
Brief Analysis of the Construction of Green Campus in Universities in the New Era

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Abstract: With the development of social economy and over utilization of natural resources, environmental issues are becoming prominent with each passing day. From the Stockholm Conference on the Human Environment in 1972 to the Tbilisi Declaration in 1977, and then to the concept of "education for sustainability" proposed by UNESCO in Greece in 1997, provided a theoretical basis of the development of green campus. On the basis of realizing the basic educational functions of the campus, green campus incorporate the concept of sustainable development into their daily management. Through environmental management and effective environmental education, they create a cultural context for environmental protection, which encourage teachers and students to participate actively in school environmental education activities, to achieve the improvement of basic knowledge, skills, attitudes, emotions, values, and moral behavior for sustainable development by participating in practice. We should adhere to the new development concept, promote green development as well as harmonious coexistence between humans and nature, which have great significance to deepening the implementation of sustainable development strategies, improving the coordination mechanism in the field of ecological civilization, and accelerating the promotion of green and low-carbon development, it's also true for injecting strong momentum into promoting ecological civilization construction and building beautiful campus and country together.

Keywords: Universities, Green Campus, Sustainable Development, Green Education

1. Introduction

The emergence of green campus began with the Stockholm Declaration in 1972, in which the concept of sustainable development was first proposed in the form of universities. The subsequent Tolloire Declaration officially became a milestone in the construction of green campuses. In 1990s, 'Green Campus' appear frequently in the World., such as 'Green Campus' in Sweden, 'Sustainable Development Campus' in Australia, 'Ecological Campus' in the UK. The European Foundation for Environmental Education launched the first European "Ecological Campus Program" in 1994. In China, the National Action Plan for Environmental Promotion and Education first proposed the concept of green campus in 1996, which emphasizes the integration of environmental awareness and action into the overall activities of school

management, education, teaching, and construction, guiding teachers and students to pay attention to environmental issues, incorporate environmentally friendly management measures into the comprehensive daily management of the school and continuously improve them. And the official implementation of the concept of green campus was proposed by Tsinghua University in 1998. Green campus not only contribute to enhance the environmental literacy of teachers and students, and improve the school environment, but also encourage more people to participate in environmental protection actions through students driving families, communities, and citizens, promoting cooperation among all parties in school environmental education and management, helps deepen the understanding and understanding of environmental issues and sustainable development ideas among teachers and students, improve their environmental literacy, and make them pay more attention to environmental protection in their future lives

and work. [1] But there are many issues such as the difficulty in popularizing the concept of "green campus", the construction of green campuses in universities started relatively late, and lack of relevant research, etc. [2] Currently, there are many problems in practice, most universities in China mainly take measures to save energy and repair houses, but there are still problems such as messy layout, scattered functions, inadequate spacing between old campus buildings, insufficient green facilities, aging teaching facilities, and high energy consumption. [3] For universities in the new era, it is very urgent to build green universities with the development of social economy and higher education. [4]

2. The Definition of Green Campus

2.1. The Concept of Green Campus

"Green campus" refers to a school that, on the basis of achieving its basic educational functions and guided by the concept of sustainable development, incorporates environmentally friendly management measures into the comprehensive daily management work of the school, continuously improves, and fully utilizes all resources and opportunities inside and outside the school to comprehensively improve the environmental literacy of teachers and students.

Green campus is the carrier of quality education, and a practical way of environmental protection. [5] The development of society cannot be separated from green landscapes, and similarly, the development of universities cannot be separated from the construction of green campuses.

2.2. The Theoretical Basis

2.2.1. Sustainable Development

The construction of green campuses is based on the theory of sustainable development. Sustainable development is the core principle of the concept of ecological civilization and the fundamental goal to be achieved in green campus construction. [6] It is the main guiding ideology and principle of green campus construction, which is integrated into various activities such as teaching, scientific research, management, and campus construction in universities.

2.2.2. Green Education

Green education is the foundation of green campus construction, cultivating students' awareness of environmental protection and sustainable development through classroom teaching, social practice, and environmental publicity and education activities. [7] Former President of Tsinghua University, Academician Wang Dazhong, believes that the construction of a "green university" revolves around the core of human education, implementing the principles and guiding principles of sustainable development and environmental protection into various activities of the university, and integrating them into the entire process of university education.

