

The 13th Five-year plan of Shanghai Ocean University



October 12, 2016

Table of Contents

Foreword

1



Part One Overall Strategy

3



1. Guideline	3
2. Mission and Philosophy	3
3. Future Strategy	5
4. Development Objectives and Areas.. ..	14
5. Main Objectives	16

Part Two Priorities and Initiatives

21



1. Taking morality education as the core to promote educational level.....	21
2. Deepening educational reform to improve the quality of talent cultivation	21
3. Strengthening technological innovation to promote overall discipline strength	28
4. Enhancing the ability of social services to expand our influence	32
5. Deepening the reform of personnel system to strengthen talents construction	34
6. Enhancing foreign exchanges and cooperation to promote the international influence	36
7. Improving the function of the campus to provide support and service for the development of the university	39

8. Improving the management system to accelerate the construction of modern university system 43



Part Three Supporting Measures

46

1.Strengthening the Party's leadership to provide political guarantee 46

2.Providing institutional mechanisms via in-depth implementation of the comprehensive reform program 47

3. Advancing the implementation of rules to provide system guarantee 47

4.Raising funds via diversified channels to provide more support 47

5.Conducting widespread publicity and mobilization to increase the degree of consensus..... 48

6. Strengthening the amendment and adjustment to the planning during the implementation to make it more rational 48

Foreword

Shanghai Ocean University, formerly known as Jiangsu Provincial Fisheries School, was founded in 1912 by Zhang Jian, Huang Yanpei and Zhang Liu. It has experienced eleven times of changing names and five times of changing locations. Over the past 100 years, the university has always been upheld by its motto “Diligence, Sincerity, Dedication and Practicality”, which provides inspiration and support for its development and has been endorsed with new connotation in different historical periods. With its transition and development, the university has gradually deepened its understanding of its social responsibility. As a “center of the creation and inheritance of knowledge”, it pursues its own sustainable development.

At present, along with the process of globalization and intensifying international competition, China has entered the decisive stage in building a moderately prosperous society in all respects, implementing “maritime power” strategy and promoting the Belt and Road Initiative. As SHOU is located in Shanghai which aims at becoming an innovation and technology center with global influence, it should play a more significant role. As the center of knowledge, the university has contributed to the sustainable development of the country and the world through cultivating talents who lead social reform with

making technological innovation. To seek further development and enhance the sense of its social identity, the university will stick to the characteristic development and rebuild predictable and practical institutional mechanism for education and research, based on its tradition and developing advantages.

In line with the third, fourth and fifth plenary session of 18th CPC Central Committee on the strategy deployment of education reform and development, the university tries to fully implement a series of important statements made by Xi Jinping as General Secretary. On the basis of the philosophy and long-term vision since its establishment, the university has developed the future strategy oriented towards 2030 according to the requirements of National Medium and Long-term Education Reform and Development Plan (2010-2020), and the Layout and Development Plan of Higher Education in Shanghai (2015-2030). In keeping with the national and Shanghai education plan, as well as Integrated Education Reform in Shanghai (2014-2020), Shanghai Ocean University has developed its 13th Five-year Development Plan to further clarify its development philosophy, routes, target and priority, enhance scientific, strategic and systemic development, and promote upgrade and coordination in all aspects including talent training, scientific research, social services and cultural inheritance.

Part One Overall Strategy

1. Guideline

Implementing the national education policy thoroughly, grasping the trend of international and domestic higher education development, positioning as a multidisciplinary applied research university, following the principle of synchronized deployment of “discipline-profession-academic degree”, taking morality education as fundamental task, faculty development as core competence, discipline construction as driving force and reform innovation as means, further developing our own features with the development of information and international trend, further highlighting innovation, figuring out connections, and consolidating the basis, building consensus with the goal of high quality ocean university, invigorating energy via comprehensive reform of the system and making concerted effort to build high level university with international influence.

2. Mission and Philosophy

For the sustainable development of human society, we shall carry out education and research on natural sciences focusing on areas such as marine science, fisheries and food etc. and related humanities and social sciences.

