political tasks and serves the interests of the Party. Upholding the Absolute leadership of the Party over the army is the basis for training the cadets in moral integrity and cultivating people, as well as for testing the effectiveness of ideological and political thinking. In [4], Xi called on officers and soldiers to consciously practice the core socialist values and those of contemporary revolutionary soldiers, be firm in their convictions, be loyal to their mission, and strive to write an outstanding military life on the journey of building a strong and prosperous army. The course of ideological and political education for the cadets aims to train the cadets to be a new generation of revolutionary soldiers with soul, ability, courage and moral character, so that the cadets shoulder the important task of strengthening the army and making contributions to the modernization of national defense and the army.

3.1.3 Cultivate students to be down-to-earth

"Facing the sky, down-to-earth, inheritance and innovation" is the school motto of our school, but also the spirit of education. Down-to-earth life, to go long term; Practical life, to work with concentration; Only by being down-to-earth can we serve our country. To cultivate students' virtue and cultivate people, it is necessary to teach students the basis of being a man and doing things. The church students are willing to contribute, do things and devote themselves to accomplishing extraordinary undertakings in ordinary work.

3.2 Carry out the teaching as the leading

The teacher is not only the teacher but also the designer of curriculum ideology and politics. Curriculum ideological and political education, like other curriculum teaching, also needs teachers' leading role, implementation and innovative practice. A good ideological and political course can not be separated from the teacher's wholehearted devotion and sincere input. Only when the teacher thinks about politics first, plans and refines can the ideological and political course be well taught and the ideological and political effect be achieved. Teachers with experience, heat and feelings are the premise and foundation of a good ideological and political course.

3.2.1 The teacher first educates the moral foundation

"He who nurtures others, nurtures himself first." General Secretary Xi Jinping stressed that educators should be educated first, and teachers should better assume the responsibility of guiding

and guiding students' healthy growth. The key to a good ideological and political course lies in the teacher. In [5], the teacher is to bury the seeds of truth, goodness and beauty in the heart of the students, and guide the students to buckle the first button of life. Cultivate students moral tree, teachers must go ahead, do a model, when the model, with their own words and deeds for students to set a benchmark in life.

3.2.2 Overall design of teaching presentation

Curriculum thinking and politics is a spiritual project of educating people, with positive, overall and long-term characteristics. As guide of students' world outlook, the outlook on life, values, teachers must dig through professional teaching materials, on the basis of the knowledge and education some clever union, be thought fit, logically to each other, complementary idea on compatibility, the content, can be spontaneous nature, follow, or get into dogma, rigid, only preach, in the form of the loss of living on the goal, Students do not accept it psychologically and cannot produce unforgettable memories. The design of ideological and political courses should have the main line, spirit, connotation, interest, humanity and story, and realize the organic integration, mutual agreement and deep coupling of professional knowledge and ideological and political elements.

3.2.3 The importance of teaching lies in innovation and guidance

"Curriculum ideology and politics is seen in learning, but higher than learning". Compared with the teaching of professional courses, courses have higher ideological and political positions, longer duration and slower effect. It is not a simple thing to make students recognize, feel and move within a 45-minute class, so as to achieve ideological, spiritual and emotional resonance. As crosstalk, sketch, drama, must pay attention to the method, in order to get twice the result with half the effort. Ideological and political courses should be artistic, interesting and story-telling. Teachers should make good use of case teaching, situational teaching and flip teaching, select ideological and political materials and elements, and guide students to get into their heart, mind and practice just like threading a needle.

3.3 Embodiment as the main body

Under the concept of "learning as the subject", students are not only the object of education, but also the participants of education. Without the participation of students, teaching is doomed to be a pool of stagnant water, silent classroom, the one-way output of teachers will not be able to achieve the expected goal. As an organic part of teaching, ideological and political teaching must give play to students' initiative, subjectivity and initiative. Only by allowing students to deeply participate in teaching and integrate into ideological and political teaching can students truly "move, act and move", and curriculum ideological and political teaching can have real effect.

3.3.1 Actively change to "I will learn"

Under the traditional one-way teaching mode, the roles of "teacher" and "student" are clearly distinguished. The student is often just a simple educated person, in the position of "asking me to learn", and the teaching effect is naturally compromised due to the inadequate guidance of the subject consciousness of the student. By establishing the subject status of students, guiding them to think positively and seek knowledge actively, we can better strengthen the transformation of students to "I want to learn".

3.3.2 Actively participate in learning

To know the taste of a peach, one must taste it. The ideological and political effects of classroom teaching will come naturally only when students truly feel the importance of "moral", identify the value orientation from the heart and strengthen the endogeneity of core values. Party history figures, stories, case studies, cultural edification and other ways can be adopted to provide a platform for students to participate in the course of ideological and political, so as to improve the teaching effect.