2.2.3. Other Basis

Taking full advantage of scientific research technology, is contributed to improve the efficiency of resource utilization, and providing energy-saving products and technologies for schools and society. [8] In green campus, people and nature coexist harmoniously, demonstrating good ecological harmony. The principles of people-oriented, green ecology, cultural orientation, and utilization of natural resources can all serve as the theoretical basis for the construction of a "green campus".

3. Green Campus Construction in Universities

3.1. The Value of Green Campus in Universities

3.1.1. Intrinsic Value

Green campus construction is an important component of green university construction. Green universities represent the new value orientation of university development and the new concept of university education, which meets the requirements of social development with ecology, harmony, and development as the theme. Guided by environmental protection and sustainable development, Green University advocates the ecological concept of harmonious coexistence between humans and nature, establishes a new order of environmental fairness and development fairness, and an ecological moral and ethical standard system, establishes the creation of ecological civilization and green culture, and leads a way of life that is in line with human nature and a harmonious and unified way of life between human values and natural values. [9] The basic axiology orientation is exploring the mode of coordinated development of social economy and nature. Green universities demonstrate the new tasks, contents, and requirements of university education. Building a green university encompasses new tasks such as green education, green campuses, and green culture. This requires universities to integrate green education with environmental protection, ecological construction, and sustainable development as the main content into teaching practice, in order to enrich and improve students' basic knowledge structure. [10] The campus of a university is green. Schools should develop green plans, set up green courses, build green campuses, and advocate green campus lifestyles.

3.1.2. Social Value

As high-quality talents in society, university teachers and students can have a more comprehensive and comprehensive understanding of the concept of sustainable development of ecological civilization, and can also have a deeper understanding of the requirements of ecological civilization construction and practice. In order to achieve sustainable development, universities actively respond to the call of the country to build ecological civilization, change the mode of education, and carry out activities to create green campuses. On the other hand, universities actively respond to the call for ecological civilization

construction, guided by the concept of sustainable development of ecological civilization, and strive to promote the construction of green campuses. [11] This not only benefits the construction of universities themselves, but also reflects their own value demands. The construction of green campuses is conducive to the promotion of the concept of sustainable development of ecological civilization in the field of higher education, and also has a huge radiation and demonstration effect on the construction of social ecological civilization.

3.2. Evaluation Standards for Green Campuses in Universities

In March 2019, the release of the 2019 version of the "Green Campus Evaluation Standards" provided an important theoretical basis for the construction of green campuses. According to the definition given in the "Standards", A green campus is a campus that maximizes resource conservation (energy conservation, water conservation, material conservation, and land conservation), protects the environment, and reduces pollution throughout its entire life cycle, providing teachers and students with a healthy, applicable, and efficient teaching and living environment. It has environmental education functions for students and is harmonious with the natural environment. [12]

4. Practical Research on the Construction of Green Campus in Universities

4.1. Existing Problems

Through continuous practice in creating green campuses, China has accumulated certain experience in building green campuses. Chinese universities have also achieved certain results in building green campuses, but there are also some problems and regrets. [13] For example, the green awareness of teachers and students needs to be further improved, there are relatively few high-quality landscapes in school gardens, and building facilities still need to be renovated due to aging; The corresponding management system for green campus construction is not perfect enough; The evaluation index system is complex and diverse; The process of creating a green campus lacks sustainability; Etc.

4.2. Solution Direction

The solution to the above problems can be approached from the following strategic directions, in order to help universities strengthen their emphasis on green campus construction and promote the sustainable development of green campus construction in universities. [14] Such as, Green education focuses on cultivating green ecological awareness among teachers and students, and cultivating campus green culture; Strengthen the construction of landscape ecology and energy-saving building facilities on campus; Establish and improve the management system for the construction of green

campuses in universities; Improve the evaluation system for green campuses in universities; Establish a persistent concept of green campus construction. [15]

5. Conclusion

In theory, building a sustainable green campus requires ideological guidance and institutional guarantee. Interpreting the theory, connotation, and social value of green campus construction from a value perspective is conducive to a deeper understanding of "green campus" construction. In practice, the construction of green campuses is an important part of the implementation of China's sustainable development policy, an inevitable requirement for energy conservation and emission reduction and the realization of an ecotype society, and also the direction that colleges and universities always adhere to in the field of energy management and environmental protection.