The centennial history of Shanghai Ocean University has proven our courage to meet the challenges of the times and constantly to blaze new trails. The core of its innovation is the scientific research based on knowledge creation. We have been

encouraging innovative research, dedicated to cultivating more creative talents and making contributions to the sustainable development of human society.

While focusing on cultivating talents serving in areas such as marine science, fisheries and food industry, we also exert great efforts to improve students' humanistic qualities as well as to promote self-discipline and encourage students' free thought, independent personality and their ability to meet the needs of social development.

Laying emphasis on the cooperation of university and industry, we will insist on writing papers based on practice and focus on applied and practical research to address a large number of key national and local technological problems in marine, fisheries and food industry. Adhering to the fundamental philosophy of being realistic and pragmatic, we will transform research results into practice through expanding industry-university-research cooperation and will make efforts to promote the education model to cultivate talents meeting the requirements of the profession, the industry and the society.

With our philosophy of “developing with distinct characteristics”, we try to improve education features, clarify the orientation and improve our reputation via a variety of means including establishing the quality assurance system of specialized talents cultivation, building characteristic discipline systems, specialized subjects with high level, and top-quality course groups,

conducting distinctive campus activities, etc..

It is beneficial to the international development with the focus on the internationalization of students and faculty. We promote the exchange of world cultures and societies through providing more opportunities for teachers to study and train abroad to improve their humanistic quality, foreign language skills and cross-cultural communication ability. Meanwhile, we also actively promote the acceptance of foreign researchers and international students.

3. Future Strategy

1) Being committed to fostering extraordinary international talents with scientific literacy and professional ability, comprehensive judgment and analytical skills, multicultural understanding and communication ability who will help to promote the harmonious and sustainable development of human society.

A. With focusing on the exploration, development and full use of biological resources, aquatic environment, and ecological protection, we will carry out education and research on marine science, fisheries, food industry etc. with task of “knowing, protecting and making use of ocean” via developing highly specialized professionals.

We will cultivate talents with following capabilities: scientific knowledge on certain discipline, professional skills and the practice capacity to solve real problems through profound systematic education, rational thinking

capacity, right judgment and sense of social responsibility, the capacity to understand general modern social problems, the basic vision and capacity of international exchanges. Through university education, students will be endorsed with the quality of critical thinking, prudence, thrifty, self-discipline and generosity. They will follow the spirit of “seeking truth, honesty and practicality” so as to forge their lofty morals, progressive thoughts, helpful hands, industriousness and stamina.

B. Promoting education internationalization serves the cultivation of internationalized talents with good understanding and communication skills of different cultures as well as flexible application of their expertise. Propelling the scientific distribution and setting of discipline and academic degrees, the university is going to deepen the reform of talents cultivation model to improve cultivating programs, to facilitate curriculum development and deepen expertise and innovation education, and to strengthen humanities education by promoting the systematic development of curricula of liberal arts. By actively improving the quantity and quality of cooperation with overseas institutions, the university is promoting diverse forms of cooperation projects with counterparts abroad and actively advancing the cooperation with high-level research institutions and first-class universities, learning from elite international

disciplines to strengthen professional construction and actively advance international profession certification, carrying out overseas study and travel projects of undergraduates to expand their international vision, and developing Doctorate programs of over one-year study abroad to cultivate more excellent PHD candidates.

C. Promoting education reforms to enhance the level of internationalization of human resources.

Upgrading guarantee system of education quality and internationalization of quality standard, the university is aimed at strengthening the internationalization of full-time faculties, hiring more personnel abroad, advancing overseas access to learning for the faculties, hiring more personnel with overseas study experience, promoting a variety of cooperation between our faculties with counterparts from overseas universities and research institutes, and forming new research team with international vision, led by academicians and backed by excellent talents including National Thousand Talent Program members, Yangtze River Scholar Program professors, National Outstanding Youth Program winners.

