# Research on Sanmen Island Research and Education Path Based on the Perspective of Tourism Geography Sentiment Evaluation

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*Abstract:* Study trips are an important off-campus teaching activity to cultivate students' comprehensive literacy, and it is also one of the effective practices of China's maritime power strategy. It is found that the types of marine research are mainly concentrated in five categories: camp science and technology innovation, investigation and inquiry, experimental inquiry, cultural participation and practical experience, and four topics: marine nature, marine economy, marine culture and marine politics. Based on the perspective of tourism geography and sentiment evaluation, it is found that the value of Sanmen Island research resources is mainly reflected in three aspects: marine environment value, marine cultural value and marine experience value. This paper proposes four research and development paths based on skills training, knowledge quizzes, historical exploration and environmental protection evenings.

## **1. Introduction**

In 2006, the "Monitoring of Sustainable Tourism Development" project of the World Tourism Organization was launched, Liu Yi of Sun Yat-sen University combined with tourism big data, innovatively proposed a tourism geography emotion evaluation algorithm, and verified the classic geographical proposition that location advantages and resource attributes are the key factors affecting the source market, and further explored the relationship between cultural attributes of tourism resources and patriotic feelings, the difference between emotional portraits of natural-human resources, the emotional images and preferences of tourists, and the temporal and spatial characteristics of tourists' emotional pulse<sup>[1][2]</sup>. Study trips are off-campus educational activities that combine research learning and travel experience, which is conducive to cultivating students' practical ability and innovative spirit, and enhancing students' sense of social responsibility <sup>[3]</sup>. China has abundant marine island resources, and how to give full play to the role of marine island resources in the cultivation of students' geographical professional ability, the construction of comprehensive geographical quality and the acquisition of teachers' teaching materials is worthy of attention and consideration by the academic community. The tourism geography sentiment evaluation provides perspective guidance for the research of island research paths, which can optimize and improve the

pertinence, education and emotion of island research paths. Through students' close contact with island marine resources, cultivating students' awareness of marine island resource protection, and enhancing students' feelings and feelings of the country and nation, it is also an important carrier and means to implement the double reduction policy and the task of cultivating talents with virtue. Sanmen Island (also known as Tuoning Island, 114 '37'58"E, 22 '27'47"N) is located at the confluence of Dapeng Bay and Daya Bay in the sea area of Huizhou City, Guangdong Province, and is one of the well-preserved natural ecological islands in China, with rich animal and plant natural resources and historical and cultural resources. It has good accommodation and catering foundation, unique experience and amusement facilities, and a good foundation for the development of island-type marine research routes. With the implementation of the national marine power strategy and the rise of study trips, the development of island-type marine research routes has broad development potential and continuous practical significance.

## 2. Current Status of Research on Marine Research

The report of the 18th National Congress of the Communist Party of China regarded the construction of a maritime power as a major strategic deployment of the country; The report of the 19th National Congress proposed to coordinate land and sea and accelerate the construction of a maritime power; Chairman Xi put forward the important concept of a community with a shared future for the ocean, aiming to promote the integration of blue economy development and marine culture to jointly enhance the well-being of the ocean. Through marine studies, students can effectively enhance their marine awareness, popularize marine knowledge, disseminate marine culture, cultivate marine talents, and further lay a solid foundation and provide intellectual support for building a maritime power. Considering the concept and characteristics of research, marine research is a learning method in which students actively acquire and apply knowledge and solve problems through scientific research under the guidance of teachers and other professionals, put forward research questions around marine natural resources, marine production and life, marine humanities and arts, etc. <sup>[4]</sup>. By combing the research results related to oceanographic research, Xu Haozhuang (2022) believes that the types of marine research include five categories: camp science and technology innovation, investigation and inquiry, experimental inquiry, cultural participation and practical experience<sup>[5]</sup>, and Du Juan (2019) integrates the "National Ocean Awareness Development Index" with the oceanographic discipline system and proposes four topics of marine research: marine nature, marine economy, marine culture and marine politics. This study fully draws on, refers to and integrates the research results of the "five types" and "four topics" of oceanographic research, and plans an islandtype oceanographic research route, which is a useful attempt and supplement to oceanographic research.