References

- [1] Xu Xinao, Wei Jianxiong. (2018). Analysis of the Connotation and Cultivation Strategies of Green Campus Culture in Universities. *Green Technology*, (11), e269-e271. doi: 10.16663/j.cnki.lskj.2018.11.116.
- [2] Hou Dasen. (2018). Exploration of the Current Situation and Countermeasures for Cultivating Green Campus Culture in Universities. *Green Technology*, (13), e303-e304. doi: 10.16663/j.cnki.lskj.2018.13.128.
- [3] He Zhiwu. (2021). Exploration of the Introduction Mechanism of Green Education in Universities. *Green Technology*, 23 (11), e225-e227. doi: 10.16663/j.cnki.lskj.2021.11.076.
- [4] Ren Jianglin. (2020). Investigation and Strategy of Developing Green Education for College Students in New Era Universities. *Journal of Chongqing Three Gorges University*, 36 (01), e114-e121. doi: 10.13743/j.cnki.issn.1009-8135.2020.01.014.
- [5] Wang Lei. (2020). Exploring the Path of Developing Green Education in Universities under the Background of Ecological Civilization. *Green Technology*, (01), e215-e218. doi: 10.16663/j.cnki.lskj.2020.01.087.
- [6] Xue Juan. (2018). The Concept and Practice of Green Education in Universities: Taking Chongqing Three Gorges University as an Example. *Journal of Chongqing Three Gorges University*, 34 (01), e114-e121. Doi: 10.13743/j.cnki.issn.1009-8135.2018.01.016.
- [7] Luo Xianyu, Yu Baihua. (2017). Green Education: The Path Choice of Ecological Civilization Construction in Universities. *Journal of Yunnan University for Nationalities (Philosophy and Social Sciences Edition)*, 34 (02), e151-e155. doi: 10.13727/j.cnki.53-1191/c.2017.02.023.
- [8] Zhan Jiayu, Wang Hao, Shi Yingying, Zhang Jing, Pang Jianfeng. (2021). An Analysis of the Ways to Build Green Campuses in Chinese Universities. *Sichuan Environment*, 40 (04), e270-e274. Doi: 10.14034/j.cnki.schj.2021.04.040.
- [9] Weng Sijuan, Wu Yan, Guo Lili. (2020). Research on the Construction and Management Model of Green Campus in Universities. *Construction technology*, (10), e122-e124. doi: 10.16116/j.cnki.jskj.2020.10.031.

- [10] Lai Xiaoyan, Chen Meilin, Wu Zhong'an, Chen Shuqin, Jiang Yifan. (2019). Discussion on the Current Situation and Problems of Green Campus Environmental Management in Chinese Universities. Chinese Society For Environmental Sciences 2019 Annual Conference of Science and Technology - Proceedings of the Environmental Engineering Technology Innovation and Application Sub Forum (III), e818-e821, e826, doi: 10.26914/c.cnkihy.2019.071306.
- [11] Huang Kaiqiang, Xu Shuitai, Xue Fei, Liu Qin. (2019). Research on the Green Transformation of Solar Fresh Air System in University Student Dormitories under the Background of Green Campus. Construction technology, (15), e23-e26. doi: 10.16116/j.cnki.jskj.2019.15.004.
- [12] Kong Zhuo, Bruce Lee, Wang Laien, Zhang Yulun, Yuan Shengqin. (2019). Research on the Construction of Green Campus in Universities under the Concept of Green Development. Anhui Architecture, 26 (06), e142-e144. doi: 10.16330/j.cnki.1007-7359.2019.06.055.
- [13] Xi Hui. (2018). Comparative Study on the Evaluation System of Green Campus in Domestic and Foreign Universities. Decoration, (11), e140-e141. doi: 10.16272/j.cnki.cn11-1392/j.2018.11.037.
- [14] Xu Wenbo, Zhang Xuehua, Zhang Hongwei. (2018). Analysis of the connotation of green campuses in universities in the new era. Tianjin Technology, 45 (08), e73-e75. doi: 10.14099/j.cnki.tjkj.2018.08.023.
- [15] Feng Jing, Zhang Hongwei, Zhang Xuehua, Li Juan. (2018). Exploration of green campus evaluation in universities. Tianjin Science and Technology, 45 (06), e35-e40. doi: 10.14099/j.cnki.tjkj.2018.06.011.