

The value and approach of integrating popular science about animals and plants into college students' life education

Jie Yan^{a,*}, Yong Zhou, Bozhou Jiang, Wenbo Fu

Chongqing Normal University, Chongqing, China

^ayanjie185@sina.com

*Corresponding author

Abstract: This article aims to explore how popular science of animals and plants can be integrated into college students' life education, and discusses its value and feasible pathways. First, it introduces the basic concepts of popular science of animals and plants and college students' life education. Then, it explores the practical value of integrating popular science of animals and plants into college students' life education, including guiding college students to establish the concept of valuing life, enriching their knowledge structure of animals and plants, and strengthening their respect and awe for nature. Furthermore, feasible pathways for integrating popular science of animals and plants into college students' life education are proposed, including utilizing popular science of animals and plants to enhance students' life education, creating an atmosphere of respect for life through popular science activities, and infusing the concept of life through popular science activities. Finally, the main viewpoints and conclusions of the research are summarized. Through this study, we can recognize the importance of popular science of animals and plants in college students' life education and provide feasible pathways to promote the implementation of life education.

Keywords: popular science of animals and plants; college students' life education; practical value; feasible pathways

1. Introduction

As an important part of contemporary university education, life education aims to cultivate students' respect, care, and spirit of exploration towards life, which is of great significance for nurturing college students' worldview and life philosophy. However, in reality, there are issues with life education content being relatively detached from reality and students' low participation. Popular science of animals and plants, as a vivid and intuitive form of education, not only increases students' understanding of life but also guides them to establish a value system that prioritizes life, enriches their knowledge structure of animals and plants, and strengthens their respect and awe for nature. By integrating popular science of animals and plants into college students' life education, the current problems of life education being detached from reality, rigid in form, and ineffective can be effectively addressed.

2. Basic Concepts

2.1. Popular Science of Animals and Plants

Popular science of animals and plants refers to educational activities that promote public awareness of animals and plants, improve their knowledge and scientific literacy. It aims to disseminate scientific knowledge about animals and plants, including species classification, ecological environments, and behavioral habits, to enhance people's understanding and respect for biodiversity. Popular science of animals and plants can be conducted in various forms such as exhibitions, lectures, popular science publications, and interactive experiences, allowing the audience to learn about animals and plants in a relaxed and enjoyable atmosphere, thereby enriching their knowledge structure and enhancing their understanding of animal and plant species and composition.

2.2. College Students' Life Education

Students' life education refers to the cultivation of students' respect, care, and spirit of exploration towards life through curriculum cultivation, practical training, environmental shaping, and atmosphere building during higher education. It aims to guide students in understanding the essence and value of life, develop their attention to natural ecological environments and biodiversity, and promote the formation of a positive attitude and values towards life. The goal of college students' life education is to cultivate students' comprehensive qualities, including scientific literacy, environmental awareness, social responsibility, and innovation capabilities, making them citizens with a global perspective and awareness of sustainable development, and enhancing their scientific understanding of life.^[1]

There is a close connection between popular science of animals and plants and college students' life education. As a specific form of popular science education, popular science of animals and plants can provide valuable resources and practical opportunities for college students' life education. Through popular science of animals and plants, college students can gain in-depth understanding of the diversity of animals and plants, the balance of ecosystems, and the interrelationship between humans and nature. At the same time, popular science of animals and plants can stimulate students' interest in learning, improve their scientific literacy and environmental awareness, and cultivate their respect and consciousness for life.

The combination of college students' life education and popular science of animals and plants can provide students with comprehensive life education experiences. Through popular science of animals and plants, students can intuitively experience the vitality of living organisms and the complexity of ecosystems, thereby cultivating their love and respect for life. Additionally, popular science of animals and plants can broaden students' horizons, stimulate their innovative thinking and spirit of exploration. By integrating popular science of animals and plants into college students' life education, the educational content becomes more specific and vivid, and students' participation and learning outcomes are enhanced.