#### 3. Analysis of the Value of Marine Research Resources on Sanmen Island

The Guangdong-Hong Kong-Macao Greater Bay Area is China's first national-level confirmed bay area, centered on Guangzhou and Shenzhen, the core areas of the Pearl River Delta, covering the two special administrative regions of Zhuhai, Foshan, Dongguan, Zhongshan, Jiangmen, Zhaoqing, Huizhou and Hong Kong and Macao, jointly forming the "9+2" Bay Area city cluster, which is an important carrier for China to build the world's top city cluster and participate in global competition <sup>[6]</sup>. From the perspective of the scale of marine economy, Guangdong has strong marine economic strength and is the most important area for the development of China's marine economy, but the pattern of the Guangdong-Hong Kong-Macao Greater Bay Area is complex, the marine industry structure of various cities is obviously different, and the overall layout of marine industry is reasonable, but the gap with the world-famous bay area is significant <sup>[7]</sup>. Based on the perspective of

complementary industrial structures, the Greater Bay Area has a large gradient of marine industry, obvious advantages of marine industry system, and there is room for improvement in marine industry synergy and marine industry agglomeration among various city agglomerations, and the marine industry structure needs to be upgraded <sup>[8]</sup>. As an organic part of the marine tourism resources of Guangdong, Hong Kong and Macao, Sanmen Island has good development potential, opportunities and resource endowments. From the perspective of tourism geography and sentiment evaluation, the value of Sanmen Island research resources is mainly reflected in three aspects: marine environmental value, marine cultural value and marine experience value.

## **3.1. Marine Environmental Values**

The marine ecological environment and the marine resources contained in it are an important basis for the generation and development of marine economic activities, in short, the development of the marine economy reflects the value of the marine environmental system, which is composed of two aspects: the value of the marine ecological environment and the value of marine resources <sup>[9]</sup>.

#### **3.1.1. Marine Natural Resource Value**

Sanmen Island has a coastline of about 13 kilometers and 5 bays with a radius of 300 meters, and Moon Bay Beach and Baisha Bay Beach have high popularity in the Pearl River Delta region. Sanmen Island has fine white and gentle sand, clear blue water, and visibility of 10-20 meters, which is known as "Little Saipan" in Guangdong. Marine natural resources such as seawater, beaches and sunshine have good development and utilization value, and have good resource development and scientific and technological innovation value for the development of new energy and other emerging industries in China. It has a good demonstration education effect for guiding students to pay attention to marine natural resources, protect marine natural resources, and reasonably tap the scientific and technological creation value of marine natural resources.

## 3.1.2. The Value of Marine Animal and Plant Resources

Sanmen Island has a subtropical climate, and its good hydrothermal resource endowment has given birth to rich and three-dimensional marine animal and plant resources. Sanmen Island's rich marine animal and plant resources not only have good ecological value, but also have very good industrial value from an economic perspective. Relying on the rich marine animal and plant resources of Sanmen Island, the Sanmen Island Marine Research Activity combines the knowledge learned in books, online electronic resource inquiry and the guidance of leading teachers and experts to guide students to pay more attention to marine ecological environmental protection, efficient and high-value development of marine biological resources and green and sustainable development and utilization.

## 3.1.3. The Value of Marine Water Resources

Different from the surrounding islands, Sanmen Island is extremely rich in fresh water resources, and it is the island with the richest fresh water resources in Daya Bay, and the mineral-rich groundwater and sweet mountain spring water can bring health and convenience to Sanmen Island's study life. The overall visibility of seawater is 10-12 meters, which meets the national first-class water quality standards. College can guide students to compare and analyze the quality of fresh water and seawater, and explore how to protect and sustain the development and utilization of the value of marine water resources in Sanmen Island through scientific tools and methods.

## 3.2. The Cultural Value of the Ocean

Marine culture is essentially the connection and product of the interaction between people and the elements of the ocean. Qu Jinliang (2018) believes that marine culture is a collection of cultures related to the sea and born from the sea, and is the connotation of spiritual, behavioral, social and material civilization created by people's understanding and utilization of marine resources and the creation of marine life <sup>[10]</sup>. The marine culture of Sanmen Island is the product of a high degree of integration between its unique marine resources and the lives of the people of Sanmen Island, mainly covering the customs established in 1899, some military facilities, marine catering and cuisine, marine theme homestays, traditional festivals and other forms. Marine culture has become an important part of Chinese traditional culture, guiding students to think about how to promote the marine culture of Sanmen Island to the track of industrialization, form a marine cultural industry, and continue to give full play to the value of marine culture.

## 3.3. The Value of Marine Experience

Sanmen Island Marine Research gives full play to Sanmen Island's marine resource endowment and promotes the effective integration of marine natural resources and marine human resources. On the basis of marine integration resources, create marine experience projects that can embody fun, entertainment, knowledge, exploration and integration. It allows students to feel the unique marine and humanistic value of Sanmen Island through participation in activities and experience creation, and feel the marine experience value of Sanmen Island through hands-on practice. For example, the integration of the unique houses of Sanmen Island with the natural ecological marine environment of the island, the food and local culture of Sanmen Island, the traditional festivals of Sanmen Island and the personality of the residents, etc., guide students to take the initiative to communicate with the local people of Sanmen Island and deeply and specifically feel the value of Sanmen Island marine experience.

