

Exploration of Cultivation Mode of Innovative and Applied Talents Built with Subject Contests

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Abstract

Under the background of integrated education with “new agricultural science”, there is a new requirement and expectation for the talent cultivation of the major of landscape design in agricultural and forestry universities. The professional subject contest is the main carrier to cultivate college students with the ability of innovation, practice and experimental innovation. According to the problems faced by the agricultural and forestry universities around the whole country in the cultivation of innovative talents, subject contests will be a good booster for the teaching mode, reform of evaluation standards, cultivation of teachers’ innovative awareness, teaching reform of professional course, students’ learning initiatives and the shaping of teachers’ teamwork spirit; and it provides evidence for the practice to deepen the integration of subject contests into the cultivation of innovative and applied talents.

Keywords

Landscape design; Teaching mode; Innovative talents; Subject contests.

1. Introduction

The subject contests each year keep upgrading in the cutting-edge direction of the major, which not only builds up a scientific and practical external platform of learning resources for students but also enriches the contents of the cultivation scheme for the professional talents of landscape design to a great extent so that it would have a feedback on the updating of teaching system. Subject contests achieve the integration of “production, learning and study” to mobilize the importance of the innovative and applied talents majoring in landscape design and pay more attention to the cross cultivation of students’ ability of professional theoretical research and project training. For the cultivation of specialized professional talents, it works as a positive pusher for teachers to change their teaching thinking.

2. Significance for Applied Universities to Carry Out Subject Contests

Based on designing cultivation of applied talents majoring in the agriculture and forestry, it should begin with innovative teaching to rebuild and design an experimental teaching system from the guiding ideology of experimental teaching, the buildup of the network platform, the utilization rate of teaching resources and teaching mode, so as to form a practical teaching framework for design with the close integration of the comprehensive and multifunctional resources sharing and the actual activities within and out of campus, so as to push the cultivation of innovative opinion and expression ability for professional talents of design. For the cultivation of innovative talents, universities should cultivate the creativity that graduates should have, including the learning ability of curiosity and interest, intuition and insight, diligence and integrated attention and the innovative ability is good at seizing opportunities and innovative development [1].

The cultivation of applied talents should put emphasis on strengthening the training of actual ability of subject besides the basic knowledge teaching and ideological and Political Teaching during the talent cultivation process, so as to reach the harmonious development of knowledge, ability and qualification[2]. It is a rational choice to comply with the time needed to deem the cultivation of innovative and applied talents as an important measure for the requirement of the new stage of higher education development in China. The transfer of cultivation direction from vocational education to applied technology education is the inevitable choice of the current social needs and national education strategy in China.

3. Role of Applied Universities to Carry Out Subject Contests

The subject contest is an effective method to push the teaching reform development of applied technical talents. In the essence, it is a platform for the technical experiment and exchange provided by universities to students, and the subject contests also enrich the learning connotation for students, broaden their horizons, inspire their entrepreneurial passion and train their innovative thinking, so as to enhance the students' will to win and struggle through improving the comprehensive qualification.

Firstly, subject contests could boost the teaching level of the practical courses. The accumulation of the experience of subject contests could be transformed to be a project of practice course activity. The practical teaching course could be fully optimized through the experience accumulated from the subject contests.

Secondly, subject contests could make the practical teaching system more perfect. The organization and undertaking of subject contests push the improvement of the school opening system. Schools can provide a venue for students to have training for contests and relevant device support so that the practical venue could be turned out to be a resource advantage to achieve the reform of practical teaching more effectively so as to push the cultivation of innovative talents.

Thirdly, the method of contest activity should give students to have an integration of knowledge and practice. Through all kinds of contest and experiment activities, they could effectively enhance students' mastery and application of the course knowledge points, so as to inspire the learning desire of students. Have learning with the questions from life. Meanwhile, during the contests, there would be a further improvement in the students' cognitive level. During the process of practice, it would cultivate students' innovative spirit and enhance their creativity to have a more comprehensive understanding and application of knowledge. The exemplary nature of subject competition could effectively boost the discipline construction and professional development of universities.

