

# On China's Island Degree Course Setting and Talent Cultivation

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**Abstract**—China has numerous islands and hence needs to configure relevant talent for island management. However, with the lack of island-related degree course setting, talent cultivation is still advanced by using traditional subjects that combine the mode of working practices, which cannot meet special demands of island governance. Upon comparing and analyzing basic information of three island cultivation modes in other countries as well as the current progress in China, this article makes several proposals for the cultivation of China's island talent, arguing that master degree courses should be emphasized as a starting point, joint cultivation should be regarded as an important means, the potential of new technology should be fully developed, and cooperation with island countries along the 'Belt and Road' to cultivate island talent should be promoted.

**Keywords**—Island; Governance; Degree Course; Talent Cultivation; New Technology Application

## I. INTRODUCTION

China has a total of over 11,000 islands, which are widely distributed across the nation, including Liaoning Province in the very north and Hainan Province in the very south (Deng, 2015). In terms of both area and population, compared with the mainland, China's islands are not a part of its mainstream affairs. Except for some special occasions and periods of time, island governance is not a focus of attention. However, islands are different from the mainland due to their uniqueness and are very meaningful for the country in terms of politics, economy, society, culture and the environment (Deng and Liu, 2018). Island governance, or island management involving all fields, requires relevant human resources guarantees. As a result, because it lacks relevant island degree courses, China actually still needs extensive effort so it can catch up in its cultivation of island talent. Nowadays, China mainly introduces island talent from relevant fields and then cultivates them accordingly to meet island development needs.

## II. PARTICULARITY OF ISLAND TALENT CULTIVATION

Islands occupy just 1.86% of the Earth's surface area (Baldacchino, 2006). What is an island? Article 121 of the *United Nations Convention on the Law of the Sea* expressly states that: "An island is a naturally formed area of land, surrounded by water, which is above water at high tide." Article 2 of the *Island Protection Law of the People's Republic of China* explains that: "The term 'islands' as mentioned in this

Law refers to the naturally formed land areas which are surrounded by seawater and above the surface of water at high tide, including inhabited islands and uninhabited islands." However, at a practical level, everybody can offer a different answer owing to the particularity of islands and differences in individual experience. Compared to large-area islands (large-size islands), small-size islands are even more diversified and unique. In China, there are island provinces (Taiwan and Hainan), island cities (e.g. Zhoushan Islands), island counties (Changdao and Chongming), island towns (Dongxiang Town, which is located in Dongtang Island, Pingtan, Fujian), and several island villages. Except for administrative-level inhabited islands, there are also many uninhabited islands (e.g. Wuzhizhou Island, Hainan). Different types of islands have largely and even totally different demands when it comes to governance.

As for island provinces or island cities, many of them have become new kind of spaces and have attributes that are similar to the mainland. As for islands below the county level, owing to different resources and environments, they have several kinds of positioning and demands and are advocating for "one island one policy"<sup>1</sup>

Islands' particularity rests with how we view them and whether or not we acknowledge their difference from the mainland. The difference between islands and the mainland determines that the subject of islands is different from other general subjects. China's current education system mainly relies on academic subjects and consists of natural science, social science, and human science. Social science can be further categorized into economics, management, law and language. There are few education systems that include a territory-based subject (A few region and country-specific research institutions exist, but are not considered a subject. Talent cultivation is usually carried out based on subjects such as international relations). Island research is not a mainstream subject, and islands in China comprise a small area compared with its mainland area. As such, the subject of islands does not exist and is mentioned only in oceanography (or marine science and ocean management). Therefore, professional cultivation of island talent has not been achieved.

<sup>1</sup> <http://news.163.com/15/1125/07/B98HR4CT00014AEE.html> or <http://www.cbrc.gov.cn/chinese/home/docView/E7D1130AC775456E896E47CB1995DA0A.html>

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### III. STATUS QUO OF ISLAND TALENT CULTIVATION

#### A. China's Island Talent Cultivation

China does not have dedicated institutions for cultivation of island talent or specialized island degree course settings. The only exception is Zhejiang Ocean University, which started to enroll master degree candidates majoring in the subject of marine science in 2015. The secondary subject of island development and protection is set to include research directions such as island environment evaluation and protection, island development and exploitation, and island planning and integrated management. By September 2018, a total of 18 master degree candidates had been enrolled, 5 of whom graduated. The amount of talent cultivated every year is relatively limited. More island talent is cultivated through other subjects such as marine geology and economics as well as related courses by involving island issues in academic dissertations and at other research levels.