3. The Practical Value of Integrating Popular Science of Animals and Plants into College Students' Life Education

3.1. Guiding College Students to Establish the Concept of Valuing Life

Integrating popular science of animals and plants into college students' life education can help guide them to establish the concept of valuing life. Modern society is facing issues such as ecological degradation, species extinction, and loss of biodiversity. As the main force of future society, the values and behaviors of college students are crucial for building a sustainable ecological environment. Through an in-depth understanding of the diversity of animals and plants and the balance of ecosystems, students can effectively recognize the value and fragility of life. In the process of popular science education on animals and plants, they learn to respect and cherish various forms of life, thus cultivating their care and protection consciousness towards living beings. This concept of valuing life has important influences not only on individuals' moral concepts and humanistic spirits but also on building a harmonious society and sustainable development.

3.2. Enriching College Students' Knowledge Structure of Animals and Plants

Integrating popular science of animals and plants into college students' life education can also enrich their knowledge structure of animals and plants. Animals and plants are important components of Earth's biodiversity. Understanding knowledge about the classification, ecological environments, and behavioral habits of animals and plants helps students gain a comprehensive understanding of ecosystems and strengthens their knowledge of life. Through popular science activities and educational resources, students can learn more scientific knowledge about animals and plants, such as the adaptive characteristics, interrelationships, ecological functions, and roles in ecosystems of different animals and plants. This not only improves students' scientific literacy but also provides a foundation for their participation and contributions in the fields of environmental protection and biodiversity conservation. An enriched knowledge structure of animals and plants also helps students develop systematic thinking and analytical abilities, enhancing their interest in learning and innovative capabilities.

3.3. Strengthening College Students' Respect and Awe for Nature

Integrating popular science of animals and plants into college students' life education can strengthen their respect and awe for nature. Through the exposure and learning of knowledge about animals and plants, students will have a deeper understanding of the wonders and greatness of the natural world. They will develop a sense of awe for the beauty and complexity of nature and gradually realize the close relationship and interdependence between humans and nature. This attitude of respect and awe will motivate students to actively engage in ecological conservation and environmental sustainable development. They will pay more attention to environmental issues, take proactive actions to protect biodiversity, and promote sustainable resource utilization and ecological balance. Such awareness and actions not only contribute to the protection of the natural environment but also promote the harmonious coexistence of humans and nature, driving social progress.^[2]

In conclusion, integrating popular science of animals and plants into college students' life education has significant practical value. It can guide college students to establish the concept of valuing life, cultivate their respect for and consciousness of life. Moreover, it enriches college students' knowledge structure of animals and plants, enhances their scientific literacy and comprehensive abilities. Additionally, it strengthens college students' respect and awe for nature and promotes the practice of ecological conservation and sustainable development. Therefore, integrating popular science of animals and plants into college students' life education is an education exploration with important practical significance. It is not only positive for the comprehensive development of individual students but also has significant influence on the sustainable development of society as a whole. By cultivating college students with life awareness and ecological civilization concepts, we can jointly build a better and harmonious world.

4. Feasible Pathways for Integrating Popular Science of Animals and Plants into College Students' Life Education

4.1. Utilizing Popular Science of Animals and Plants to Enhance Students' Life Education

Currently, there are issues with life education for college students being relatively detached from reality and their low participation. Many college students lack a true understanding and profound knowledge of life, and their awareness of the importance of ecological environmental protection and biodiversity is insufficient. To address this problem, popular science of animals and plants can be integrated into college students' life education to strengthen their life education.

Firstly, by organizing popular science lectures and exhibitions on animals and plants, students could be taught basic biological science knowledge and the latest research achievements. Lectures and exhibitions could showcase the diversity of animals and plants, ecological functions, and the relationship between humans and nature by inviting professional biologists, ecologists, and other experts to present vivid and interesting explanations and demonstrate examples to students, showcasing. These activities not only broaden students' knowledge but also stimulate their interest and enthusiasm for learning.

Secondly, through field trips and practical activities students are able to have direct contact with and observation of animals and plants. Schools can organize biological field study teams to take students to nature reserves, botanical gardens, and other places for field investigations. Through close contact with animals and plants, students can intuitively experience the wonders of life and the complexity of ecosystems. Such practical activities help stimulate students' interest in learning and allow them to truly appreciate the value and vulnerability of life, cultivating their awareness of life.

