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# An Analysis of the Effective Ways to Implement College Students' Innovation and Entrepreneurship Education in Higher Vocational Colleges

Kang Na

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**Abstract:** This paper analyzes the basic connotation of innovation and entrepreneurship education, and analyzes the effective ways to implement innovation and entrepreneurship education in higher vocational colleges under the environment of "mass entrepreneurship and innovation".

**Keywords:** Higher vocational colleges; Innovation and entrepreneurship education; Associations.

## 1. CONNOTATION OF INNOVATION AND ENTREPRENEURSHIP EDUCATION

The basic connotation of innovation and entrepreneurship education is to develop students' innovation ability, cultivate their entrepreneurial consciousness, train basic entrepreneurial skills, and strive to cultivate high-quality innovative talents with innovative thinking and entrepreneurial ability. Entrepreneurship education is about developing pioneering individuals. Innovation is the foundation of entrepreneurship, and there is a close relationship between entrepreneurship and innovation[1].

Innovation and entrepreneurship education, in essence, is an educational activity to cultivate students' innovative spirit, entrepreneurial quality and entrepreneurial skills, that is, to train students how to adapt to social survival, choose a job independently, and seek a career by themselves.

The relationship between innovation education and entrepreneurship education is mainly manifested in three aspects:

### 1.1 Aim in the same direction

Cultivating innovative spirit and practical ability is the focus of quality education. Only with the spirit of innovation can the cultivated talents meet the requirements of the economic and social development. Only with practical ability can we adapt to the development trend that scientific and technological achievements are transformed into productive forces faster and faster, and that knowledge and application are integrated more and more closely. In short, cultivating innovative spirit and practical ability is the necessary meaning of implementing quality education, effectively cultivating the entrepreneurial ability of future talents, and it is also an inevitable choice for our

country to comply with the requirements of The Times and the world competition and development trend. In a sense, the strength of entrepreneurial ability reflects the strength of a person's innovative spirit and practical ability. Therefore, innovation education and entrepreneurial education are highly consistent in the goal of talent training[2].

### 1.2 Content homogeneity

The content structure of innovation education and entrepreneurship education are integrated and complementary to each other. Innovation is the basis of entrepreneurship, and the effectiveness of innovation education in colleges and universities can only be tested by the entrepreneurial practice of the students it trains in the future. Entrepreneurship is the carrier and manifestation of innovation, and the success or failure of entrepreneurship depends on the solid foundation of innovation education. They both promote and restrict each other, and are inseparable dialectical unity. The similarity of the content of innovation education and entrepreneurship education does not mean that the two can replace each other, because it is not enough to have the spirit of innovation, it only provides the possibility and necessary preparation for the success of entrepreneurship, if separated from entrepreneurial practice, lack of certain entrepreneurial ability, the spirit of innovation will become a water without a source, a tree without roots. The significance of the spirit of innovation can only be reflected in the entrepreneurial practice, and it is possible to eventually produce the success of entrepreneurship.

### 1.3 Functions have the same effect

Innovative education is not only the reform of methods or the increase or decrease of educational content, but also the reorientation of educational functions, and the value pursuit of educational innovation and development with overall and structural features, which can reveal the highest essence of human beings, that is, the creative educational function. Innovative education pursues the unity of harmony and specificity in personality development, attaches great importance to the autonomy of students in thinking training, encourages them to consciously choose, commit to

breakthrough, and strive to build a perfect and sound idealized personality with harmonious integration of IQ and EQ, and ultimately becomes a person who can conquer nature and transform the world.

## 2. CONSTRUCT THE CURRICULUM SYSTEM OF INNOVATION AND ENTREPRENEURSHIP EDUCATION FOR COLLEGE STUDENTS

The curriculum system of entrepreneurship education is the core of the course construction of entrepreneurship education, which is generally constructed from different perspectives such as the goal and nature of the course. According to the quality requirements of entrepreneurship, the aim and connotation of entrepreneurship education courses are analyzed, and a series of courses such as entrepreneurship enlightenment course, entrepreneurial knowledge course, entrepreneurial environment course and entrepreneurial practical training course are constructed. In addition, some scholars also try to construct the curriculum system from other perspectives. For example, some scholars divide entrepreneurship education courses into theoretical courses and practical courses based on the curriculum content. Some of the courses are divided into subject courses, activity courses, environment courses and practice courses. Some start from the curriculum, the entrepreneurship education course is divided into elective courses and compulsory courses. This topic starts from the curriculum content, based on the requirements of quality education, research and construction of entrepreneurship education curriculum system.

The curriculum system of entrepreneurship education is the carrier of entrepreneurship education teaching activities. As a curriculum system, the development of entrepreneurship education curriculum is not a disordered superposition of various courses, but should follow certain design ideas or routes under the guidance of curriculum theory.

First of all, we should strengthen the research of the curriculum theory of entrepreneurship education, clarify the course development route and course design ideas, so that the design and development of the curriculum system of entrepreneurship education can be "rational and reliable". At present, the most representative curriculum theories are subject-centered, experience-centered, knowledge-centered and humanist-centered. For the comprehensive entrepreneurial education curriculum system, simply based on a certain curriculum theory, it will inevitably be biased. In this regard, we can learn from the successful experience of Timmons in the United States. The course system of Timmons' entrepreneurship education is dominated by the experience-centered curriculum theory, combined with the subject-centered curriculum theory and the humanistic curriculum theory, and integrated the respective advantages of the three kinds of

curriculum theories. The setting of its entrepreneurship education curriculum system has achieved remarkable success.

Secondly, due to the differences in scientific research strength and professional Settings in higher vocational colleges, it is impossible to have a unified curriculum system. Curriculum development subjects must clearly define their own characteristics and talent training objectives, and take this as the basis for the design and development of entrepreneurship education curriculum. Only in this way can we scientifically and reasonably develop a set of entrepreneurship education curriculum structure system and related teaching plans suitable for our own characteristics.

### 2.1 Research content design

First of all, the relationship between innovation and entrepreneurship education of higher vocational college students and talent training objectives

At present, innovation and entrepreneurship education in higher vocational colleges has been integrated into the professional talent training system. In order to achieve the goal of quality education in higher vocational colleges, innovation and entrepreneurship education has been integrated into the professional talent training goal.

