# Cultivation of Innovative Ability of Students in Higher Vocational Colleges

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### Abstract

The cultivation of innovative ability is the core of higher vocational education, in order to provide a wayto effectively cultivate students' Innovation ability for higher vocational colleges. based on the characteristics of higher vocational students and professional gardening technology, the ways to cultivate innovation ability for higher vocational students gardening technology were pointed out, starting from the connotation of entrepreneurship education, entrepreneurship and innovation training concept, the relationship between the cultivation of innovative ability with talent training scheme, students entrepreneurial community, skills competition and teacher training and other aspects, cultivation mode of innovative ability of horticulture technical students in Higher Vocational *Colleges were constructed, which Based on the ability* progressive knowledge of entrepreneurship and entrepreneurial thinking development, entrepreneurial ability training and student entrepreneurship practice and provides a way to effectively cultivate students' Innovation ability for higher vocational colleges.

**Keywords** —higher vocational education; horticulture technical specialty; innovation ability

### INTRODUCTION

Innovation is the motive force of social progress; innovation expands the human vision, updates the human knowledge base, and lays the foundation for the establishment of modern scientific system. Since 2015, Premier Li Keqiang made the government report and pointed out that " scientific and technological innovation can be promoted by institutional innovation", public entrepreneurship and innovation has become the new trend of economic development and promoting and stimulating of masses entrepreneurship and innovation has become the connotation of the development of all walks of life, Education is the foundation of other industry, so It's innovation should be in the forefront of the times [1].

High-tech talent competition is the main content of social competition, and It's essence is the competition of knowledge and technology innovation ability, therefore, the primary task is to cultivate students' innovation ability of higher vocational colleges and the special mission of higher vocational colleges is to cultivate applied talents who has the spirit of innovation [2], therefore, in Higher Vocational Colleges we must deepen the education and teaching reform, in order to adapt to the requirement of cultivating innovative talents of high-tech.

### I. THE CONCEPT AND CONNOTATION OF ENTREPRENEURIAL INNOVATION

### A. Entrepreneurship education

Entrepreneurship Education is a kind of training, which provide people with related knowledge and skills, cultivate whose sharp observation ability to grasp the opportunity which other ignored, and cultivate self assessment ability and related professional knowledge and skills to make a decisive action in others shilly-shally, so entrepreneurship education include professional knowledge, skills education, self cognition, risk assessment of education. At present, the broad sense of entrepreneurship education is to improve the basic quality and ability of entrepreneurship students through the study of the related courses in, the narrow sense of which is enable students master professional knowledge, ability and observation ability which engaged in some entrepreneurial activities of through entrepreneurship courses, so the student can be engaged in creative work, post innovative competence after graduation.

The task of higher vocational colleges is to cultivate talents student, so it should try it's best to improve students' entrepreneurial ability and the business knowledge of students [3], cultivate students' innovative consciousness and innovative spirit, so the students realize their self development and self employment at work.

### B. Entrepreneurial ability

Entrepreneurial ability is a kind of must employment ability for entrepreneur, which is the comprehensive accumulation of knowledge, experience and skills, including professional ability and entrepreneurship quality, entrepreneurship quality contain entrepreneurial enthusiasm ,values, discovery ability and innovation ability [4]. The training objectives of the higher vocation education is to cultivate high-level personnel on applied technology who master the basic theory of the professionals and the specialized knowledge, comprehensive quality and comprehensive occupation ability which engaged in the professional practice and work in technical production, construction. management and service ,which can meet the needs of socialist modernization and work in the first-line position [5], Therefore, graduates of horticulture technical specialty should not only have the professional knowledge and skills, but also have the methods, abilities and social abilities of entrepreneurship.