## 4. Sanmen Island Marine Research Education Development Path

## 4.1. Skills Training

Sanmen Island's various resources can be developed into holiday tourism attractions, and there are various attractions on the island. For example: diving, fishing, camping, volleyball, etc., the team leader leads the students to participate in the amusement project through certain methods to carry out research activities, which can allow students to learn new skills in the process of playing, improve outdoor survival ability and hands-on exploration ability, so as to achieve the effect of edutainment. Sanmen Island is rich in flora and fauna, and people can see many different fish and birds during their travels.

### 4.1.1. Tent Test

According to the schedule, when the lead teacher and the assistant leader brought the students to the beach of Sanmen Island, they organized the students to form a circle and teach how to build a tent. Organize students to allocate their own building space, and start setting up tents as a small competition, and give different suggestions and study trip assessment scores according to the speed and quality of their construction. The lead teacher or assistant leader will supplement the relevant camping knowledge afterwards and remind the students to understand the importance of the geographical characteristics of the island in advance.

### 4.1.2. Undersea Exploration

According to the schedule, at noon when the sun is shining and the sea visibility is high, the leading teacher will gather the students together to first introduce the relevant theoretical knowledge of diving to the students, and then demonstrate the use of diving equipment to the students through the exercise, and then let the students dive in turn under the leadership of professionals. Organize students to discuss what fish or plants they see underwater and what they feel like in the center of the dive. In the face of different answers from students, the leading teacher should make corresponding evaluations and popularize relevant knowledge of marine and island geography.

## 4.1.3. Volleyball Matches

The leader and deputy team leader organize student teams to play beach volleyball matches in the afternoon or during the cool weather according to the schedule, and the competition requirements are strictly in accordance with the regulations of beach volleyball. The team leader is the head of the organization, and the deputy team leader is the referee. After the game, the teachers announced the results of the game and led the students to the rest area, during which the teachers introduced the history of volleyball to the students, and through the competition, let the students understand the meaning and importance of team spirit.

## 4.1.4. Seafood Cookout

The leader and deputy team leader organize students to bring fishing tools to the beach to catch crabs, groupers, sea urchins, and sea shrimp as ingredients at night, in the process of fishing, the leading teacher should correctly guide the students' fishing methods, so that students can understand the geographical knowledge of the island and can use it flexibly, and activate the geographical knowledge in continuous practical attempts.

## 4.2. Knowledge Questions and Answers

## 4.2.1. Watch the Sunrise from the Sea Oath Mountain Alliance

According to the schedule, hike to Sanmen Island's must-have check-in point - Haishishanmeng peak to watch the sunrise. Students were organized to ask questions about the four small islands on the bay (Hongsheng Gong, Ghost Bay, Xiaosanmen, Qingzhou Island) and other related geographical knowledge related to the islands, ocean, climate and so on, and the leading teacher gave corresponding comments and research practice scores according to the enthusiasm and accuracy of students' answers. After the Q&A, the leading teacher introduced the relevant island and marine geography knowledge and Hong Kong geography knowledge to the students using Qingzhou Island, the closest island to Hong Kong.

#### 4.2.2. Yacht Sea Fishing

According to the schedule, the leading teacher arranged for the students to do a good job of safety measures, and led the students to take a yacht to fish in Sanmen Island Bay. Guide students to flexibly apply marine geography knowledge fishing methods and skills. During the round trip of the yacht, the leading teacher asked the students questions about the marine geography, marine life, animals and plants (birds, vegetation) in the scenery along the way, and the teacher answered the questions. During the student's fishing, the teacher asks questions about the fish the student catches, and after the student answers, the teacher conducts a popular science on marine geography knowledge. On the return trip, the fish will be released to maintain the diversity of aquatic life and guide students to protect marine

geography and environmental sustainability awareness.

## 4.3. Exploring History and Tracing the Trail

#### **4.3.1. Tracing the History of War**

According to the schedule, the leading teacher led the students to visit the artificial bomb shelter of Sanmen Island, and in the process of touring, the leading teacher explained to the students the history of Sanmen Island as a military base and its significance of existence, and further guided the students to pay attention to the practice and application of island geographical knowledge in civil air defense engineering.

## 4.3.2. Humanistic Customs

According to the schedule, the leading teachers organize students to go to the fishing village, lead students to experience in the fishing village according to the time arrangement, let the students observe the appearance of the fishing village, taste tea eggs, food cake cones, black rice mochi and other delicacies, experience the local eating habits of living alone. Through the visit and investigation of local residents and the knowledge supplement of teachers, the leading teachers let students understand the integration of local customs, catering, village appearance and island geography knowledge such as Sanmen Island wedding leave, tea toast, festivals, etc.