Secondly, research on the feasibility measures of the implementation process of innovation and entrepreneurship education in higher vocational colleges

The feasibility measures are studied and practiced from the aspects of innovation and entrepreneurship education platform, innovation and entrepreneurship education carrier and innovation and entrepreneurship education teacher team construction.

Third, the research on the curriculum system of innovation and entrepreneurship education in higher vocational colleges

Starting from the content design of the curriculum system of innovation and entrepreneurship education in higher vocational colleges, a series of courses such as entrepreneurship course, entrepreneurial knowledge course, entrepreneurial environment course and entrepreneurial practical training course are constructed.

Fourth, research on the incentive mechanism of innovation and entrepreneurship education in higher vocational colleges.

Combined with the essence of incentive mechanism, this paper studies the construction of incentive mechanism of innovation and entrepreneurship education in higher vocational colleges from two aspects: external incentive and internal incentive.

### 2.2 Research methods

(1) Adopt the research method based on normative research and supplemented by empirical research.

Research and practice on vocational college students' employment and entrepreneurial ability training In

the process of research and practice education, design, modify and improve.

(2) Accumulate data by means of questionnaire survey, observation research, experience summary, symposium, online answer, etc., obtain information feedback on research measures, research stages and research effects, and constantly adjust and control them.

The details are as follows:

First, improve the incentive mechanism of innovation and entrepreneurship in higher vocational colleges, enhance the students' awareness of innovation and entrepreneurship, and realize that entrepreneurship drives employment.

At present, college students' entrepreneurship has just started, and the operation mechanism is not very perfect. Although some innovation and entrepreneurship lectures and activities have been organized, there are still some drawbacks, such as: Students will have good ideas, but in the specific business plan, there are many bottlenecks, marketing model and profit model innovation there is a certain difficulty, students are still very lack of innovation awareness, ideas can not open, therefore, improve the innovation and entrepreneurship incentive mechanism in higher vocational colleges, enhance the innovation and entrepreneurial awareness of students in higher vocational colleges, to achieve entrepreneurship to promote employment.

Second, the feasibility model analysis of the formation of innovation and entrepreneurship education in higher vocational colleges

While exploring the innovation and entrepreneurship education model of college students in practice, it draws on the innovation and entrepreneurship education model of other colleges to explore the effective new model suitable for innovation and entrepreneurship in higher vocational colleges.

Third, establish the operational mechanism of innovation and entrepreneurship education for college students

Based on the analysis of the feasibility model of innovation and entrepreneurship education for college students in higher vocational colleges, a set of innovation and entrepreneurship education operation mechanism is formulated and put into practice, and the rationality of the operation mechanism is tested in practice and gradually improved.

### 3. EFFECTIVE WAYS TO IMPLEMENT INNOVATION AND ENTREPRENEURSHIP EDUCATION IN HIGHER VOCATIONAL COLLEGES

Innovation and entrepreneurship education in advanced countries such as Europe and the United States has a history of several decades, has been deeply valued, has been quite large scale, to carry out entrepreneurship education in college students, is to adapt to the development of knowledge economy,

but also to broaden students employment channels and build a national innovation system long-term plan, therefore, in the implementation of college students innovation and entrepreneurship education process, should adopt the following approaches:

#### 3.1 Strengthen the temper of students' psychological quality

Vocational colleges should, according to the psychological characteristics of college students, help them establish mental health awareness, optimize psychological quality, enhance psychological adjustment ability and social adaptability, help them cope with the problems of adapting to the environment, self-management of interpersonal communication, job hunting, personality development and emotional adjustment, promote the all-round development of morality, intelligence, physical beauty, and establish mental health awareness. Effectively eliminate psychological confusion, consciously cultivate perseverance will quality, improve their psychological quality and ability to withstand and cope with setbacks.

#### 3.2 Highlight the cultivation of innovation and practical ability

The cultivation of students' innovative ability is the weak link in most higher vocational colleges at present. Therefore, in deepening the teaching reform, it is necessary to emphasize the cultivation of students' innovative ability, respect students' personality development, love and cultivate students' curiosity and thirst for knowledge, help students to study independently and think independently, and protect students' spirit of exploration and innovative thinking. Create an atmosphere of advocating true knowledge and pursuing truth, create a relaxed environment for the full development of students' potential, let students feel and understand the process of knowledge generation and development, and cultivate students' scientific spirit and innovative thinking.

Efforts can be made to improve students' entrepreneurial practical ability, through school-enterprise cooperation, the establishment of college students' entrepreneurial practice base in the enterprise, the hiring of enterprise technical experts and school professional advisers to jointly establish student entrepreneurial training base, so that more students have the opportunity to participate in student entrepreneurship and corporate cooperation projects.

Vocational colleges can make full use of the activity platform of college students' associations to carry out entrepreneurship education, integrate entrepreneurship education into community activities, establish professional skill-based associations, voluntarily organize students who have common interests in a certain discipline, profession or research direction, hire professional teachers as

instructors, and carry out practice, exchange and discussion activities. Through self-organization and management, independent learning and self-training, the mastery of professional knowledge and the formation of professional skills are integrated into the community activities, so that the members of the community can extend from interest to ability cultivation, and form the comprehensive quality that the enterprise actually needs[3]. Colleges and universities can formulate corresponding systems to encourage and support college students to use holidays and other spare time to go out of campus, and combine the professional characteristics of learning to create some projects with less investment, quick effect and low risk. In the current information age, it is particularly important to pay attention to and strengthen the training of students' ability to

acquire new knowledge and analyze and solve problems.

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# CAE Analysis of the Critical Load Bearing Component of 41 Person Cabinet in Ropeway

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**Abstract:** The strength of the mechanical structure of the cabinet greatly affects the safe operation of the passenger ropeway and is the core product of the passenger ropeway, so it is particularly important to carry out the strength analysis of the critical load bearing components in the design stage[1]. As the research object, the 41-person cabinet's stress situation is analyzed according to various common working conditions of the passenger ropeway, and the critical load-bearing structure is analyzed by CAE.