D. Promoting education of international students by accepting more excellent students from other countries and regions.

With the focus on “maritime power” strategy and “the Belt

and Road Initiative", the university will actively expand international students education to achieve significant growth, carry out management system reform of international students education to strengthen public service capacity and upgrade management and service capacity, advance the construction of full English disciplines and curricula so as to provide rich resources for international students, improve internationalization of the faculty in order to facilitate the faculty development for the international students, expand the funding sources of international students education and establish the incentive mechanism.

2) Being committed to advancing the international forefront of innovative scientific research, addressing applied subjects in certain areas with our characteristics, and providing service for sustainable development of the international community.

A. Gathering elite research experts around the world to create a research platform and sound environment for the international cooperative research, and to build the global talents exchange base.

Advancing joint research across multiple disciplines around the globe by building international cooperation bases, especially in the areas of marine science and technology, fisheries, food, etc., the university is aimed at establishing national, provincial and university research platforms

covering land, coasts, and ocean (hadal), improving the system and mechanism of attracting excellent talents home and abroad to bring in well-known experts and scholars in key areas like marine science and technology, fisheries, food, etc., in order to form new international research teams and cultivate the international leading talents.

- B. Establishing international cooperation networks among universities to enhance academic influence.

By introducing well-known foreign experts and scholars, the university will build cooperation with world-class universities to enhance our international academic influence in the relevant disciplines and try to enter the world science frontiers. We will establish new partnerships with universities and scientific research institutes at home and abroad, forming our advantages in marine science and technology, fisheries, food, etc. around the world.

- C. Centering on "sustainable development and utilization of biological resources in waters, and protection of Earth's environment and ecology", the university will explore issues of natural and social sciences including biological resources, the global environment and human society.

By exploring philosophical, scientific and engineering problems in protecting and utilizing biological resources in waters of land, coastal areas, ocean, hadal and polar areas, we are studying the Earth's climate, water (sea water, fresh

water) and energy changes coupling with human, resources, environment and ecology, forming our characteristics and achieving the world advanced level, especially in the fields such as the development and utilization of water biological resources, the protection of Earth environment, the polar marine climate, and hadal science.

D. Cultivating more young researchers.

With employing excellent young researchers, the university is aimed at enhancing the cultivation of young researchers by encouraging them to participate in various training to improve their capacity, cooperating with elite universities from "985" projects and the Chinese Academy of Sciences etc. at home and abroad to carry out jointly training of promising young scholars.

E. Improving infrastructure and strengthening research capacity.

Improving academic information and research infrastructure, and building shared basic research platform with international standards.

3) Solving new problems, creating new values and making new contributions to promoting domestic and international industry and regional development, social and human progress through extensive cooperation.

The university will be carrying out research on science and

technology related to the protection and utilization of water biological resources and training talents to meet the needs of industrial, economic and social development. We are aimed at exploring science and technology related to the protection and utilization of water biological resources to serve the region, the nation and the international community.

A. Making effective use of campus environment and advanced knowledge to look for the ideal state of coordinative development with the region to provide information and advice for environmentally and socially sustainable development.

In line with the needs of local economic and social development, we will actively carry out talents cultivation, scientific research and social services, making contribution to the economic development and personnel training. We will make the full play of the knowledge platform, providing training services to the public and disseminating knowledge.

B. Actively promoting industry-university-research cooperation, technological innovation to make contributions to resolving social issues.

Organizing industry-university-research cooperation to promote the transformation and application of research results, the university will make use of intellectual property rights with flexibility to fasten the transformation, with

addressing social issues in Shanghai, China and the whole world through making survey home and abroad.

C. Cooperating with other agencies, bodies of local autonomous organizations to promote the collaboration with universities of various nations and regions.

In order to further promote the cooperation with qualified elementary and secondary schools to build new cooperation mode for talent training, we are going to make full use of university facilities such as SHOU History Museum, Aquatic Biological Museum, other museums, and hadal diving device, etc. to facilitate the popularity of scientific knowledge and promote the exchange with the outside world, intensifying the communication and cooperation with coastal countries, especially with countries and regions along the 21st-Century Maritime Silk Road by making use of “Songhang”, the research vessel of distant-water fishery.

