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Current Situation and Countermeasures of Bonsai Teaching in Local Agricultural and Forestry Universities

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Abstract This paper introduces the role of bonsai in the cultivation of talents, analyzes the current situation and existing problems of bonsai teaching in local agricultural and forestry colleges and universities, and finally puts forward corresponding countermeasures, including increasing the proportion of bonsai in professional courses, strengthening the introduction and training of high-quality teachers, improving the teaching model that combines theory and practice, and increasing and perfecting practice and training base of bonsai teaching.

Key words Bonsai teaching, Significance, Current situation, Countermeasure

1 Introduction

Bonsai is not an independent subject in many local agricultural and forestry universities in China all the time. It belongs to the teaching category of floriculture, and occupies a relatively light weight. In actual teaching, it is often not paid attention to, making its role in talent training not fully exerted. With the popularization of higher education in recent years, the cultivation of talents in colleges and universities must meet the needs of society. Therefore, changing the old talent training model is necessary for the needs of development in the new era. Undergraduate teaching must adhere to the talent training goal of "thick foundation, broad specialty, strong ability, and high quality", find the right direction, and open up ideas, thereby serving to cultivate practical and innovative talents with both solid theoretical knowledge and solid practical ability. Bonsai is a highly practical subject. Bonsai art is a kind of art developed from the art of plant cultivation and gardening. It is a concentrated miniature garden, and covers multiple disciplines such as literature, sculpture, calligraphy and painting, gardening and engineering. Bonsai is both a commodity and a work of art, and it has extremely high economic value and artistic value. In some majors of agriculture and forestry colleges and universities, strengthening the teaching of bonsai, increasing the content of practical teaching, and focusing on cultivating students' practical creative ability will contribute to the improvement of overall professional quality and the cultivation of social entrepreneurship and innovation capabilities, which is of very practical significance.

2 Paying attention to and innovating the necessity and significance of bonsai teaching

2.1 Helping cultivate students' professional interest and practical ability

Cultivating students' professional interests can

stimulate their enthusiasm for learning and creative talents, and strengthening the teaching of bonsai theory and practice is an effective way. Compared with floriculture and other subjects, the teaching methods, involved content, expression methods and activity space of bonsai are more colorful, and it can more stimulate students' interest and hobbies in learning. The process of making and cultivating bonsai is not only an internship with physical and mental investment, but also a spiritual feast of artistic aesthetics and artistic appreciation. The interaction of teaching and learning is completed in the process of entertaining. In the practice of bonsai production and maintenance, students can be cultivated to be meticulous, rigorous, patient and hard-working. The result of the experiment is a work of art infused with students' wisdom and sweat, undoubtedly bringing students a sense of accomplishment and pride.

2.2 Helping improve students' aesthetic literacy and professional skills In the cultivation of talents in gardening and landscape architecture majors in agricultural and forestry universities, the major direction and ability training are focused and different, but they are all required to have the knowledge and skills of garden planning and design and can independently undertake the design and construction management of urban and rural landscaping. This requires students to have a good aesthetic foundation and artistic quality. Bonsai is a comprehensive art category, which absorbs and uses art methods such as gardening, painting, calligraphy, poetry, pottery and sculpture. Using living plants, mountains and rocks and other materials, in pots and other utensils, bonsai expresses people's aesthetic ideals and artistic emotions towards nature and society through the artistic image that reproduces the natural scene. Bonsai is a condensed garden, which belongs to the art of space landscaping. Artistic methods should be used in garden planning, design and construction to create a landscape image, and the aesthetic principles related to contrast and unity, balance and stability, proportion and scale must be followed. In the practical teaching of bonsai, through the teacher's demonstration operation and explanation, students can more intuitively

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tively understand the use of aesthetic principles in modeling. Through the creation of the small space of bonsai, students can experience the aesthetic principles contained in the configuration of various landscape elements in the garden space landscaping and master some basic skills in landscaping. Through the production and maintenance of bonsai modeling, students' awareness of four-dimensional space in garden design and landscaping is cultivated, and they will know how to make full use of various landscaping factors and to use appropriate methods and means to express the artistic conception of the landscape.

2.3 Being conducive to stimulating students' potential for innovation and entrepreneurship Cultivating creative talents who adapt to the needs of the society and have innovative consciousness and spirit and promoting the progress of society is the responsibility of college education. Universities are highlands of high-tech and new technological theories research and development, boosters for the transformation of scientific and technological achievements and incubators for high-tech industries. Although the development of bonsai has gone through thousands of years, it has not formed a relatively mature industry until recent years. In a market economy, compared with other agricultural and forestry products, bonsai products have higher technical content and industrial potential. Popularizing bonsai knowledge and cultivating bonsai professionals can promote industry upgrades and promote targeted poverty alleviation. Teaching practice should be combined with entrepreneurial and innovative ideas, close to actual production operations, allow students to create independently and become experts in bonsai appreciation and production and stimulate their potential for innovation and entrepreneurship.