**Keywords:** Ropeway; Cabinet; CAE analysis.

## 1. INTRODUCTION

Many scenic spots all over the China, scenic spots are in complex terrain, causing a certain threat to the safety of tourists, passenger ropeway is a means of transportation with strong terrain adaptability, but China's passenger ropeway industry started late, the industry foundation is weak, innovation ability is not strong, passenger ropeway carrier heavy. Seriously lagging behind the needs of the development of tourism exhibition industry, so the application of advanced manufacturing technology, under the premise of ensuring the safety performance of carrying equipment, as far as possible to reduce the quality of maintenance, improve the cost performance, reduce energy and material consumption, is of great significance to the establishment of a conservation-oriented harmonious society. As an important tool of modern mountain transportation, the safety and stability of ropeway elevator are very important[2]. In order to ensure the normal operation of ropeway elevators in various complex environments, CAE analysis is widely used in the design and evaluation process of ropeway. In this paper, the importance and application of CAE analysis in ropeway design for 41 people cabinet are discussed by CAE analysis[3].

## 2. CRITICAL LOAD BEARING PARTS OF THE CABINET

In the operation of passenger ropeway, according to the product structure of the trunk, the critical load-bearing parts mainly include: the lower bottom combination parts of the aluminum alloy profile, the load-bearing connecting rod connecting the boom and the trunk, the lower bottom combination and the load-bearing connecting rod with the matching nut, the load-bearing connecting rod and nut, etc. As

shown in Figure 1, the passenger stands inside the lifting compartment with all loads acting on the bottom combination. The critical load-bearing components are shown in Figure 2, which is the focus of CAE analysis.

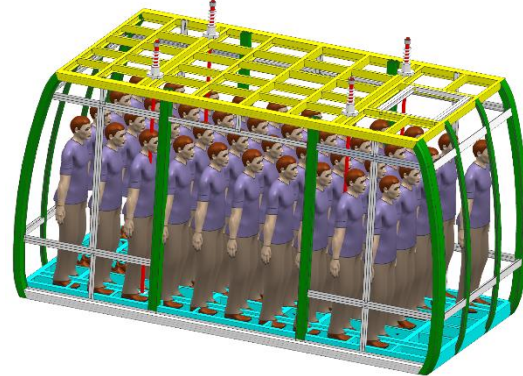


Figure 1 Main frame of the cabinet

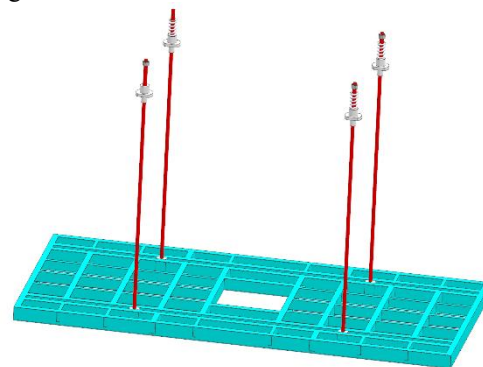


Figure 2 Critical load bearing components

## 3. OPERATING CONDITIONS

According to the actual operation situation of ropeway, the running conditions can be divided into seven scene: running normal operation condition, line snow stop running condition, line is sudden braking condition, line normal operation when the station passengers off, line normal operation of the internal passengers to box body lateral impact condition, line long running passengers repeatedly on and off the fatigue operation condition[4].

The wind load should consider both the transverse wind and the longitudinal wind along the running direction of the ropeway. The impact force of human beings mainly considers the transverse and longitudinal impact. Due to the inertia during the line braking, it will lead to the impact along the running direction of the line. When the cabinet enters the station, friction will be received due to the guide,



coefficient  $f=0.16$ . As shown in Table 1.

Table 1 Load situation combination of seven working conditions

Load condition	normal running	snow	gale	braking	Running station	in sudden impact	on and off
Cabinet weight	G	G	G	G	G	G	1.5G
load	Q			Q	Q/2	Q	1.5Q
snow load		Ws					
wind load Wfy	Wfy/Wfx		Wfy/Wfx	Wfx			
passenger impact Hy/ Hx				Hx		Hy	
inertial force				Fa $a=1.5m/s^2$			
friction force					R = $f*(G+1/2Q)$		
safety factor	Tensile strength 5, yield strength 3.5						fatigue strength 1.35

The braking inertia force, wind load and impact force are horizontal direction. The cabinet mainly bears the tension, and the magnitude and direction of the force are the vector sum of the vertical force and the horizontal force.

### 3. FORCE ANALYSIS AND CAE

Description of the running direction is shown in Figure 3, X is longitudinal, that is the running direction of the ropeway; Y is horizontal, in the horizontal plane, the direction perpendicular to the running direction of the right hand, and the vertical direction is Z.

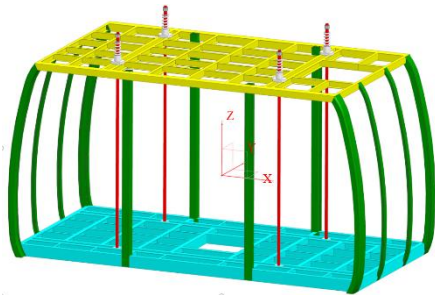


Figure 3 Coordinate system of the cabinet

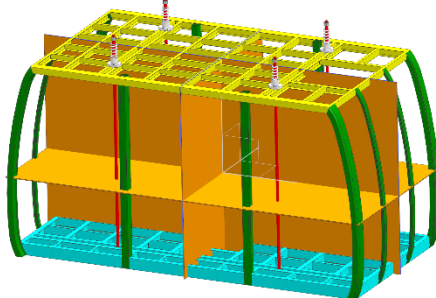


Figure 4 Wind area in X / Y / Z direction

In the UGNX software, the area of the cabinet in X/Y/Z direction can be accurately measured by the projection along the directions of X/ Y/Z. Maximum area in the X direction  $AX=5.40m^2$ ; Maximum area in the Y direction  $AY=11.04m^2$ ; Maximum area in the Z direction  $AZ=10.34m^2$ .