### II. THE NECESSITY OF CULTIVATING INNOVATIVE ABILITY OF HORTICULTURE TECHNICAL STUDENTS IN HIGHER VOCATIONAL EDUCATION

Education is the remains when a person forgets everything he has learned in school." This is the essence of education in Einstein's eyes, so the essence of education is not quantity of information, but the preservation of divine curiosity". Divine curiosity is the intense interest of exploring the unknown, and the joy and satisfaction of this inquiry. As the modern higher vocational education, its essence is to cultivate students' innovation ability, so teachers must change the education concept and improve the understanding of the significance of cultivating innovative talents, and reform the teaching content, increase the content which "keeping pace with the times the forefront of the industry to avoid "one book for life" phenomenon; at the same time ,teachers should improve methods, select appropriate methods to meet the students' learning enthusiasm and cultivate students' innovation consciousness and innovation spirit.

Horticulture specialty is a productive comprehensive specialty [6], which graduates employed in horticultural production from production, processing and sales to research and development, the purpose of which is to cultivate the comprehensive research and development ability of student who engaged in horticultural production, applying horticultural plant growth and development theory and Corresponding cultivation techniques and methods ,but the growth of individual plants can be influenced not only by individual genetic characteristics, but also by the external environment, so the horticulture students must have keen field judgment, in addition to agricultural periodic long, large initial investment, students also need to have the ability to judge the market; therefore the core of Horticulture Specialty talents training is to cultivate students' innovation ability, this is focus topic of vocational education, so the core of modern vocational education is the teachers to guide students create new ideas, seize opportunities, achieve creative development at work, and start businesses [7].

#### III.THE PATH OF STUDENTS ENTREPRENEURIAL ABILITY TRAINING IN HIGH VOCATIONAL COLLEGE

The innovation ability of horticulture Specialty students of Higher Vocational include gardening professional ability and entrepreneurial ability, the innovation ability of which need to be cultivated from many aspects, multi-channel and multi-level, Jiangsu Agri-animal husbandry vocational college struggle to develop students' innovative thinking, stimulate their creative consciousness and judgment ability to train their innovative ability through the cultivating innovative ideas of teachers and students, reforming personnel training program and encouraging students to participate in various competitions.

## A. Carry out the idea of innovation and cultivate students' innovative consciousness

The essence of innovative education is the embodiment of the overall quality of entrepreneurs, In order to realize innovation, higher vocational train students' innovative education must consciousness, and take the cultivation of students' innovative spirit and innovative ability as the core content to cultivate students' innovation spirit and innovation ability as the core content, the student from higher vocational college had its own characteristic, it's knowledge, understanding and learning ability is higher than technical school student and practice ability is higher than the ordinary college undergraduate students, when the students are trained, we should implement the concept of innovative training, take students as the theme, train students' innovative ability in various ways, and cultivate innovative talents needed by industry enterprises [8].

In order to realize innovation in Higher Vocational Education, The idea and method of innovative education must be carried out in all aspects of teaching, In the teaching management, we should teach students in accordance with their aptitude; In the choice of teaching content, we must keep pace with the times [9], in addition, In order to cultivate of innovative talents ,teachers also need to update the concept of innovation education, establish a new teacher-student relationship which taken students as the subject of and to encourage students to explore the frontiers of professional through kinds of ways.

### B. Scientific setting up personnel training program and setting up innovative courses in Horticulture

In order to realize Innovative talents training in Higher vocational colleges, we must embody the characteristics of innovation and entrepreneurial ability training in the formulation of personnel training programs, and laid stress on solving the link between curriculum and creative ability training, The author finds out, many vocational colleges in China did not offer formal entrepreneurship innovation courses, so many students have innovative ideas, but they cannot carry it out and have no way to start, The formation of students' innovative thinking results from the accumulation of theoretical knowledge, through innovative courses setting up in horticulture, students can understand the principles and characteristics of innovation, integrate existing results or a comprehensive superposition of the results, and let achievements to create new value or qualitative leap in the new field.