3.3.3 Sincerely Willing to "Follow suit"

The unity of knowledge and action is the basic requirement of curriculum ideology and politics, and also the ruler to test the effect of curriculum ideology and politics. The cultivation of students' ideological and political literacy is a process of pure thought, life experience and action. In the classroom, students listen to teachers' lectures and discuss with their classmates, sowing the seeds of ideological and political thoughts in their hearts, and producing internal motivation for improvement. Only through practice, can they take root and sprout, and truly transform into self-consciousness of action, so as to achieve the goal of ideological and political thoughts in the course.

4. Ideological and political teaching practice of the course "Introduction to Airworthiness"

Distinctive characteristics of the course of "introduction to seaworthiness, combining historical, technological, case, practicality, course content and subject development and airworthiness regulations evolution is closely linked, with the domestic and foreign airworthiness model is closely related to the design of the engineering practice, and aviation development and the progress of science and technology are closely linked, it provides the education teaching of the course material and elements, It also provides convenient conditions for ideological and political courses.

4.1 Identify the value positioning

Airworthiness professional students belong to the combination of technology and finger, and their future jobs determine the ideological and political direction of the course, endowing students with the connotation of value pursuit. Students work in the field, the natural conditions are particularly difficult, the pace of work is tense and busy, the requirements must be able to endure loneliness, guard the poor, must establish roots in the grassroots, silently dedication, but also have great ambition and pursuit.

First, the fighting spirit. Actual combat is the distinctive orientation of military education. President Xi stressed that the cultivation of fighting spirit is an important factor in the military's combat effectiveness. It is urgent to cultivate the fighting spirit of trainees under the current actual combat background. Through promoting patriotism, carrying out education of ideals and beliefs and telling stories of war heroes, it is helpful to cultivate students' fighting spirit.

Second, the spirit of science. In the course of "Introduction to Airworthiness", it shows the development of airworthiness science and technology to students, expounds the technical problems behind airworthiness clauses, and teaches students the ability to solve practical problems with the knowledge they have learned. This requires that students must believe in science, believe in science and devote themselves to science. Cultivate the scientific spirit of striving and enterprising, which is the internal power source to support students to explore the future and scale new heights. Through ideological and political courses, students can be helped to strengthen their faith, strengthen their will, develop scientific thinking, aggressive attitude and courage to seek.

Third, professionalism. The purpose of the course is to cultivate talents for the Party and the country, and to cultivate professional qualities of dedication, self-restraint, diligence and preciseness. Because of the particularity of flight, aircraft maintenance has high requirements for safety and highly depends on the technical accomplishment and professional ability of personnel. In the professional spirit of aviation personnel, excellence, extreme responsibility, bear hardships and stand hard work, tenacious struggle, dedication, unity and cooperation, etc., are its basic connotation, but also students must develop.

4.2 Dig into ideological and political elements

Integrate the knowledge system of the course "Introduction to Airworthiness", optimize the teaching content, deeply dig ideological and political elements in the history of airworthiness,

entrepreneurial process and typical events, achieve organic integration and coordination of the two, and effectively support the moral education of students. By integrating the core values and fighting spirit of revolutionary soldiers into the curriculum, students can not only learn professional knowledge, but also strengthen ideological and improve the political literacy of students.

First, the party's innovative theory. The biggest experience of the rapid development of airworthiness in China is to adhere to the correct leadership of the Party and arm and guide the work practice with the party's innovative theories. Civil aviation has constructed the mode of "two levels of government and three levels of management", which provides organizational guarantee for the party's leadership. Leaders of the Party and the state have always attached great importance to the development of civil aviation. Premier Zhou wrote in person at the very beginning of the establishment of civil Aviation "Ensuring safety first, improving service and striving for normal flight", which has become the core concept guiding the development of civil aviation. This point helps students to firmly support the leadership of the Party and inspires students to love Party and country.

Second, the history of airworthiness entrepreneurship. The history of airworthiness of CAAC is a history of entrepreneurship, which is an enterprising process from scratch, from small to big and from weak to strong. By telling the stories of the CAAC, enable students to experience the hardships of entrepreneurship and is not easy, to appreciate the development of China's seaworthiness and achievement, set up the correct outlook on life, world outlook, values, understand the importance of striving for growth, realize their own value of, we the foundation, enhance the pride to do a good job of seaworthiness. Through learning the knowledge of airworthiness science and technology, students can strengthen their understanding of the scientific spirit and understand that any advanced technological innovation is not plain sailing, but as long as they have a strong will, firm confidence and courage to climb the peak, they will overcome difficulties and make their own contributions.