The mass of 41 cabinet is about 1110 Kg, that is, the weight of the box body  $G=11100N$ . The mass of a single passenger is 74kg, that is the weight of a single passenger is 740N;41 people, so the payload  $Q=41*740=30340N$ .The total mass of cabinet and passengers is  $m=1110+41*74=4144kg$ .

Wind pressure is 250N/m<sup>2</sup> when ropeway running; The wind pressure is 800N/m<sup>2</sup> When ropeway stop.

That is, the ropeway is running, the wind load is:

$$Wfx\_yunxing=250*AX=250*5.4=1350N;$$

$$Wfy\_yunxing=250*AY=250*11.04=2760N.$$

That is, when the ropeway is stopped, the wind load is:

$$Wfx\_dafeng=800*AX=800*5.4=4320N;$$

$$Wfy\_dafeng =800*AY=800*11.04=8832N;$$

The ropeway is stopped under heavy snow conditions, and the snow load coefficient is 900N/m<sup>2</sup> The vertical snow load of the cabinet is:

$$Ws=AZ*900=10.34*900=9306N.$$

The brake acceleration of the ropeway is  $a=1.5 m / s^2$ , so the inertia force is  $Fa=m*a=4144*1.5=6216N$

Horizontal friction force of the station guide  $R=f*(G+Q/2)=0.16*(11100+30340/2)=4203.2N$

Impact force Hx/Hy:  $Hy=41*200=8200N; Hx=41*200/2=4100N.$

The calculation results based on the seven working conditions in Table 1 are shown in Table 2.

Table 2 calculation of the seven working conditions

load condition	normal running	snow	gale	braking	running in station	sudden impact	on and off	force direction
Cabinet weight	11100	11100	11100	11100	11100	11100	16650	vertical
load	30340			30340	15170	30340	45510	vertical
snow load		9306						vertical
wind load Wfy Wfx	2760		8832	2760				horizontal
passenger impact Hy/ Hx				4100		8200		horizontal
inertial force				6216				horizontal
friction force					4203.2			horizontal
horizontal force	41440	20406	11100	41440	12680	41440	62160	
vertical force	2760		8832	13076	4203.2	8200	0	
Resultant force	41531.8	20406	14184.99	43454.06	13358.49	42243.5	62160	

4. CAE ANALYSIS OF THE CRITICAL LOAD BEARING COMPONENTS

In the UG / CAE environment, the load and constraint are set as shown in fig 5 below. The upper end of the load connecting rod is fixed, the load acts to the combination of the lower bottom surface, the connecting rod and the connecting nut, and the connecting nut and the lower bottom surface. In the braking condition, the load is 43454.06N, the maximum stress point is 66.92Mpa, actual, the stress will be much less than this value, due to the actual operation of the floor.

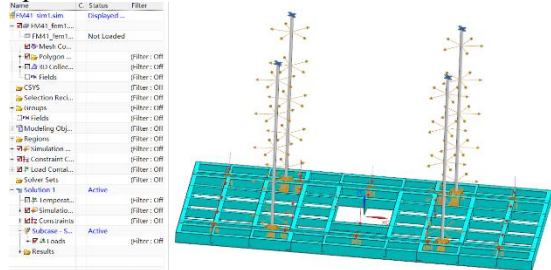


Figure 5 Load and constraints

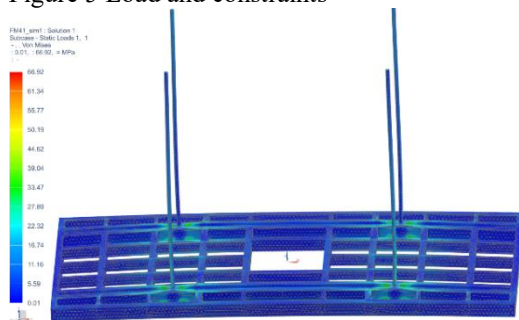


Figure 6 All structural force analysis

The stress cloud diagram bearing the connecting rod and the connecting nut is displayed separately, as shown in Figure 7 and Figure 8. The value of stress is 26.99Mpa and 38.83Mpa as shown in Fig7 below, and the analysis results are shown in Table 3.

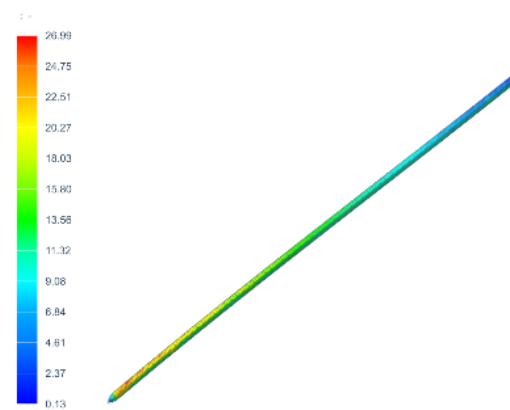


Figure 7 Connecting rod stress

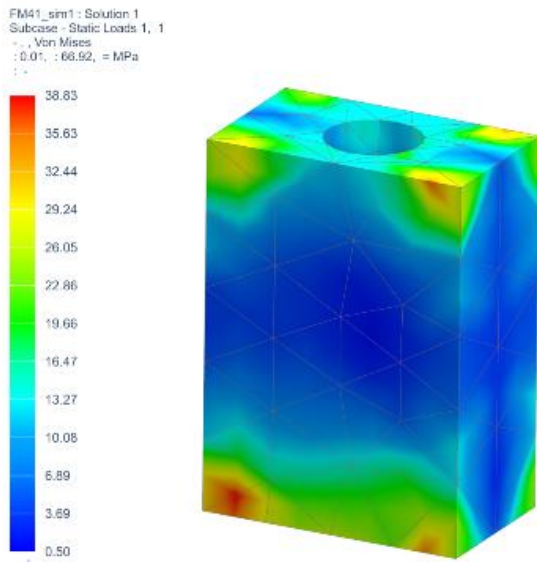


Figure 8 Turning nut stress

Table 3 summary of the safety factor of the critical load-bearing components

No.	Component name	material	stress (MPa)	safety factor	
				tensile	yield
1	the load-bearing link	40Cr	26.99	27.78	20.37
2	transfer nut	40Cr	38.83	19.31	14.16
3	lower bottom combination	6061T5	30	8	6.83
4	lower bottom combination bolt hole	6061T5	24.25	9.89	8.45
5	lower connection bolt M12		21.64	36.96	29.57