Furthermore, China has several island research institutions, including the Island Research Center, Ministry of Natural Resources of the People's Republic of China (affiliated with the Ministry of Natural Resources (MNR)), the National Island Development and Management Research Center (affiliated with the Second Institute of Oceanography, MNR), the Research Center for Island and Coastal Zone (affiliated with the First Institute of Oceanography, MNR), the Research Center for South Pacific Island Countries (Fujian Agriculture and Forestry University), Research Center for Pacific Island Countries (Liaocheng University), and the Strategic Research Center for Pacific Island Countries (Guangdong Institute for International Strategies). These institutions play significant roles in cultivating research talent, and many island management ones are cultivated from these institutions.

#### B. International Island Talent Cultivation

The international community adopts two modes of island talent cultivation. First, talent is cultivated by relying on traditional subjects, and degree certificates of related subjects are issued. Second, specific island degree certificates are issued. Considering the particularity of islands, the second mode, i.e. setting specialized island degree courses, is preferable. It should be noted that dedicated institutions have set relevant island degree courses especially to cultivate interdisciplinary research talent. Part of the information is briefly described as follows:

- Islands and Small States Institute at the University of Malta. The Institute aims to promote a multidisciplinary and integrated approach to issues pertaining to islands and small states<sup>2</sup>, and to promote research and talent cultivation. It provides master degree courses and doctorate courses specializing in islands and small states, as well as master degree courses and relevant certificate courses specific to a certain island. The University of Malta is the only

institution that offers island doctorate courses.

- University of Prince Edward Island. The Institute of Island Studies at the University of Prince Edward Island is a Canadian professional island research institution. Relying on this Center, the island studies master degree courses of the University of Prince Edward Island are a unique, interdisciplinary and policy-driven master degree program focusing on islands<sup>3</sup>. It welcomes worldwide applicants with diversified learning backgrounds as well as professionals with relevant practical experience. In addition, the Institute of Island Studies has extensive achievements in island research and sponsors the Island Studies Journal, a platform for the publication of achievements in the field of islands.
- University of the Highlands and Islands. The University consists of 13 campuses located in Scottish tourist cities, and its Institute for Northern Studies offers island studies master degree courses<sup>4</sup>. It mainly focuses on research on islands and island communities in Scotland and abroad, and the core courses are Island Governance and Selling "Cold" Islands.

### IV. CONSTRUCTING CHINA'S ISLAND SUBJECT AND TALENT CULTIVATION MECHANISM

It may require long-term efforts to establish islands as a subject with relatively complete island degree course setting. Emerging subjects and degree courses need to be advanced by using relevant experience, cultivation focus, propulsion mode and future positioning.

#### A. Determining Cultivation Levels from a Comparative Perspective

Cultivation levels of Chinese higher education include junior colleges, undergraduate colleges and graduate schools (master degrees and doctorate degrees). Junior colleges and undergraduate colleges have the largest amount of students, followed by master degree candidates. Doctorate candidates have the smallest amount. Junior colleges emphasize skill-based education and do not apply to the positioning of island governance. The education level of undergraduate colleges currently boasts the highest number of cultivating schools in China. Owing to the wide range involved, they are subject to strict management by competent education departments. Since the establishment of an additional subject creates direct employment along with other issues related to reality and management performance assessment, it is fairly difficult to establish the island subject at the postgraduate college level.

To become a subject and even a mainstream subject, the subject of islands must become an essential part of first-rate universities. For example, marine science, which has recently undergone significant development, can be referred to as an example of this subject's establishment at universities. China's marine science is part of the subject of science. As a first-level subject, it mainly includes second-level subjects such as

<sup>2</sup> [https://www.um.edu.mt/\\_data/assets/pdf\\_file/0003/86709/LN-325-Statute-Islands-Small-States.pdf](https://www.um.edu.mt/_data/assets/pdf_file/0003/86709/LN-325-Statute-Islands-Small-States.pdf).

<sup>3</sup> <http://www.upei.ca/programsandcourses/island-studies>.

<sup>4</sup> <https://www.uhi.ac.uk/en/courses/mlitt-island-studies/#tab-summary>

physical oceanography, marine chemistry, marine biology and marine geology as well as relevant interdisciplines (Wang et al., 2016). Marine science was not a mainstream subject in the 1990s, and available only in a few universities such as the Ocean University of China, Xiamen University and Tongji University<sup>5</sup>. However, after more than ten years of effort, it has become one of the key subjects in many universities (Liu, 2015). By the end of 2015, a total of 75 universities had established the major of marine science. For example, the development of the marine science subject at the Institute of Oceanography at Shanghai Jiao Tong University did not start until 2013. Therefore, this article seeks to illustrate the positioning of the cultivation level of China's island subject.