4. Current Situation of the Talent Cultivation in the Applied Universities

The existing innovation and entrepreneurship education concept is lagging with a loose combination with professional education and a gap with practice; teachers are lack awareness and ability of innovation and entrepreneurship education, and their teaching method is single with weak pertinency and effectiveness; there is a shortage of practice platform and there is improper guidance and assistance, so there should be an improvement for the innovation and entrepreneurship education system. [3]

4.1. Undeveloped Teaching Method and Single Evaluation Standard for the Classroom Teaching

Due to the historical factors in applied universities, most students passively have classes in the teaching, and teachers do not treat students as a real subject in the class; while teachers could not teach students in accordance with their aptitude, so it would affect the shaping of students'

innovative thinking to some extent; and examination ignores the acting ability and innovation ability of students.

4.2. Loose Connection with Professional Courses

In the content setting of professional courses, the traditional professional courses would be simple with much more basic course contents, so it could not improve the application ability, and the knowledge acquired is hard to be linked with the industries and companies.

4.3. Overall Quality of Teachers to Be Improved

It is the key point of the new talent cultivation. The applied universities normally require teachers to have a compound ability or “double-quality”. Some teachers even have no innovation ability, and the knowledge structure is also limited to their own discipline, which is inconsistent with the more inter-major requirement for the innovative teachers. [4]

4.4. Poor Practical Ability of Students to Cause A Gap Between Theory and Reality

The students in applied universities could not fully understand the important significance of innovative talents in the domestic national, and regional development and the enhancement of personal qualifications within a short time.

5. Core Value of Subject Contests to Boost the Cultivation of Innovative Applied Talents

Cultivating the students with a strong practical application ability and innovation ability based on solid theory raises a strict testing requirement for the education workers, including exploring a flexible and free teaching mode, encouraging the training for abilities, cultivating students' self-learning ability and the selective learning ability and enhancing the competitive consciousness, so that each professional theoretical courses could be linked with the reality to raise the application significance. The education reform based on the core content of cultivating innovative and applied talents has been an urgent task, so we should positively proceed with the teaching reform development. The core value is shown in the following three aspects, see Figure 1

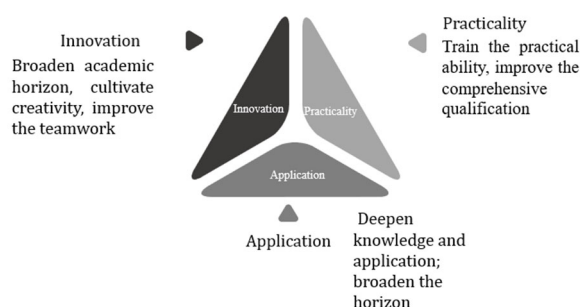


Figure 1. The Core value of subject contests to boost the talent cultivation

5.1. Innovation

The “contests education engineering” based on subject activities is an efficient carrier to cultivate students' creativity. The basic foothold of the professional contests is to broaden students' academic horizons, encourage them to make independent study, polish their innovation and improve their group innovation spirit.

5.2. Practicality

Through professional contests, there would be better training for students' discipline and specialty theoretical knowledge, professional technology and innovation ability, so as to highlight the features of applied technical talents.

5.3. Application:

Through subject contests, students could master and understand the knowledge that they have learned more profoundly so as to know about the application of disciplinary knowledge more sufficiently. It would not only broaden students' horizons and enhances the opportunity for students to have mutual communication and learning.

6. Build up Innovative Cultivation Mode with the Help of Subject Contests

The direction of talent cultivation mainly emphasizes two points: practical application ability and creative innovation ability. Different from the cultivation direction of traditional academic research, it prevents from the gap between theory and reality, beginning with zero after employment, bookworm and the employment embarrassment as a theoretical talent, so that it could make a good docking between campus to workplace come true. Besides, it is also different from the pure-technical workers trained in the traditional vocational schools. The cultivation of innovative and applied talents focuses on application, but there is also a linkage between theory and reality, so there should be innovative talents with compound skills. [5]

Traditional teachers' cultivation mode emphasizes the commonality training for students. Teachers are hard to implement characteristic training according to the features of students, so it is hard to teach students in accordance with their aptitude. Build up a perfect incentive system of subject contests; set up an activity platform based on subject contests; have an integration with the subject contests, innovation and entrepreneurship activities, scientific research training, project training and social practice and the teaching activities; put emphasis on the individualized cultivation of students; build up an innovative talent cultivation system.