6	connect the flanges at the upper bottom connection	40Cr	8.248	90.93	66.68
7	bolt at the upper bottom connection	40Cr	19.74	37.99	27.86
8	nut		18.28	43.76	35.01

5. CONCLUSIONS

After CAE analysis, It can be concluded that the critical load-bearing parts of the 41 person cabinet meet all the requirements in seven working conditions of the ropeway. CAE plays an important role in the design and safety assessment of ropeway. It can not only ensure the safety and stability of the ceiling compartment in a variety of complex environments, but also provide strong support for improving the design and operation efficiency. In the future, CAE will be more used in the design of ropeway cabinet, such as the analysis of complex factors , material nonlinearity, contact problems, dynamic response, to provide more powerful technical support for the safe operation and continuous innovation of ropeway.

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# A Study of the General Senior High School Curriculum Standards: And the Comparison with the Experimental Version

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**Abstract:** The experimental versions of the General Senior High School Curriculum Program and Curriculum Standards released in 2003 has been implemented in China for many years. With the development of the economy and other aspects, new problems have emerged. Experimental Version is no longer suitable for the current situation in China.

When the General Senior High School English Curriculum Standards (2017 edition, 2020 revised) came out, it caused widespread discussion. Compared with the experimental versions of the General Senior High School Curriculum Program and Curriculum Standards, this version has many innovations and differences. Therefore, it is necessary to carefully interpret the General Senior High School English Curriculum Standards (2017 edition, 2020 revised), which is of great practical significance to English teaching in China.

This paper will make a preliminary study on the General Senior High School English Curriculum Standards (2017 edition, 2020 revised), explore the background and main framework, then explain the highlights. Finally, the differences between the two versions are compared to achieve detailed interpretation.

**Keywords:** Curriculum Standards; General Senior High School English Curriculum Standards; High School English

## 1. THE BACKGROUND

Since 2003, China's English education has developed rapidly, the Experimental Version has made significant contributions. "After more than ten years of hard work and persistence, the phenomenon that primary and secondary school students can neither understand nor speak English has been basically reversed, and the quality of English teaching has been gradually improved. However, in the process of reform, there are still many unresolved problems." [1]

From 2003 to 2017, the situation has changed significantly, both domestically and internationally. This brings opportunities and challenges to China's curriculum standards.

After the introduction of New Curriculum Standards, China's English education has embarked on a new path.

## 2. THE MAIN FRAMEWORK

The New Curriculum Standards has six parts and appendixes, which introduce the nature and basic concepts of the curriculum, the core competencies and curriculum objectives, the curriculum structures, the content of the curriculum, the academic quality and implementation recommendations. Each part has its own focus.

The first part clarifies the nature and basic concepts of the curriculum of high school English. The English curriculum is clearly defined. Its role, status and mission are explained. The New Curriculum Standards emphasizes that teacher needs to nurture students' lifelong development. The excellent grades in exams have been no longer an evaluation criterion. Learning English well creates opportunities for future employment and develops an international perspective.

The core competencies of English include language ability, cultural awareness, thinking quality and learning ability. In language ability, the skill of "viewing" has been added. Core competencies are also a goal of the English curriculum, which skillfully integrates language, culture and knowledge to support the implementation of the task of cultivating virtue and cultivating people.

In terms of curriculum structures, three types of courses: compulsory, elective and optional compulsory have been constructed, which help students achieve individualized development. Every student's life planning and learning ability are different and they cannot be forced to take the same curriculum. This is an important step to cultivate students' individualized development. Depending on the different types of courses, credits and course selection requirements are also explained.

In order to achieve core competencies, the curriculum content will consist of the following six areas. Thematic contexts, text types, language knowledge, cultural knowledge, language skills and learning strategies. These six parts are an organic whole.

The New Curriculum Standards also provides a clear explanation of academic quality. It describes the level that students should achieve after completing their English studies at the high school. It divides the level of academic quality into three levels. Similar to

the division of competencies in many foreign language fields, the classification of academic quality levels is also based on students' ability to apply knowledge and skills in contexts of different levels of complexity. Finally, the relationship between academic quality levels and examinations is explained.

The final part is the implementation recommendations. It includes suggestions on how teachers implement English teaching, combined with teaching cases, it provides guidance for teachers' teaching. There are also evaluate and test suggestions and other advice.

### 3. THE HIGHLIGHTS

The New Curriculum Standards has many highlights. Many new concepts and perspectives have been proposed, which are worth exploring.

#### 3.1 Core competencies

Cultivating students' core competencies is a specific goal of the New Curriculum Standards. Core competencies has been a hot topic in recent years. There are many countries that are trying to develop core competencies of students. The core competencies of English include language ability, cultural awareness, thinking capacity and learning ability. Language ability refers to the ability to use language skills of listening, speaking, reading, writing and viewing to understand and express meaning. Language ability is very important in English learning because English is a communication tool, which requires students to have a certain level of language ability to achieve reading and communication. Language and culture are closely linked, and learning a language is inseparable from cultural learning. In order to better learn English, teachers sometimes need to introduce the culture. It is necessary to have cultural awareness. For a long time, people ignored the role of English subjects in developing thinking qualities. Learning to think is very important in today's society. English has an advantage in developing thinking quality. Students need to learn how to learn, which is the goal of learning ability. "Cultural awareness reflects the value orientation of the English subject core competencies." "Thinking capacity represents the cognitive aspect of the English subject core competencies." "Learning ability paves the way for students to develop the English subject core competencies." [2] At the national level, the educational value of English is emphasized. We value our living students and truly value all-round development and lifelong learning.

#### 3.2 Viewing

In addition to the four skills of listening, speaking, reading and writing, the skill of viewing has been added. Viewing refers not only to what is seen in the eyes, but also to the thinking of the brain. As a skill used for understanding, viewing is inextricably linked to reading and listening, while contributing to

the development of other skills. "The object of viewing can be very wide. It should be viewing as well as thinking, and it should be viewing with one's own opinions. At the same time, it is different from reading: Read: the process of understanding text information; View: the process of understanding visual information." [3] In order to understand viewing, it is necessary to distinguish between viewing and reading.