4) Carrying out system reform in organization, personnel, budget under the leadership of the Party Committee to inspire the potential and creativity of teachers and students and realizing the sustainable development in the inheritance and innovation of Shanghai Ocean University.

A. Establishing the management system of the modern university. With improving the organization and institution system, the university will strengthen scientific integrity to prevent academic and administrative irregularities and

ensure that teachers and students are in strict compliance with laws, rules and regulations, promoting the check and assessment of university management, collecting and analyzing education and management data to create operational reports, human resources reports, financial reports, and audit analysis reports, and further improving efficiency.

B. Seeking to further diversify funding resources and building a stable financial basis and strengthening the operation capacity through efficient and flexible financial operation.

By strengthening the strategic planning of financial budget, the university will be operating funds in an effective way to achieve a highly efficient and flexible use of its assets, promoting cooperation among universities and reducing office expenses through improved operation, promoting the sharing of infrastructure and facilities to reduce the financial burden on users, actively attracting other external sources of funding like competitive funds and making effective use of indirect funding.

C. Reinforcing flexible personnel and pay system beneficial to the reform of the university.

Introducing the annual salary system and the mixed remuneration, we are going to check and review performance assessment system to further improve the pay system based on "task + performance".

D. Strengthening the training of staff to improve the professional competence of teachers and administrators.

Continuing to implement FD project to improve the ability of new faculty, the university will promote system of staff training abroad to enhance the faculty's international outlook and advance SD projects to improve the operational capacity of managers as well as the management quality.

5) Actively popularizing education and research results through strategic publicity to show the world the prominence of Shanghai Ocean University.

A. Exerting great efforts to enhance the University's overall influence and striving to build a high level university with its own features and important influence in the international arena by 2030.

B. Strengthening the construction of university brand to promote bi-directional publicity of the society and the university.

C. Strengthening alumni organizations at home and abroad to build a worldwide alumni network.

D. Improving the mechanism of international publicity by employing multiple means of communication as well as actively popularizing the latest education and research results.

4. Development Objectives and Areas

Centering on "sustainable development and utilization of biological resources in waters, and protection of Earth's

environment and ecology”, we will strive to build a high level multidisciplinary university with its own features of applied research and important influence in the international arena and exploring issues of biological resources, the global environment and human society. In order to develop multiple disciplines coordinately with the highlights of marine sciences, fisheries and food, the strong support of basic disciplines, the overlapping and integration of related areas, blooming emerging subjects, and social sciences on humanities of specific features, we are going to enhance the integral strength with the emerging of innovative talents, high level faculty, outstanding research and innovation, the upgrade of internationalization, continuing to cultivate qualified talents for the industry, the academia, and administrative area, continuing to provide systematic solution for the frontier science and technology, and continuing to provide training, key technology, application popularization and intellectual support.

Biological resources: exploring the biological resources in waters, including population, nutrition, diseases, functions, as well as exploring the knowledge, theory and methods of other supporting disciplines such as biology, chemistry, mathematics, engineering, information, economics, management, philosophy and other humanities and social sciences.

The Earth environment: exploring and understanding the Earth environment related to the systematic utilization and protection of biological resources in waters, including land, coastal areas, ocean, hadal and polar areas. Exploring the philosophy, science

and technology and engineering issues related to human, resources, environment and ecology, including the macro issues of water temperature, water (seawater and freshwater) and energy changes.

Human societies: exploring and understanding the sociological issues related to the systematic utilization and protection of biological resources in waters, including urban development and changes of Shanghai, issues related to agriculture, rural development and farmers under the background of China's urbanization, other sociological issues with multiple ethnics in the “Belt and Road Initiative”, in particular those on the Maritime Silk Road.

5. Main Objectives

The objectives of “13th Five-year Plan”: By 2020, striving to build a high level multidisciplinary university with its own features of applied research and important influence in the international arena, a world-known university to feature competitiveness in marine, aquatic product and food disciplines, collaborative development in science, engineering, agriculture, economics, liberal arts, management and law sciences, exploring issues of biological resources, the global environment and human society. We will form a basic discipline system with a competitive edge, full of innovation and vigor, and significant integration system and talents training with distinctive features, further improving the comprehensive strength, social influence, and various academic

levels.