4.2. Creating an Atmosphere of Respect for Life through Popular Science of Animals and Plants

In the college campus, an atmosphere of respect for life can be created through popular science of animals and plants. Schools can establish popular science display areas for animals and plants, showcasing models, pictures, and information about various animals and plants, providing students with opportunities to understand biodiversity. At the same time, student participation in popular science volunteer activities can be organized, allowing students to actively participate in popular science work, increasing their interaction and understanding of animals and plants. These activities not only enhance students' knowledge of animals and plants but also cultivate their respect and care for life.

Additionally, school libraries can increase popular science books and magazines related to animals

and plants, providing students with a wide range of reading resources. Schools can organize popular science knowledge competitions on animals and plants, encouraging students to actively participate and improve their understanding and mastery of knowledge about animals and plants. Through these initiatives, a learning environment that comprehensively understands life can be created for students, stimulating their interest in and passion for popular science of animals and plants, and encouraging them to actively acquire and disseminate life knowledge.

4.3. Infusing the Concept of Life through Popular Science Activities

Popular science activities on animals and plants can serve as a way to infuse the concept of life and integrate life education into students' daily lives and learning. Schools can organize diverse popular science activities on animals and plants, such as popular science lectures, exhibitions, film screenings, and parent-child activities. These activities not only provide students with opportunities to acquire knowledge but also guide them to reflect on and contemplate the meaning of life in interesting and engaging ways.

Furthermore, to better integrate popular science of animals and plants into college students' life education, relevant elective courses or seminars can be offered to provide students with a more in-depth platform for research related to life. These courses and seminars can cover a wide range of topics, such as biodiversity conservation, ecosystem restoration, climate change and biological adaptation, etc. Through these academic activities, students will have the opportunity to conduct in-depth research on cutting-edge issues in life sciences, understand the latest research achievements and challenges.

In these courses and seminars, employing small group discussions, research reports, and practical projects are able to guide students in actively thinking and discussing the relationship between humans and nature. Students can form groups to jointly research a specific topic, engage in collective brainstorming, conduct in-depth analysis of problems, and propose solutions. Such learning processes not only cultivate students' innovative thinking and problem-solving abilities but also stimulate their academic interests and sense of responsibility.^[3]

In summary, integrating popular science of animals and plants into college students' life education is a feasible pathway. By utilizing popular science of animals and plants to enhance students' life education, creating an atmosphere of respect for life through popular science activities, and infusing the concept of life through popular science activities, students' awareness and respect for life can be improved, their knowledge structure of animals and plants can be enriched, and their awe and consciousness for nature can be cultivated. Schools and educational institutions should actively explore and promote the implementation of this pathway, providing rich educational resources and practical opportunities for college students' life education, and promoting their comprehensive development and the construction of consciousness for sustainable development.

5. Conclusions

Integrating popular science of animals and plants into college students' life education is an exploration with significant practical value. By guiding students to establish the concept of valuing life, enriching their knowledge structure of animals and plants, and strengthening their respect and awe for nature, their life awareness and environmental responsibility can be cultivated. Moreover, by utilizing popular science of animals and plants to enhance students' life education, creating an atmosphere of respect for life through popular science activities, and infusing the concept of life through popular science activities, students' interest and participation can be stimulated. This will contribute to shaping college students with a global perspective and awareness of sustainable development, and enable them to make contributions to the construction of a harmonious society and a sustainable future. Therefore, we should actively promote the practice and research of integrating popular science of animals and plants into college students' life education, continuously explore innovative educational strategies and pathways, and provide more effective and meaningful educational experiences for college students' life education.

Acknowledgements

This paper is the research result of the Innovation and Entrepreneurship training program of Chongqing Normal University students in 2023, "Science and Education Mapping of common birds in University Town Park", project number: S202310637007.

References

- [1] Jiyou Xiang, Feiyang Zhen. (2021). *A Survey on college students' life education Path Innovation. School Party Building and Ideological Education* (13), 89-90.
- [2] Shengqiang Wang, Ying Xiong. (2023). *Dilemma and optimization Strategy of college students' life education in the new era. Journal of Mudanjiang College of Education* (04), 56-59.
- [3] Yujing Fu. (2022). *Dilemma, causes and path selection of college students' life education in the New Era. Future and Development* (12), 88-91.