3 Problems in the teaching of bonsai

3.1 Ignoring or even missing internship teaching Although bonsai is included in the teaching category of the professional backbone course of floriculture, its proportion is relatively small, and the degree of attention paid to it is not enough. Bonsai production generally uses live plants and other materials, and takes a long time. The workload of teachers is relatively large. Due to insufficient time, insufficient ability or limited teaching conditions, some teachers will pay attention to theoretical explanations and ignore practical teaching. This has led to the blurring of the teaching content of bonsai to a certain extent and made bonsai teaching become pure art theory study and appreciation.

3.2 Lacking teachers with both theoretical foundation and production skills Bonsai, as a marginal subject, has not received due attention in professional education for a long time. The teaching of bonsai is mostly undertaken by teachers who are not from the field of bonsai research, have insufficient theoretical research and lack practical experience. In addition, college teachers generally emphasize theory and ignore practice nowadays. As a result, the enthusiasm in the teaching of bonsai is not high, the initiative is not strong, and all-round teachers are absent.

3.3 Lacking qualified practice and training base of bonsai professional production The knowledge learned in the classroom needs to be transformed into skills and practical work abilities through practical links. A perfect experimental base is a platform and necessary condition to ensure the quality of talent training. The bonsai garden on the west campus of Yangtze University has always been the main place for teaching and practice of bonsai. It is converted from the original campus flower garden, with simple facilities and limited scale. Most of the space in the garden is occupied for other purposes, so it can only be utilized by a small number of students to carry out simple internship activities such as species identification, bonsai display and maintenance management.

4 Ways and measures to change the current situation of bonsai teaching

4.1 Increasing the proportion of bonsai in professional courses In the teaching of floriculture, bonsai learning can be listed as a course equipped with scientific and systematic textbooks, rational theoretical and practical teaching content, improved weight among professional courses and sufficient time to ensure the teaching effect. In other majors, bonsai making and appreciation can be added as an elective course to improve the popularization of bonsai knowledge and play the role of cultivating students' comprehensive quality.

4.2 Strengthening the introduction and training of high-quality teachers A high-quality faculty team is the guarantee of talent training. Combining the rich cultural connotation and strong practicality involved in bonsai science, teachers are required to have high cultural and artistic literacy, as well as strong practical ability. Talents with bonsai expertise should be introduced appropriately to enrich the teaching staff. The method of internal training and external recruitment can be adopted to select teachers to scientific research institutes and professional bases in the bonsai genre's birthplace and well-developed areas such as Guangdong, Jiangsu and Zhejiang for further training. In daily practice teaching, experts with rich experience in bonsai production and manufacturing from off-campus gardening companies can be hired to give on-site demonstration lectures. At the same time, teachers need to overcome the view of underestimating technical knowledge and consciously study bonsai theory and techniques to improve their professional quality.

4.3 Improving the teaching mode that combines theory and practice Bonsai is a highly practical subject. If abstract theories cannot be combined with actual operational applications, it is difficult to grasp the principles and techniques of bonsai creation and cultivate the ability to produce bonsai. Bonsai is a kind of plastic art in four-dimensional space, and it has a time continuity of life changes in a three-dimensional space, exhibiting the change cycle of landscape in the four seasons. Therefore, in the practical teaching of bonsai, it is necessary to arrange the relevant content of the lectures in different time periods for each link of modeling and di-

vide the conception creation, bracketing, shaping, and root, stem, branch and vigor cultivation, and maintenance management into a school year for planning and implementation, in order to ensure the continuity and integrity of internship. The production of tree bonsai is a confirmatory experimental process. When creating bonsai, computer-aided design and manual sketching can be first used to design or draw the plan of bonsai modeling, and then combined with the actual situation, the bonsai works are perfected, thus improving the quality of the works and the efficiency of creation.

4.4 Increasing and improving the practice and training base of bonsai teaching A perfect practice teaching base is a necessary basic condition for talent training. We should attach importance to base construction, and increase investment in personnel and materials to ensure adequate venues and complete facilities and tools, thereby meeting the needs of teaching and research. The planning of base should be scientific and reasonable. It can be divided into indoor and outdoor functional areas including bonsai material cultivation, production and manufacture, work display, bonsai art classification appreciation and bonsai research exchange to form a multi-functional science and technology demonstration park integrating production, teaching and research. At the

same time, it needs to dock the market actively and carry out product sales services to create benefits. Students can be sent to off-campus bonsai production companies, professional bases, etc. to follow the experts on the production lines as teachers and participate in the production, operation and management of bonsai, thereby improving their comprehensive ability in all aspects.

5 Conclusions

Education and teaching reform is an eternal topic for colleges and universities. Based on the goal of cultivating high-quality talents with practical and innovative capabilities that meet the needs of the society, the unreasonable curriculum structure system must be adjusted in a timely manner to eliminate outdated teaching content and backward teaching methods. It is necessary to fully understand and explore the functions of various professional courses in talent training, construct a curriculum system according to the characteristics of the subject and the law of development, and establish and perfect internship training bases, providing scientific theories and material guarantees for the cultivation of talents, and promoting the construction and development of high-level universities.

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