Third, the spirit of dedication to the country. Airworthiness is the work of fighting with safety, and it is the development of overcoming the hidden dangers of accidents in a time of risk and challenge. The formulation of airworthiness regulations and the establishment of airworthiness provisions left a magnificent poem of aviation people's dedication to the country, especially the test flight verification, but also the airworthiness people directly at the cost of their lives for the model casting soul escort. By telling the story of airworthiness certification, the hardships of airworthiness certification and the risks of airworthiness test flight, we help students to build the brand of dedication to the mission and the feelings of national supremacy.

4.3 Active use of ideological and political cases

Is the airworthiness in terms of aviation accidents and develops on the basis of the experience and lessons, behind every clause is real rough story, full of enterprising spirit, through mining, sorting and processing, can provide the most vivid case for course education, convenient for airworthiness culture, can help students choose standard value orientation.

One is the airworthiness model character. History is made by man. No matter airworthiness technology or airworthiness management innovation, every step forward has condensed the hard work and efforts of generations of airworthiness people. For example, change the fate of the Chinese air force Xu Shunshou, Tu Ji, Gu Songfen 12 aircraft design masters, adhere to national greatness, ambition for national rejuvenation, stand in the forefront of The Times, with the fighting spirit and selfless work, dedicate their life work to China's aviation industry, host and led the research and development of several generations of Chinese military, Training and bring up a large number of Chinese aviation industry pillars of talent. Zhu Guangrong, the deputy chief designer of ARJ 21-700, who has made great contribution to the structural safety of domestic civil aircraft, always keeps in mind that "the safety of aircraft structural strength is the strength of human life", "details determine success or failure", "strong and appropriate, dynamic and dynamic", and takes it as the highest level of lifelong pursuit. Under his leadership, the ARJ 21-700 has successfully made breakthroughs in

many key technical issues of structural airworthiness, ensuring the successful test flight and safe operation of the aircraft.

Second, airworthiness technology. Airworthiness is a science and a scientific achievement based on experiment and practice. Airworthiness people with rigorous realistic spirit, craftsmanship spirit of excellence and perseverance, adhere to the problem oriented, continuous innovation practice, in exchange for technological progress and safety guarantee. For example, early aircraft often crash due to flutter in flight, which is a problem of aeroelastic stability, improper handling will lead to the destruction of aircraft structure and disintegration crash. On November 4, 1941, the prototype YP-38 Lightning developed by Lockheed of the United States disintegrated in the air during its test flight. Flutter test flight is a class I risk subject that must be performed on every new aircraft or major modified aircraft, and it is also a subject that must be performed according to airworthiness regulations. Aircraft designers were able to solve the flutter problem by taking cues from the wing eyes of dragonflies. Through the introduction of the technical breakthrough story of flutter, it can help students to build up the awe of aviation safety, renew the cognition of scientific and technological innovation, so as to establish the spirit of dedication to science and technology.

The third is model engineering practice. Airworthiness is derived from the public's demand for aviation safety, not from the need of academic research, but from the process of pursuing safety and the practice of model development. Airworthiness technology and model engineering are closely related, the former supports the development of the latter, the latter is the carrier of the former. The success of Boeing 737 derives from the airworthiness concept and practice, while the accident of Boeing 737MAX shows the importance of airworthiness from the opposite side. Strong airworthiness makes the model enter the market, but insufficient airworthiness will inevitably lead to the failure of the model. Composite materials, supercritical wing, wheel brake system, advanced windshield, flight control system, and so on, are the representatives of airworthiness technology, but also in the practice of model engineering breakthrough and can be applied. Through introducing the practice of model engineering to the students, it not only teaches the professional technology and post skills, but also cultivates the students' will quality of attaching importance to practice, taking root at the grassroots level and enduring the blows, laying the ideological foundation of making achievements in the difficult side, at the front line and at the grassroots level.

5. Conclusion

To carry out curriculum ideological and political development in professional courses is a career of moral cultivation and lasting achievement. It is not only an internal reflection of the essential needs of education, but also an inevitable requirement of the mission of education era. "Airworthiness introduction" as a professional course, attempt to reform education course is teaching, teach students professional knowledge and skills at the same time, also planted the seeds education in students' heart, help students set up the correct world outlook, the outlook on life, values, opened the road to success, for the participants to adults, have become "a window". Students have expressed, education courses of fresh, vivid and touching story, filled with positive energy, full of new ideas, ideological point of nature, fit and proper choice, give a person with enlightenment and education in spontaneous, to strengthen the students' patriotism, BaoGuoZhi, inspire the students to the battle of war to the determination, cultivate the students' fighting spirit in underdeveloped and feelings, The students in the face of difficulties, in the face of setbacks, in the face of challenges of the attitude of courage, self-restraint of the students will quality and military style. At the same time, it also triggered the students to think deeply about how to set up morality, realized the ideological change from "want me to set up morality" to "I want to set up morality", formed the action consciousness of "actively set up morality, comprehensively set up morality, sincerely set up morality", and achieved the expected results of ideological and political thinking of the course.

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