The reason for adding viewing to language skills lies in the development of modern educational technology. In the past, classrooms consisted only of blackboards and text books, teachers had very limited resources, so they could only hold text books in class and write important contents on the blackboard. Now, almost all classrooms have computers and projectors, even in some schools, students each have their own tablet. Outside of the classroom, people can also use computers and mobile phones to learn in their daily lives. There has been a major shift in people's lifestyles and different ways of educating, so new skills need to be acquired.

With the development of modern technology and the richness of language expression, the teaching content is no longer limited to reading texts. Reading ability is not enough. Through the skill of viewing, students need to observe, compare, analyze, think, obtain information in media such as pictures, symbols, and videos, and use the knowledge and skills they have learned to grasp the meaning, so as to obtain sufficient language input. In fact, in the traditional English classroom, it is difficult to attract students with only one text book. If we can add rich videos and pictures, etc., we can enliven the classroom atmosphere and increase students' interests.

### 4. COMPARISON WITH THE EXPERIMENTAL VERSION

The New Curriculum Standards fully draws on the advantages of the Experimental Version. Comparing the two curriculum standards help English teachers to further understand the changes of the New Curriculum Standards and better implement teaching.

#### 4.1 Changes in Main Framework

The New Curriculum Standards has a total of six parts, as well as an appendix and preface: the nature and basic concepts of the curriculum, the core competencies and curriculum objectives, the curriculum structures, the content of the curriculum, the academic quality and implementation recommendations. In addition to the appendix, the Experimental Version is divided into four parts: preface, curriculum objectives, content standards and implementation recommendations.

The first difference of the two versions is the preface. The Experimental Version uses the preface as the first part, the basic concepts and the curriculum design ideas are mentioned in the preface. In The New Curriculum Standards, the nature and basic concepts of the curriculum are taken as the first part,

and the curriculum design is placed in the third part. This reinforces the nature and philosophy of English and makes the position of English clearer.

The curriculum objectives are further explained in the New Curriculum Standards as the core competencies. Core competencies help to achieve the overall goal and appears for the first time in our curriculum standards.

Curriculum structures, curriculum content and academic quality are all unique. Put forward the curriculum objectives, establish a new curriculum structures, content and evaluation system, and finally give implementation suggestions. Compared with the Experimental Version, the New Curriculum Standards are more logical.

#### 4.2 Changes in curriculum structures

The Experimental Version divides high school English courses into compulsory and elective, while the New Curriculum Standards adds optional compulsory courses. Due to the addition of optional compulsory courses, there are also new requirements for credits. New foreign languages have also been added, making the selection more extensive.

In the process of personal development, students will have different life goals and requirements, and if all students are allowed to develop towards the same goal, some students will find the task too difficult, and some will find it too simple. Each student's learning ability is also different, which requires changes in the structure of the curriculum. The addition of optional compulsory courses allows students to choose the content of study according to their learning ability, interests and future development direction, which will promote personality development.

If there are too many required credits, it will be difficult for students to have the time and energy to take more elective courses. Students can graduate with 6 credits of required courses. This can allow more people to graduate from high school and increase graduation rates. If students want to take the college entrance examination, they need to complete optional compulsory courses and acquire credits. Elective courses are used by students to satisfy their interests and improve their abilities. In particular, there are courses in optional compulsory courses, which are designed for students who have difficulties in learning English, but have interests to continue learning. This fully reflects the people-oriented concept of English education in China.

#### 4.3 Changes in curriculum content

In the Experimental Version, the curriculum content includes five areas: language skills, language knowledge, emotional attitudes, learning strategies and cultural awareness. In the New Curriculum Standards, six elements of curriculum content have emerged: thematic contexts, text types, language

knowledge, cultural knowledge, language skills and learning strategies. The fact that the thematic contexts is placed first is enough to illustrate importance. The contexts cover man and self, man and society, etc. The field of foreign language teaching has always required teachers to provide a context because a real context will promote English learning and communication. Text types include various genres of texts, which help to enrich students' cognition. For example, argumentative essays, narratives, essays, poems, letters, etc. Language knowledge and cultural knowledge are interrelated and are an important part of English language teaching. Language skills include listening, speaking, reading writing and viewing, that is more in line with modern education. For learning strategies, the New Curriculum Standards gives four strategies: metacognitive strategies, cognitive strategies, communication strategies and affective strategies. Metacognitive strategies are important for students to supervise themselves, while affective strategies help students establish a correct attitude of learning. These two strategies actually put forward higher requirements for cultivating students' self-learning ability.

The six elements of curriculum content are an integrated process that together facilitate English language teaching and learning.

#### 5. CONCLUSION

This paper explains the background and main framework of the General High School English Curriculum Standards, discusses the two highlights: core competencies and the viewing skills, compares and analyzes the differences between the Experimental Version and the New Curriculum Standards. The New Curriculum Standards point out the direction for the future of English education in China. In the future, teachers should improve their professional ability and develop English education on the basis of carefully interpreting curriculum standards.

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# Diagnosis and Treatment of Endometritis in Ewes

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**Abstract:** ewe endometrial inflammation is a wide obstetric condition of ewe, which will affect the economic profit of ewe breeding industry. Bacterial infection is an important cause of endometrial inflammation in ewes. The classification of endometrial inflammation in ewes is complex. And the lack of accurate standards to develop a unified establishment of classification standards. Domestic and foreign scholars have established the definition of endometrial inflammation in ewes, which is also the universal classification standard in the world. With the establishment of the latest cytological diagnosis method, in the absence of established clinical characteristics, endometrial cytology examination can confirm the early diagnosis of endometrial inflammation in ewes, which has also been recognized by international industry experts and belongs to the universal standard of the industry. In the treatment of endometrial inflammation in ewes, antibacterial drugs, vegetarian drugs, traditional Chinese and western medicine drugs, bacteriostatic disinfection and sterilization drugs and Chinese herbal medicines are the most promising medicines. Based on the results of scientific research at home and abroad, this paper analyzes the causes, classification, methods, diagnosis, treatment and prevention of endometrial inflammation in ewes for reference only.