6.1. Teaching Method, Reform of Evaluation Standard, Reform of Professional Course

Universities should introduce the teaching evaluation system with the core of course contests. There could be independent credit for the course contests, and the course contests could be deemed as one of the resultant evaluation methods of certain courses. Build up an incentives system to provide motivation for teachers and students to take part in the contests. In the incentives system, the awards gained from subject contests could be classified into the task of examination to grant rewards for encouragement. Building up a perfect contests mechanism to enable students and teachers to actively take part in professional contests and cultivate innovative talents is an important guarantee to gain a benign circle for competitions, and it is also a powerful backup for students' participation initiatives in contests. It could effectively cultivate students' learning initiatives and make them find out the breaking point of learning by themselves through professional matches. Based on the mastery of basic knowledge, it would strengthen their actual acting ability so as to inspire their sense of learning achievement. The model of professional practical teaching is also a crucial part. The practical part should be integrated with the training of knowledge and vocational skills. Hence, the professional contests' work could be written into the guidebook of experience and training, so that learners could handle relevant problems through the practical cases, so as to gradually cultivate the innovation ability consciousness during the process of solving problems. Enhance students' learning interest and cultivate teamwork and contribution spirit.

6.2. Cultivation of Teachers and Students' Innovation Awareness

When guiding students to have professional contests, teachers could inspire their innovation awareness through the mutual discussion, exchange and learning experiences with other teachers. Schools organize and carry out the training for relevant subject contests and invite professional lecturers so that teachers would have a comprehensive understanding of the subject contests. Everybody struggles together to cultivate a batch of teacher teams with high qualifications, experience and professions to provide guidance for subject contests.

6.3. Branding Subject Contests Cultivates Students' Innovation Ability

Screen the quality brands of contests. The contests with high value could inspire students to participate, and it would also trigger their learning interests and mobilizes their initiatives for subject contests. Meanwhile, there should be an understanding of the importance of innovation to ceaselessly enhance innovation awareness. Ask students to join the innovative atmosphere of competition would effectively enhance students' application of subject knowledge and practical innovation ability.

6.4. Design Subject Contests Going Through the Practice with the School-Enterprise Integration

The subject contests with the integration with enterprises or other projects would be more practical and pertinent, and it would also boost students' passion and motivation to participate. It is good for the project teaching for employment in the future so that it would strengthen students' comprehensive practical innovation ability. Teachers guide students to actively take part in subject contests to upgrade students' innovation ability.

6.5. Mechanism of Experience Conclusion After Subject Contests and the Necessity

The post-contests conclusion could help students know about the gains and losses in the contests. There is analysis and conclusion on the problems of subject contests so as to improve the practical innovative ability of students. There would be enlightenment in the conclusion, and experience and learning would be gained from the conclusion. Thus, it would comprehensively arouse students' innovative thinking.

In view of the problems exposed during the process of subject contests, they should be solved positively and timely. For example, contests would be involved multiple departments, so there should be a clear responsibility division of the management system to confirm the specific heads and rights. All departments should have positive cooperation with the aim of benefiting teaching for students to have a proper publication. The evaluation achievement should be public and transparent without any personal affairs or equalitarianism; it should try to reach be equal and just by building up a supervision mechanism and so on. In a word, there would be a mutual linkage between subject contests and talent cultivation, so as to push the teaching reform of professional practice and cultivate the excellent innovative applied talents.

7. Conclusion

When participating in subject contests, students could have a full display of the subject ability of learning and find out their problems to solve. Thus, there would be ceaseless solutions to the innovative difficulties. The students who are reluctant to have considered and have insufficient acting ability in the training courses would have bigger interest and higher innovation ability by completing the creative tasks of contests and solving the problems suggested by the previous works of the seniors. Therefore, boosting the cultivation of applied students with subject contests would be a certain promoter for the cultivation of innovative applied talents.

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References

- [1] Qingshi Zhu:Pay Attention to Innovative Quality and Cultivate Successful Innovative Talents . China Higher Education, (2006)No1,p.12-14.
- [2] Fanrong Kong:The Way to Build the Applied Universities . (Peking University Press, Beijing 2006). p.35-37.
- [3] Juhua Tan:Research on the Reform of Talent Training Mode in Chinese Higher Education: from the Perspective of College Students' Employment .(Ph.D.,Wuhan University,Wuhan, 2014).p48.
- [4] Chunhua Peng, Huamei QI, Lixin Lin:Research on promoting innovative talent training with discipline competition . Industry and Information Education,(2022)No.3,p8-13.
- [5] Bin Li, Yan Gu, Wen Jiang, Jie Jiang:Innovation and Entrepreneurship: Theoretical Research and Practice, (2014)No.19,p100-102.