Constructing the talent training system with characteristics to improve talent quality from all aspects. Improving the undergraduate discipline system, innovating the talent training mode, constructing the undergraduate curriculum system, innovative education and training systems with our own characteristics, and strengthening students' international outlook and communication capacity and undergraduate teaching quality system. By 2020, increasing the scale of undergraduate disciplines to over 45 to form the reasonable layout of disciplines and academic degrees. Keeping the scale of 16,000 full-time students, including 12,000 undergraduates and 3,500 full-time graduates, and expanding Doctorate graduate education. Vigorously expanding international student education, stabilizing the continuing education, and carrying out a variety of forms of continuing education and non-degree education.

- 1) Forming the discipline pattern with coordinated development to enhance the innovation of science and technology from all aspects. Based on the discipline map, building the discipline system with our own characteristics, keeping the advantages of key disciplines and coordinating development of multiple disciplines. Significantly enhancing the overall discipline strength with our outstanding characteristics, sound system and focusing direction. Making the core disciplines of Marine Science and Fisheries reach the international advanced level, achieving top three in fisheries worldwide, and making the

comprehensive strength of food science and engineering a leading position in the domestic arena. The basic disciplines will provide strong support, highly integrated with the key disciplines. Continuing to improve the top 1% ranking in ESI's classification of plant and animal sciences. Seeking to add one discipline in the world's top 1% ranking in the ESI classification. Making efforts to build a key national lab. Making a breakthrough in the blank of ESI highly cited papers. The annual value of transforming scientific and technological into industry will take up 20%~30% of the overall funding. Striving to foster a well-structured graduate education system led by four Level 1 doctoral programs, namely, fisheries, biology, food science and engineering and marine science, supported by twelve level 1 master degrees and six profession degree programs (15~20 field), coordinated with three to four post-doctoral mobile stations.

- 2) Optimizing the systematic allocation of human resources to enhance the level of teaching faculty. According to the positioning of disciplines and type of colleges, we will establish new principles and standards of human resources allocation. Constructing talent pattern with unified "scale, structure, quality", compatible with the international high level ocean universities. Training a high-level faculty consistent with national strategic needs, requirements of the industry, capable of guiding students' growth and development. By 2020, the total number of staff will amount to 1,334, with 45~50%

percent of senior technical staff. Among 900 full-time teachers, not less than 70% per cent with a PhD degree and not less than 40% with overseas experience more than one year. Focusing on introducing and cultivating academic team and academic leaders with great influence at home and abroad, making breakthroughs in academicians, increasing national "Thousand Talent Plan" holders, "Changjiang scholars", "winners of the National Science Fund for distinguished young scholars" and other State-level talents, building 1~2 innovation teams at the Ministerial level, and recruiting over 40 international teachers.

- 3) Improving managing university by law and democratic management to reinforce the overall management capacity. Adhering to the system of presidential accountability under the leadership of the CPC Committee. Strengthening the CPC's leadership, improving the governing and managing ability of leading groups at all levels, making efforts to improve the scientific level of the party building, and providing a strong political, ideological and organizational support for the development of the university. Taking SHOU Rules as guiding principle, we will improve the systems of managing university by law and democratic management to form a systematic and comprehensive system, standardize rules of procedure and decision-making process, improve the running mechanism and process to advance the systematic reform of administrative, university and other affairs; facilitate the

information publication to improve the democratic supervision mechanism, standardize the management to show respect to the principal status of teachers and students, clarify functions to improve the settings, organization system and efficiency, gradually complete the two-level academic management schema of university and college to play the key role of grass-root organizations in academic area, promote the campus planning and construction to improve function and layout of campus and further meet the spatial needs of the university development, and strengthen the construction of campus culture with SHOU characteristics to show the educational and demonstrative function of the university culture.