**Keywords:** Ewe; Endometritis; Treatment; Prevention

Endometrial inflammation in ewes is a widespread disease of the reproductive system of ewes and has various characteristics. It will lead to the reproductive system of ewes or infertility, which has a more serious impact on the farm. Academic reports have shown that 90.0% of ewes have an early postpartum diagnosis of uterine bacterial infection. The incidence of endometrial inflammation in pregnant women was 20.0%, and infertility caused by endometritis accounted for 50.0% [1]. Proper understanding of the mechanism, development and treatment of endometrial inflammation in ewes can improve the economic profit of farms.

## 1. CONFIRMED

Endometrial inflammation in ewes can lead to changes in the physiological index values of ewes, which can be used immediately or indirectly to

confirm the indication of endometritis. Laboratory confirmation methods include diagnosis of sulfur amino acid, silver nitrate, confirmation of microbial species, hematology examination, changes in blood biochemical indicators, values of egg white concentration in the uterus and changes in enzyme charm, etc. Although their advantages are different, but the early diagnosis is not very good. Early and accurate diagnosis, prevention and targeted treatment of endometrial inflammation in ewes are very important. Important points of laboratory diagnosis include:

1.1 Vagina increases with purulent discharge, or contains blood and pseudomembranes. After lying on the ground, a large number of row, often keep the state of backward low head. The vulva has a small amount of dilute liquid, dirty milky white liquid and thick liquid. Subsubacute endometritis has no atypia. In estrus, the uterus can be seen slightly cloudy secretions increase increased discharge, leading to infertility.

1.2 Vaginal examination. Mild cervical dilation, cloudy secretions increased discharge.

1.3 The volume of the uterine horn becomes larger, and the thickness of the uterine body is different, thus showing the rectal examination.

There is liquid extravasation, liquid fluctuation movement after light press, with slight pain.

1.4 Sub-acute endometritis, the body temperature increases rapidly, the appetite decreases, reflected gradually, some medical cases have no obvious disease. Manus intrauterine meningitis whole body disease is not obvious, sick animals are weak, sexual cycle time time is disorderly, with habitual abortion and recessive miscarriage, infertility after repeated reproduction, infertility after pregnancy.

## 2. HEAL

### 2.1 Medical drugs

#### 2.1.1 antimicrobial treatment

At present, the common antimicrobial drugs for endometrial inflammation in ewes are: cefotaxime, kanamycin, penicillin sodium, norfloxacin, ananfloxacin, amoxicillin, vancomycin, oxytetracycline, sulfonamide, furacillin, penicillin sodium, streptomycin, tetracycline.rpt, Penicillin sodium, streptomycin and lincomycin hydrochloride in the treatment of non-rupture of intrauterine inflammation [5]. In the whole process

of drug treatment, attention should be paid to the following points: first, pregnant women in the endometrium within 30d after delivery, the released penicillin sodium enzyme will affect the role of penicillin, so penicillin sodium is not suitable for use. Secondly, penicillin sodium, streptomycin, sulfonamide, furacillin and hydroxyglycosides can not be used for intrauterine injection. Third, penicillin sodium can affect uterine involution, especially in the diseased cattle with more endometrial components.

#### 2.1.2 Chinese herbal medicine

Compared with organic chemical disinfection and sterilization drugs and antibacterial drugs, the immediate selection of Chinese herbal medicine enema to treat endometritis can have some effect. After uterine digestion, absorption, digestion and absorption, it can play a role up and down in the whole body. Chinese herbal medicine without toxic side effects, is an ideal treatment of medicine. Application of traditional Chinese medicine preparations (drugs including baicalensis, baicalensis, rhubarb, wort, safflower, Yin Yangqin). It can effectively suppress orange light yellow golden yellow *Staphylococcus aureus*, *Escherichia enterica* and *Streptococcus*. Uterine grouting has a significant effect on the treatment of endometritis. Pregnant women early delivery mixing oxytetracycline powder 2g, normal saline 200mL pay attention to the uterus, 2d / time, 4~7 times for a course of treatment. Cervical closed ewes, obvious symptoms, increased mucous and purulent secretions, 0.5% iodine volt can be used to sterilize the inside of the uterus. After 2d, penicillin sodium 1 million IU and streptomycin 800,000 IU were mixed with normal saline 80mL, and uterine grouting was carried out immediately. Four to seven times is a course of treatment. If the disease is mild, 35 mL (10.0% + procaine 2.50%). Combined with growth hormone treatment, oxytocin, diobestrol, estradiol, prostaglandin and other drugs are used to promote uterine movement, improve blood circulation system software, enhance the body's immunity, accelerate the discharge of uterine inflammatory secretions. It is very worth mentioning that high concentrations of antibacterial drugs will aggravate inflammation[4].

#### 2.1.3 Anticorrosion, disinfection and sterilization drugs

Uterine irrigation can effectively remove the increase of uterine secretions. Saline or disinfectant removal can be selected. Common disinfectants are iodine liquid, chlorhexidine acetate, potassium permanganate 0.5g / L, sodium bicarbonate 8g / L, livano 0.5g / L and deep sea fish oil 30g / L. With the help of irrigation, it can change the pH value and the osmolality of the uterus, transmit the excitatory central nervous system, and accelerate the increased discharge of uterine inflammatory secretions. It is very worth mentioning that high concentrations of

antibacterial drugs will aggravate inflammation. Fast uterine contraction, regulate the body endocrine, and promote the metabolic effect of the uterus, in order to promote the uterus repair as soon as possible to health. The treatment effect of elimination combined with drugs is remarkable. Some scholars choose clean son drink for the treatment of subacute endometritis, the recovery rate is 100.0%.

#### 2.2 Growth and development of growth hormone treatment method

The use of estrogen and gonadotropin released out growth hormone can accelerate uterine contraction, improve the effect of uterine defense, thus treating endometritis. Its effect system is similar to the comprehensive treatment of microbial species growth hormone.

