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Exploration of ecological fishery course teaching practice from the ideological and political perspective

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Abstract
Ecological fishery is introduced in the fishery ecosystem between producers, consumers and decomposition of hierarchical energy conversion and material cycle, make the specific aquatic life and specific fishery waters environment, in order to achieve sustained, stable and efficient fishery production mode of a aquatic professional course, is for aquaculture, fishery development master courses of professional theory and practice. Ecological fishery can make full use of local fishery resources, recycle waste, save energy, improve comprehensive ecological benefits, and realize the sustainable development of fishery. Through the study of this course, students can master the basic theory of aquaculture ecology, the characteristics of water ecosystem and the theory of fish individual ecology, have the basic skills of fishery ecology research, establish the ideological concept of ecological civilization in the new era, and establish the values of "big country, agriculture, rural areas and farmers", "understand agriculture, love the countryside and love farmers". Ecological fishery is also an effective way to build resource-saving and environment-friendly fishery in the new era, an important part of the development of rural circular economy, and the development direction of modern fishery.

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1. Introduction

Under the new situation, ideological and political education in colleges and universities must further promote the reform and innovation of ideological and political education, fully explore the ideological and political elements in professional courses, improve the quality of ideological and political education, and improve the ideological and political quality and professiona1 comprehensive quality of contemporary college students [1]. Ecological fishery is an important basic course of fishery development in the School of Animal Science and Technology of Yangtze University. This course is together with the major decision of "ten years of banning fishing in the Yangtze River" and General Secretary Xi Jinping's request that "the restoration of the ecological environment of the Yangtze River should be placed in an overwhelming position, and we should focus on great protection and not large-scale development. "The indication has a high fit point. This course is conform to the era development, combined with the national macro policy "Yangtze river ten years fishing" background, in 2021, through the classroom teaching national ecological policy, fishery development in the past and present, especially the discussion link, the students big fishery feelings, depth of participation, combined with his hometown fishery development, expressed their understanding of ecological fishery and future development, ideological elements into the classroom, the teaching effect is good.

2. Conconnotation and task of ideological and political courses

Curriculum ideological and political education refers to the integration of ideological and political elements while teaching curriculum knowledge, so that it can be promoted in collaboration with professional teaching.

Its task is to professional course and ideological and political content of organic fusion, and make the organic integration continuity throughout the whole process of teaching, the realization of professional knowledge teaching and correct values lead the organic unity, encourage students to learn knowledge into their own ability, become the individual know the world and the basic ability and method of transforming the world [2]. Among them, the so-called ideological and political elements refer to the ideological elements related to moral education and which can actively help college students establish a correct world outlook, outlook on life and values, including the positive and important positions and viewpoints in various political, economic, cultural, social and ecological fields.

3. Curriculum teaching design of integrating professional knowledge points and ideological and political elements of ecological fishery

Ecological fishery contains rich ideological and political elements. Teachers can fully explore the ideological and political elements in ecological fishery, organically integrate the professional knowledge points of ecological fishery with the ideological and political elements, and realize the cross-explanation of ideological and political elements and professional knowledge by improving the course teaching design.

3.1. The organic integration of ecological fishery definition, brief history of development and cultural confidence

Ecological fishery refers to the benign material circulation of fishery organisms and energy conversion according to the principles of ecology and ecological economics, through the combination of natural regulation and artificial control, so as to realize the sustainable, stable and efficient fishery production mode.

China is the first country in the world to start freshwater fish farming, and also one of the earliest countries to develop ecological fishery in the world. The working people have accumulated rich knowledge of ecological fishery in the production practice. In 460 BC, Fan Li wrote the Book of Fish Farming, which emphasized that the breeding environment should be adapted to the habits of fish. The Ming dynasty "multiple industry composite ecological agriculture model" on the basis of ecological principle, a variety of high economic value of agriculture (fishery) species population layout in different space lake depression area, according to the principle of food chain and material, energy multiple utilization principle of planting and breeding (livestock, aquatic products) organically, realize the large agricultural ecological economic system of efficient energy flow, material circulation, information transmission and value appreciation, a model of traditional ecological agriculture model. However, the ecological fish farming in ancient China mainly relies on people's practical experience to adapt to the reproduction of fishery, which belongs to the traditional ecological fishery. Through the introduction of the interaction between fish and the environment and the brief history of the development of "ecological fishery", students can master the definition of ecological fishery, understand the brief history of the development of ecological fishery, learn the wisdom of ancient working people, establish cultural confidence, and enhance national pride.

3.2. Organic integration of fish species diversity and family and country feelings

China has more than 3,000 kinds of fish, including more than 800 kinds of freshwater fish. In comparison, there are only 522 freshwater fish species across Europe. According to incomplete statistics, there are about 380 species of fish in the Yangtze River basin, among which more than 180 species of species are unique to the fish distributed only in the Yangtze River basin. The Yangtze River is known as the cradle of China's freshwater fishery. In the 1950s, people caught more than 420,000 tons in the Yangtze River basin every year. Through the introduction of fish species diversity, make the students in the fish species distribution and origin at the same time, arouse the motherland magnificent rich interest, love, guide students to love the motherland, love home lofty feelings, and contribute to the construction of the country, home, youth sense of mission and sense of responsibility, so as to cultivate talents with deep home countries feelings.