## 4.4. Environmental Protection Party

### **4.4.1. Environmental Action**

At present, there is a lot of garbage in some bays of Sanmen Island, some of the garbage drifts with the waves, and a large part of it is discarded by tourists, and the relevant departments have not cleaned up the garbage in time. These garbage have a great negative impact on the environment of Sanmen Island, such as polluting seawater and bringing marine ecological damage. The teacher explained in detail the adverse effects of garbage on the marine geographical environment, so that the students could understand the potential and actual impact of human activities on the marine geographical environment. Teachers lead students to clean up marine debris and sort garbage, and cultivate students' awareness of environmental protection and geographical environment with practical actions.

## 4.4.2. Summarize Party

No	. T	ype of activity	Ocean islands geography knowledge content
1	Skills training	Tent Test	Set up a tent on the beach of Sanmen Island to enhance the ability to apply geographical knowledge
		Underwater Exploration	Ghost Bay dive sites explore the marine world and enhance your geographic exploration capabilities
		Volleyball Tournament	Beach Volleyball Tournament to enhance students' ability to collaborate on the geographical environment of the island
			Catch seafood and cook dinner to cultivate students' geographical survival ability on the island
2	$(1X_7 \Delta)$	Haishishanmeng peak to watch the Sunrise	Haishishanmeng peak watching the sunrise to enhance students' geographical knowledge and beauty
		Yacht Sea Fishing	Bay fishing develops students' patience and complements marine geography knowledge
3	Exploring History	Tracing War History Tracing	Cultivate students' geographical knowledge of islands in the practical application of civil air defense engineering
		Cultural customs	Visit the fishing village and experience the island's characteristic folk customs and human geography
4	friendly		Beach environmental protection activities to cultivate students' awareness of environmental protection and geographical environment
		Summary Party	Students summarize their research achievements and improve their expression and team comprehensive skills

Table 1: Sanmen Island Research and Education Path

Students are organized to gather around the bonfire, and the teacher is located in the center of the student circle to teach students about marine geography, which increases the fun and education of research. The leading teachers organize students to carry out seminars on the achievements of island geography, guide students to pay attention to the environmental protection and sustainable development of island geography, and improve students' practical ability to flexibly apply their knowledge of island and marine geography.

In general, the Sanmen Island Ocean Research Path is shown in Table 1.

## **5.** Conclusions

Based on the perspective of tourism geography and emotion evaluation, it is found that the value of Sanmen Island research resources is mainly reflected in three aspects: marine environmental value, marine cultural value and marine experience value. And based on this, four research and development paths based on skills training, knowledge Q&A, historical exploration and environmental protection evening are proposed. This will help give full play to the positive effects of tourism in Sanmen Island, realize the organic integration of economic, environmental and social benefits of Sanmen Island, and promote the sustainable and healthy development of Sanmen Island.

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## References

[1] Liu Yi, Chen Luan, Liu Zihui, et al. (2022). Research on Spatial Agglomeration Characteristics of Leisure Industry based on Isotopic Mode [J]. Tourism Journal, 37(2), 11.

[2] Liu Yi, Meng Lingkun, Bao Jigang, et al. (2021). A Comparative Study on the Validity of Emotional Capture based on Artificial Computing Model and Machine Learning Model: A Case Study of Tourism Review Data [J]. Nankai Management Review, 24(5), 63-72.

[3] Zhang Hongqiong, Qin Qu, Zi Lang. (2022). Research on Geography Research Travel based on Rural Tourism Resources [J]. Secondary School Geography Teaching Reference, 16, 86-88.

[4] Du Juan. (2019). Research on the Basic Problems of Oceanographic Research[C]. Sanya: Proceedings of the 2019 Marine Academic (International) Biennial Conference of the Chinese Oceanographic Society, 144-147.

[5] Xu Haozhuang. (2022). Practice and Thinking of Project-Based Learning of Marine Research in Junior High School [J]. Teaching Monthly Middle School Edition(Teaching Management), 1, 89-92.

[6] Xia Yi. (2020). Guangdong: Jointly build "Bay Area Property Rights Connect"[J]. Property Rights Guide, 07, 62-64. [7] Zhang Ke, Duan Zhijun. (2017). Research on the Development Path of Guangdong's Marine Economy under the Strategy of Civil-Military Integration [J]. Economic Forum, 12, 8-10.

[8] Wang Fangfang, Li Xiangtao, Yang Zhichen. (2020). Research on the Potential of Marine Science and Technology Industry Cooperation in Guangdong-Hong Kong-Macao Greater Bay Area-Based on AHP-OVP model [J]. Ocean Development and Management, 37(05), 76-82.

[9] Xu Sheng, Chi Ming. (2012). Evaluation of Marine Environmental Resource Value in Bohai Rim Region [J]. Journal of Ocean University of China (Social Science Edition), 03, 8-15.

[10] Qu Jinliang. (2018). The Position of Shandong Marine Culture in the History of Chinese Marine Culture [J]. Journal of Shandong Institute of Socialism, 04, 64-72.