Part Two Priorities and Initiatives

1. Taking morality education as the core to promote educational level

In order to improve morality education and collaborative education system, the university is going to conduct comprehensive reform of morality education through "three focuses and three systems", by focusing on full-time teachers to establish collaborative mentor education system, focusing on professional team to reinforce the professionalism of ideological and political teachers, focusing on online ideological education to promote the supporting mechanism of information platform, and deepening the systematic innovation of ideological and political theory courses, and strengthening the education of socialist core values, the mental health education, career planning and employment guidance, and standardizing the working process.

2. Deepening educational reform to improve the quality of talent cultivation

1) Advancing the reform of undergraduate education

A. Optimizing and adjusting the structure of undergraduate disciplines

According to the two-dimensional coordinates of learning the known and exploring the unknown including the application development and inquires into the basis, we will carry out classified positioning and construction in line with different

specialties. With adjusting the discipline structure, optimizing the scale and type of specialty and developing new specialties to transform and upgrade the traditional specialties, we are going to improve the specialty setting standards of the university, building the dynamic adjustment mechanism of specialty setting, intensifying the development and construction of new specialties in shortage of marine science, creative areas and arts, and creating 3~5 leading specialties in subjects like agriculture, science and engineering in China.

B. Improving talent cultivation mode

In order to establish and develop diversified recruitment and selection mechanism based on cultivation objectives, we are going to improve multi-level undergraduate programs and teaching systems based on the principle of recruiting and classifying students by big academic subjects, with forming the feedback mechanism of social evaluation for employment quality on the basis of education effectiveness. Further the implementation of the second degree and double degrees' education and the trial reform of signing up courses from different majors, reforming academic assessment methods and improving undergraduate tutorial system.

With strengthening innovation and entrepreneurship education, exploring new mechanism of cultivating innovation talents and entrepreneurs across college, specialty and discipline, facilitating the construction of courses systems and

practice platforms for innovation and entrepreneurship education, the university is going to form its guiding teams, strengthen the innovation capacity training for the full-time students, improve career planning and employment guide education, and establish innovation activities and the contest system covering all disciplines. Taking the pilot project on education reform of agriculture and forestry talents as the starting point, we will build cultivation system of excellent talents with the features of Shanghai Ocean University. Creating a number of demonstration teaching teams through a variety of types of teaching team development to advance the reform of education and teaching. Continuing to carry out guidance system (office hour), effective implementation of TA (teaching assistant), SA (Student Assistant) and RA (Research Assistant) systems, we will establish cross learning community to implement learning support system via “pair learning”, and carry out study projects or courses with the space utilization in library.

C. Reforming the curriculum system

We will improve training programs, establishing the integrated curriculum system in line with various classification and characteristics, and strengthening the development of curriculum group with the general subjects of marine science, fisheries, food, as well as the curriculum on traditional Chinese language and culture and physical education curriculum with our own characteristics in particular. Improving the curriculum

setting in liberal arts and specialty education, and focusing on fostering a number of high-quality course groups of basic disciplines and course group of the core curriculum of different subjects. With exploring the ideological and political education resources from the specialized courses and practical teaching, editing the key elements and cases of the curriculum, implementing the function of moral education, we are going to build and improve the multi-level and multi-module education system with the integration of specialty education, ideological and political education, innovative education and career education, by the way of strengthening the construction of course groups in innovation and entrepreneurship, establishing four-year integrated teaching system of practice teaching and foreign language education.

Strengthening the standardization of teaching, improving course construction and management system, improving the logic map of curriculum, focusing on the development of new curricula and the analysis of implementation of learning objectives. Improving quality curriculum system and the development of digital teaching resources platform, establishing mobile learning campus, enhancing informatization construction of quality courses and creating high level international online courses with our own features.

D. Strengthening the experiment and practice

Strengthening practice education, establishing an integrated

system of practice teaching with the whole process and different series, including three levels of basic practice, specialty practice and comprehensive practice. In order to further improve the basic and specialty platforms of public laboratory teaching as well as practice teaching bases, we will promote the standardization of quality control of experiment teaching platforms of different disciplines, speeding up the construction laboratories in urgent need by new specialties like aquatic animal medicine, creating a open laboratory for college students' scientific and technological innovation. Strengthening the construction of field bases for ocean science and education, expanding practice teaching, and enhancing the service function.