3.3. The organic integration of fishing influence on fishery resources and the strategic thought of sustainable development

Due to the high intensity fishing for many years, the fishery resources of Qinghai Lake have decreased sharply and the development capacity has been lost. Therefore, the fishery of Qinghai Lake has been fully banned, and artificial proliferation and release have been carried out to protect the fishery resources of Qinghai Lake. At present, the naked carp in Qinghai Lake has been listed as an endangered species in the Red List of Chinese Species. When explaining the protection of fish resources, combined with the changes of naked carp resources in Qinghai Lake, with the teaching method of typical related case analysis, it expounds the strategic thought of sustainable development for students. As a member of the natural life system, human beings should respect, learn and make rational use of the natural laws, and take the demands of nature wisely and use them properly.

3.4. Organic integration of the sustainable utilization of water resources with the concept of environmentally friendly fishery

Water ecosystem is the general term of all kinds of water ecosystem on the earth's surface, and is one of the important environmental conditions for human survival. It is mainly composed of water, dissolved substances, suspended substances, substrate and aquatic organisms as complete natural complexes. For aquaculture, on the one hand, almost all aquaculture modes depend on water resources, and the availability of abundant quality water is the basic premise and necessary condition for healthy aquaculture; on the other hand, the waste output formed by aquaculture can also cause pollution to water resources. At the same time, due to the lack of national and regional aquaculture overall planning and farmers environmental consciousness is lacking, blindly expand the scale of breeding, increase density, any discharge aquaculture wastewater such as phenomenon is common, combined with the breeding yield, benefit orientation, the breeding mode of water quality control ability is weak, lead to fishery water environment pollution has become increasingly serious, fishery accidents occur frequently. Therefore, the concept of environment-friendly fishery is also in line with the current development trend of ecological

fishery development. With the new breeding mode and the new breeding technology, the students can understand the value of water source and the strength of new technology, and then form a new concept of ecological and environmental protection breeding.

3.5. The influence of aquatic germplasm resources protection on ecological fishery and the organic integration of patriotism

Aquatic biological resources are the material basis for the sustainable development of fisheries. As early as the early 1960s, led by Chinese biologist Professor Tong Di Zhou, a series of nuclear transfer studies in bony fish have obtained nuclear hybrid and cloned fish in fish genera and subfamilies, greatly surpassing the results obtained by western scholars in frog experiments and breaking through the barrier between species. In the interpretation of genetic influence on fish growth, combined with the birth of the world's first cloned fish and genetically modified fish, introduce the older generation of scientists in response to the country's call to the, give up foreign superior conditions, resolutely returned to the motherland, overcome difficult, research, made a significant contribution to scientific research in our country, embodies the strong spirit of patriotism. These deeds are of great significance to the spread of patriotism and the cultivation of students' national identity.

3.6. Organic integration of research on aquaculture pollution prevention and control and innovative spirit

In order to achieve the goal of environment-friendly aquaculture, new green breeding models have emerged in the public view, such as rice and shrimp integrated breeding, fish and vegetable symbiosis, container breeding and far-reaching sea cage farming. Among them, the rice and shrimp integrated breeding mode has developed rapidly in recent years and has been widely recognized by farmers [3]. Combined with the rice planting mode of rice and the habitat characteristics of crayfish, the researchers carried out the rice and shrimp co-cropping mode, clean water quality and safe living environment, which not only ensured the quality of crayfish, but also efficiently utilized the deep space of farmland, improved the quality and efficiency, and became a booster of rural economic development. Limited by the continuous extrusion of offshore and land aquaculture space, far-reaching sea aquaculture has become an important development direction of China's aquaculture industry [4]. With the strong self-purification ability of the far-reaching sea and high quality quality, the incidence of aquaculture diseases will be significantly reduced, the yield per unit water body will be greatly increased, and the quality of aquatic products will be continuously upgraded. China's aquaculture is transforming from extensive to modernization, and this difficult process needs to rely on scientific and technological innovation. The new era, new situations and new tasks require us to have new ideas, new designs and new strategies in scientific and technological innovation. The same is true of aquaculture. Only by leading science and technology can we build a more stable and modern aquaculture system and ensure the "bite of safety". These research examples fully show the innovative thinking ability of Chinese scientists, which is of great significance to broaden students' vision and cultivate their innovative spirit.