We also set up a scientific and technological innovation team composed of teachers, students and enterprise personnel and carry out a variety of technological innovation activities to inspire students' creative thinking, develop students' creative thinking and training their innovation ability, In summer 2016, we set up innovation team and carry out the harmful Investigation of pest in Taizhou, First of all, we let the students refer to the relevant information, and then the students investigate harmful organisms distribution and damage status in different areas, Finally, we organize students to collect, discuss and demonstrate, through similar technological innovation activities, students' innovation ability and the ability to solve practical problems were get exercise, the innovation ability of students was examined through such activities as, and their enthusiasm of innovation in science and technology were mobilized

### C. Students and teachers of higher vocational colleges set up horticultural professional associations to explore innovative education of Horticulture.

The training target of higher vocational colleges is cultivating higher practical ability and applied talents in first-line service production, so students must not only grasp the theoretical knowledge of the classroom and books, but also need to have the professional practical ability, therefore, professional societies can build a bridge for the theory of classroom learning and professional practice [10], the student of horticultural department in Jiangsu Agri-animal husbandry college established tissue culture association, flower and Bonsai Association, herbarium and Aquarium Association in 2013, according to professional characteristics of their own, some activities were carried out in these

professional societies regularly, student can creative conception and hands-on operate to complete the work, when their work finish, which can be exhibited at the mass show and teachers and students in the community can comment, Through community activities, students innovative thinking can be developed, students' creative potential can be excavated, and students' innovative ability can be trained. While students consolidate their theoretical knowledge, they practice and practice skills. Students can consolidate theoretical knowledge, while their practice and practical ability have been tempered.

# D. Promote the development of students' innovative ability through competition

The competition is an important part of Horticulture Technology Innovation Talents Training, because the fundamental purpose of competition is creative, competitions not only test students' ability of theoretical knowledge, but also adaptability, logical thinking ability, practical ability and unity and cooperation ability, at the same time, through participating in the contest, students can communicate with other participants to Look for problems and make up for them, higher vocational colleges can be summarized to improve students' innovative ability through competition [11], therefore, competition become the important means of cultivating students' innovative ability.

Students from Horticulture Technology Specialty had attended various competitions such as tissue culture, flower arrangement and seed quality inspection in provincial and domestic many time, on the one hand, participating in the competition can exercise student ability to solve practical problems, using acquired knowledge, broaden the scope of knowledge, On the other hand, competitions attract student from different specialties and grades involved who had common interests, they strive for a common object, exchange and discuss, complements each other in working methods, so their innovative thinking and enthusiasm were sublimated. If they win the competition, their self-confidence and self-awareness will be improved, or they will be able to improve their personal frustration. These are the

abilities they need to face the job; therefore, the discipline competition has trained a group of innovative talents for the society.

### E. Train an innovative teacher team that can do both innovative education and service enterprise innovation

The training goals of creative education is cultivation of students' innovative spirit and ability, innovative teachers training is the key to achieve this goal, as innovative teachers who must grasp the professional knowledge and effective innovation method, and can be engaged in the industry and guide the practice, and can use innovative ideas, methods and attitudes in daily teaching; on the other hand, innovative teachers must be familiar with requirement for innovative talents' ability and quality of Industry and employing units, the teachers should help student to plan career and provide guidance for innovative development future post and entrepreneurship [12].In order to meet the demand of innovative teachers, regular lectures are conducted to popularize modern vocational education and innovative education concepts; the short-term training, such as career guidance staff, was carried out to improve teachers' creative ability.

### **IV.CONCLUSION**

It has been found that the improvement of productivity level and comprehensive national power depends on the development of science and technology, A nation cannot stand in the forest of the world without knowledge innovation, and science and technology development, In terms of cultivating innovative spirit and innovative talents, education should be the first to bear the brunt, As far as he horticulture technical specialty was concerned, it is very important for students to cultivate their creative ability, However, there is no uniform training model for horticultural technology innovation talents, Therefore, in the process of personnel training, we must continuously reform training scheme, improve teaching methods and renew teaching content, to meet the requirement of cultivating innovative talents, meanwhile the school of professional associations also carry out various activities to stimulate students'

innovative thinking, train their innovation ability; mangy of students were encouraged to participate in provincial and national skills competition, so, this method also can cultivate students' innovation ability, Through these ways, we should train qualified creative talents for society.

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