#### 2.3 Uterine cavity grouting

Uterine grouting is the immediate injection of drugs into the uterus to avoid the defects of a long course of oral antimicrobial drugs, which has the advantages of ensuring some higher concentration value but the least systemic impact and lower cost. At present, there are common drugs, including colony irritant elements, blood-rich cell plasma, growth hormone and antibacterial drugs. The recovery rate of patients with uterine endometritis after intrauterine injection and dexamethasone was 77.98%, and the live birth rate, planting rate and clinical pregnancy rate of embryo transfer were higher than that of the group of patients with maternal endometritis and the group of non-ewe endometritis. It shows that the intrauterine grouting antibacterial drugs and dexamethasone work well and can improve the pregnancy outcome of ewe endometritis. Uterine grouting is currently in the trial stage, so it is necessary to further identify the effect of endometrial grouting in patients with endometriomitis in ewes and improve the results of embryo transfer with endometriomitis in ewes. Probiotics are the key for maintaining microbiota homeostasis. Probiotics have been successfully used to treat bacterial vaginosis[2]. After 7 d of food probiotics treatment, the bacterial vaginosis dissipated and the vaginal microbial species repaired the normal condition. Therefore, it is speculated that probiotics can also improve the disordered of endometrial microbial species in ewes with endometritis[3]. The microbial species charm of probiotics (antioxidant, antibacterial, anti-inflammatory and hormonal regulatory activities) provides favorable norms for the maintenance and repair of endometrial conditions. The use of probiotics reduces the use of antimicrobial drugs, which at the same time reduces the cause of antibiotic resistance. At present, the application of probiotics in the field of sheep reproductive system is still in the development stage, and the future scientific research still needs to prove its effect and system in improving ewes[6].

### 3. DAILY PREVENTION STRATEGY OF



## ENDOMETRITIS IN EWES

3.1 Improve feeding management and improve the disease resistance of ewes. Attach great importance to feeding management and provide the best feeding standard for ewes. According to the ewe growth and development[7].

Different dietary programs should be formulated at the stage to ensure the scientific and reasonable nutritional composition level of ewes, and attention should be paid to the balanced diet of ewes during the dry milk period and after pregnancy. Secondly, clean environmental health, cowshed, delivery room to disinfect on time sterilization, sterilization thoroughly.[8] Summer to improve, of course, natural ventilation, winter to pay attention to the cold and warm. Metabolites and straw ATS used in puerperium must be centralized and destroyed for alcohol treatment. Ensure the cleanliness and hygiene of utensils, all-round disinfection and sterilization, improve the maintenance and maintenance of postpartum ewes. Evidence ewe nutrition component intake, with the help of drug treatment to accelerate the repair of ewe uterine system[9].

3.2 Fully follow the operating procedures of artificial insemination

Artificial insemination should pay attention to the implementation of clean hygiene policies and regulations, fertilise, gloves and cow vulva thoroughly sterilized, light actual specific operation of fertilization, and the bicycle will harm the reproductive system, avoid genital sense. Keep the site, cow bed, cow shed, sports field clean and dry, and disinfect it on time. Improve the treatment of metabolites, sewage and water in the cowshed and sports fields, wipe sheep dung on time, ensure clean and tidy, dry and manic, and pay attention to the solution of mosquitoes and flies in spring. Reduce the transmission rate of mosquitoes, flies and other insect diseases, and reduce their harassment of ewes[10].

3.3 Control of prenatal and postnatal sensation of seven

3.3.1 Avoid early marriage and reduce the cause of difficult childbirth. Establish an independent delivery room and disinfect it on time. Pregnant women before delivery, careful disinfection sterilization pregnant women pregnant women delivery geographical environment and ewe vulva. It is very possible to let the ewes produce their own, not having to produce too early. In the case of dystocia, midwifery should be performed appropriately. Midwives and the actual specific operation of the staff should fully disinfect sterilization equipment and weapons and equipment, scientific delivery, to avoid damage to the birth canal. If the placenta retention, birth canal harm, midwifery birth canal harm, postpartum lochia occurs abnormal and other conditions, should be treated appropriately.

3.3.2 During the production of ewes, attention should be paid to the balance of diet. In the late stage of pregnancy and childbirth, ewes should moderately add calcium and phosphorus, vitamin A, vitamin D, vitamin E and nutritional components. Before labor, two turnover to the delivery room for bed feeding, and health examination. After postpartum should speed up time and energy repair, improve the ability to resist, choose intravenous red sugar or calcium gluconate for treatment. If the placenta does not fall out, oxytocin can be injected in the body up and down the body muscle, pregnant women 24-48h after the uterine injection of antibiotics, to avoid postpartum uterine feeling. To avoid uterine sensation, iodine and 10% sodium oxide can be injected in the uterus for treatment[11].

3.3.3 One week after delivery, pay attention to the hygiene of the delivery bed, ewe vulva and ewe body. Pay attention to postpartum numbness, chest inflammation, and ketosis. Pay attention to the cleaning and environmental sanitation control, create excellent feeding norms, pay attention to the cleaning and sterilization of cattle houses and delivery rooms, improve the management of ewes, and ensure that the geographical environment is dry and clean. Of course, pay attention to natural ventilation in summer, winter pay attention to keep warm, on time all-round disinfection sterilization equipment, to ensure that the geographical environment aseptic test.[12]

3.4 Avoid air pollution from mating and uterine irrigation

Artificial insemination and uterine washing, the machinery and equipment, work in the work of the arms and ewe vulva sterilization, to avoid the ewe reproductive organ sense. Infirmation gun in the cervical fold, should be gradually, to avoid harm to the cervix and endometrium, in order to reduce uterine infection[13].

## 4. SUMMARY

The secondary sexual diseases leading to endometritis in ewes are numerous and complicated. Most of these diseases are closely related to the level of feeding management, the professional quality of the staff in the technical work, the own immunity of ewes, and the actual specific operation of diagnosis and treatment. If the secondary sexual disease is not timely diagnosis and treatment or intervention, the pathogen can invade the uterus and then cause endometritis cast convenient and fast norms. Therefore, in the actual production, it is necessary to standardize the farm feeding management, do a good job in postpartum ewe health care, scientific diagnosis and treatment, especially to improve the professional ability training in the technical work, so as to avoid the cause of secondary venereal diseases and reduce the incidence of ewe endometritis in sheep[14].

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