On April 22, 2013, Shanghai Jiao Tong University decided to found the Institute of Oceanography, whose subjects would focus on marine science, including physical oceanography, marine chemistry, marine biology and marine technology. In 2014, relying on mechanics, ship and ocean engineering, biology and other subjects, it began to enroll master degree and doctorate candidates in the subject of marine science. In 2018, relying on the Institute of Oceanography, Shanghai Jiao Tong University and the Second Institute of Oceanography, MNR jointly founded the College of Oceanography at Shanghai Jiao Tong University. Furthermore, in 2019, the marine science first-level subject doctoral program has been approved and master degree candidates were enrolled in the marine science subject. Enrollment of postgraduate students in marine science and marine technology began during the same year. It took only around six years for Shanghai Jiao Tong University to complete its development of the subject of marine science, which has a significant reference value.

Regarding the subject of islands, resources such as faculty and relevant subject programs can be relied on to found an island institute, with a focus on the cultivation of master degree candidates and higher-level students. It is not advisable to set up postgraduate-level island courses.

### B. Interdisciplinary Cultivation

Islands and coastal zones are somewhat similar because they are part of the minor fields, where a certain region serves as the object of studies. This subject's regional attribute means that it will intersect with many other subjects. The cultivation of island talent does not aim to replace talent cultivation for other subjects. The main priority is to cultivate island talent with interdisciplinary backgrounds based on other subject knowledge by combining island features and demands.

Based on the above considerations, when enrolling master degree and higher-level candidates as well as postgraduate students, the positioning should be open. In addition, postgraduate students with any subject background should be invited to apply for island master degree courses. The same positioning applies to island doctorate degree courses. As a result, years of cultivation will provide island talent with extensive background knowledge and can develop their interdisciplinary management skills.

### C. Promoting Joint Cultivation

Even though China has a relatively long history related to island research, objectively evaluated, it is still in its initial stage. China's cultivation of island talent is at a similar stage. This is because, for several reasons, its course setting and degree granting may be subject to strict restrictions. An important way to effectively promote cultivation of island talent is to establish joint colleges or a joint talent cultivation mechanism, which is currently prevalent in China. For one thing, cooperation agreements can be entered into with relevant institutions that cultivate island talent (University of Malta, University of Prince Edward Island, etc.) to establish joint colleges for joint cultivation of island talent. For another, if it is difficult to establish joint colleges, on the premise of both parties' common will, their publicization can refer to the Shanghai Jiao Tong University-Emory University Master in Comparative Law, M.C.L.<sup>6</sup> or the School of Economics at Peking University-Nanyang Technological University Nanyang Business School dual master's degree as examples of joint cultivation<sup>7</sup>. Joint cultivation helps compensate for Asia's lack of centers to cultivate island talent (Europe and America have specialized institutes that cultivate island talent). During cultivation, talent cultivation course setting and relevant working mechanisms that meet Asian demand will be developed.

### D. Serving Global Island Development

The cultivation of island talent does not aim at replacing original subjects. Instead, it is intended to further emphasize characteristics of islands and meet island demand based on other subjects. China's island development requires time, and its island talent will encounter disapproval, attempted acceptance and ultimately total acceptance. Its slow progress may prevent high-quality students from pursuing island course degrees. Furthermore, in the meantime, island talent should seek not just to meet demand in China but also keep pace with global island development trends. It should also prioritize urgent issues and development needs in island states and regions. Global island governance talent should be cultivated by relying on available resources such as 'Belt and Road' scholarships as well as Chinese governmental marine scholarships.

## V. CONCLUSION

China's island talent cultivation should be based on island degree courses. Its development requires cooperation with international institutions that cultivate island talent and should ultimately meet demands for global island governance. China's island talent cultivation is possible only if it follows the aforementioned pattern of thinking. However, most importantly, China's island degree course setting and the cultivation of its island talent should be integrated into the mainstream of China's education and talent cultivation.

<sup>5</sup>[http://www.edu.cn/edu/cooperate/crcr/tenth2007/yjbg/200710/t20071018\\_259850\\_1.shtml](http://www.edu.cn/edu/cooperate/crcr/tenth2007/yjbg/200710/t20071018_259850_1.shtml)

<sup>6</sup> <http://law.sjtu.edu.cn/Detail19859.aspx>

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