3.7. The organic integration of the quality and safety management of aquatic products and the sense of industry responsibility

Develop green breeding to ensure food safety. The use of antibiotics in aquaculture has been a food safety concern for researchers and the public. Many aquaculture farmers are unable to distinguish between the specific class of antibiotics and the specific withdrawal time of each antibiotic, resulting in the abuse of antibiotics. The illegal use of antibiotics not only leads to the destruction of the microbial environment balance of the aquaculture water and the bottom, but also flows into the rivers and lakes with the discharge of the aquaculture tail water, which brings great hidden dangers to the ecological environment safety of natural waters. The abuse of antibiotics has also led to the problem of antibiotic residues in aquatic products, triggering food safety discussions. In addition, if the long-term use of low doses of antibiotics in aquaculture is used to prevent diseases and promote growth, it will accelerate the increase of drug resistance or even the emergence of drug-resistant bacteria. Therefore, the abuse of antibiotics has become a major scientific problem that seriously affects the healthy development of aquaculture industry in China [5]. China is also constantly strengthening the management and finding new ways to regulate the standard use of antibiotics in aquaculture. Since 2000, Chinese scientific researchers and aquatic enterprises will gradually carry out scientific research and production exploration, Excavating potential biological agents or natural substance components that alternative antibiotics, besides, Research institutes and enterprises actively develop microbial preparations, fermentation products and Chinese herbal extracts, The prohibition and substitution resistance storm has swept through China's aquaculture industry, A variety of microbial agents, including probiotics, prebiotics, synbiotics and so on, have also been put into aquaculture, By improving the water, sediment and animal gut microbial environment, Improved the quality of aquaculture environment and the stress resistance performance of aquatic animals, Also improved the scientific awareness of the breeding personnel. At the same time, make full use of the ancestors left wealth-Chinese herbal medicine, its not only rich resources, high security, less residue, and not easy to produce resistance, can adjust by feed or water, significantly improve aquatic animal stress resistance and immune performance [6-7], is very in line with the green aquaculture future development direction of high quality choice. It can be seen that in order to ensure the safety of aquatic products on the table, the national and the aquatic industry constantly improve the supervision mechanism and constantly develop new alternative products. As a student majoring in aquaculture, we should also pay attention to food safety, learn professional knowledge carefully, fully understand the laws and regulations promulgated by the state, organically integrate the quality and safety management of aquatic products with the sense of industry responsibility, and finally make contributions to the protection of food safety.

3.8. Organic integration of fish resource conservation and the Yangtze River conservation

On January 1,2021, the "ten-year fishing ban on the Yangtze River" was officially launched, and the Yangtze River Protection Law of the People's Republic of China also came into force on March 1,2021. The organic integration of human activities on fish resources and laws and regulations related to Yangtze River protection. When teaching the impact of human activities on fish resources, students use professional knowledge to interpret the instructions, decisions, laws and regulations of the General Secretary, the CPC Central Committee and the state on the protection of the Yangtze River, and analyze the reasons [8]. It is urgent to guide the protection of fish resources in the Yangtze River. Through the above explanation, it can help students to better understand the connotation of the instructions, decisions, laws and regulations on the protection of the Yangtze River, and deepen their understanding and understanding of the major decisions and arrangements of the Party and the state on safeguarding ecological security.

4. Conclusion

Nowadays, the ideological reform of professional courses is the inevitable way to realize the moral education under the new situation, and it is the inevitable requirement to train the talents in the new rural construction. As a full-time teacher, need to continue in teaching practice and daily life and explore course ideological elements, and organically to ideological elements and professional knowledge theme content integration teaching, continuously promote ideological construction of ecological fishery courses, continue to improve aquaculture professional course ideological education effect, for the country to develop ideological and political quality and professional quality both new farmers.

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6. References

1. Nie H, He J, Huang XM, *et al*. Exploration on the mode of ideological and political education in biochemistry curriculum from the perspective of scientific and research education. Journal of biology. 2022;39(5):121-124.
2. Liu XC. On the way of curriculum ideology and politics construction in colleges and universities in the new era. Contemporary Education Forum. 2023;9(18):1-10.
3. Ly O, Yoris-Nobile AI, Sebaibi N, *et al*. Optimisation of 3D printed concrete for artificial reefs: Bio fouling and mechanical analysis. Construction and Building Materials. 2021;272:121649.
4. Chen Y. Research and construction of modern Marine pasture in China. Journal of Dalian Ocean University. 2020;35(2):147-154.
5. Liu Songyan, Pan Kaiyu, Zhou Benxiang. Collection and application of teaching materials in the curriculum reform of The Ecology of Aquaculture Waters. Henan Aquatic Products. 2011;89(04):46-48.
6. Dong SL. High efficiency and low carbon-The only way for the development of aquaculture industry in China. Journal of Fisheries. 2011;35(10):1595-1600.
7. Tan XS. Analysis on the value connotation and practical Path of ideological and political courses. Research on Ideological and Political Work. 2018;39(3):29-32.
8. Li L, Li H, Cheng JH. Exploration of ideological and political education practice in the cultivation of graduate student innovation ability. Ideological and political Education. 2021;37(6):58-60.