E.Improving quality guarantee system

In order to improve quality standards of various aspects including recruiting, training, employment, publicity etc., the university will be strengthening the construction of University-College level teaching assessment system and the teaching quality guarantee system, establishing the specifications of teaching and management, and improving the normalized quality monitoring system of teaching information to form normalized mechanism for quality control. With carrying out professional assessment and certification to improve the evaluation system, we are going to conduct peer evaluation among teachers, student evaluation and performance evaluation and recognition.

2) Strengthening the graduate education

With intensifying the construction of academic degrees, optimizing the degree structure and layout, and promoting the first-level doctoral programs in fisheries, food science and engineering, and biology, we are going to strengthen the construction of first-level doctoral program of marine science, setting marine science-related disciplines relying on the existing doctoral programs to realize the recruitment and education PhD students in marine sciences, actively seeking to obtain the authority to award more doctoral degrees, and to realize the construction of post-doctoral research stations in disciplines such as biology. Continuing to expand and optimize the layout of doctoral degrees carrying out the dynamic adjustment of master degrees in accordance with discipline demand, and actively striving for more academic degree programs.

By steadily advancing the education reform of graduates to improve the integration of master and doctor cultivation system, the university is going to improve the cultivation systems of the academic graduate and professional graduates, with reforming the selection, assessment and access mechanisms of graduate mentors. Further improving the joint cultivation with fishery industry, and expanding the joint programs with the SOA system, international universities and research institutions. Improving graduates ' capacity for scientific research and innovation via graduate cultivation plan for creative talents. Actively promoting the internationalization of postgraduate education. Carrying out

qualified assessment of academic degrees.

3) Promoting the education of international students.

Strengthening the strategic layout of international student education, making scientific development planning and systematic implementation, developing new ideas, approaches and methods of international student education. Expanding the scale of international students, especially graduate students. Strengthening the system construction, carrying out reform of management organizations, establishing incentive mechanisms, and reinforcing publicity.

Building internationalized education system with the close cooperation between university and college, strengthening the faculty training for the international student education to improve the internationalization of faculty, promoting the construction of majors and curricula delivered in English to provide a wealth of teaching resources for international students; establishing special fund for international students education to expand its funding sources, and strengthening capacity building for public service to enhance the service and management capacity for international students education.

4) Promoting the transition and development of continuing education

Making innovation in organization of student resources and talents training mode, and exploring non-diploma education mechanisms based on the project management with the

integration of various resources and relying on existing platforms.

3. Strengthening technological innovation to promote overall discipline strength

1) Strengthening the top-layer design of discipline construction

Focusing on the objective of building our university into a high quality university with our own features, we have to follow the law of discipline development, insisting on the idea of “sustainable development and utilization of biological resources in waters, Earth environment and ecological protection, sticking to the principles of “highlights, differentiation, cooperation, and win-win”, strengthening the integration of discipline- specialty-academic degrees-platform, taking people as our priority, strengthening feature-oriented development and precision construction of disciplines, improving the cooperation, exchange and collaborative innovation among disciplines, and advancing the upgrade of connotation quality and strength. With improving the integrated strength by enhancing features and stimulating the inner motivation of disciplines via people-oriented method, the university has been further promoting the development of other disciplines through the construction of key disciplines like marine science, fisheries and food, realizing the coordinated development of multiple disciplines including science, engineering, agriculture, economics, liberal arts, management and law sciences.

2) Promoting coordinated and scientific development of multiple disciplines

Strengthening hierarchical position and precise construction of the core disciplines, related disciplines and supporting subjects to form a layout and planning of disciplines “where there are keys disciplines of the university with its supporting subjects and every college enjoys its own focuses”. Conducting precise construction of three major disciplines and forefront inter-disciplines with our distinct features to formed our characteristics and competitive edges at different levels and in different areas, lifting the integral discipline level by breakthroughs.

3) Promoting the construction of inter-disciplines

Promoting the deep integration of science, agriculture, engineering and humanities and other social science disciplines. We are going to strengthen the construction of interdisciplinary directions such as economic management of fisheries, economic management of oceans, food logistics management and engineering, marine food, marine pharmacy, digital ocean etc. to gradually form our own discipline features.

4) Highlighting the features of humanities and social sciences

Focusing on the development of Humanities and Social Sciences relevant to ocean, we are gradually forming research fields or directions of humanities and social science with the distinct features of ocean such as marine policies and

regulations, marine history, marine culture, marine sociology and marine politics, and form the development environment beneficial to the development of students, full of humanistic culture and integration of scientific and social sciences. During the construction of "13th Five-year Plan", College of Humanities, foreign languages and social sciences will form 1~2 influential disciplines with SHOU features.

5) Promoting scientific and technological innovation

Closely attaching to national strategies, industry needs and local economic and social development priorities, we are sticking to the combination of service demand orientation and free exploration, strengthening the basic research of main disciplines, conducting prospective studies on interdisciplinary fields, and deepening application research on the urgent needs of service industry. Forming a wealth of scientific results with original, integrated and trans-formative innovation which will have a significant impact on the development of economy, society, technology and culture as well as on the production and life style of human beings. In order to deepen system reform of research management to form an effective mechanism of encouraging collaborative innovation and concentrated scientific research, we have been improving the guarantee system of research operation and management to explore and establish a macro research management system, building new scientific research organizations to explore and establish PI management system of research teams driven by

the target and led by the task, encouraging to focus on the exploration of international forefront sciences and research projects involving in sciences and technologies needed by the nation and the area to foster key research directions and innovation teams. Exploring the grand platform for disciplines to build such platforms. Organizing vital research teams and gathering science and technology human resources and scientific research innovation teams to facilitate significant research collaboration at home and abroad.

In order to improve the performance evaluation system of scientific research, to establish the classified evaluation system of scientific research to safeguard the basic research, we are going to encourage applied research and development as well as technology transfer and strengthen the assessment on teachers' practical ability. With introducing third-party performance appraisal of scientific research to establish the evaluation system and performance management guidance suitable to the characteristics of our university, we are going to reform the management system of scientific and technological achievements and improve the award policy of scientific and technological results to improve the efficiency of the transformation of scientific and technological achievements.

6) Strengthening the construction of scientific research platforms

According to the requirements of discipline construction and high level innovative talent cultivation, we will take the

construction of macro discipline platform as our target to establish three-ring layout of the base platform covering land, coast, Ocean (hadal and polar areas). Focusing on the layout and adjustment of integrated research laboratories of discipline groups, planning rational layout of field science stations, research vessels and industry-university-research bases, actively building the joint laboratory with international and domestic cooperation, establishing and improving the management system of research platforms and bases, and forming a high level discipline platform system with the coordinated development of three key disciplines and other disciplines.

4. Enhancing the ability of social services to expand our influence

1) Reinforce the advisory capacity serving for the state strategic decision

Strengthening the construction of interdisciplinary think tank. Forming several teams of experts and scholars with solid theoretical competence, rich practical experience and international strategic vision in some areas such as international negotiations on ocean affairs, management of marine fishery resources, international compliance, food safety and risk control etc. to carry out prospective studies and provide strategic consulting for national and local governments in strategic layout, institutional reform, policy implementation.

2) Constructing a new mode of industry-university-research

Building technology innovation bases such as the utilization of marine resources, hadal science and technology, qualified and safe food supplies in urban area to explore and establish a new mode of industry-university-research with the of collaborative development of disciplines and industry.

3) Establishing alumni networking

Actively fostering the cultural atmosphere of “making joint effort to create a better future of SHOU” for alumni, improving the alumni network and system to establish the database of alumni information, strengthening the exchanges and cooperation between the university and its alumni as well as their working institutes to smoothen the pathway for alumni to take part in the construction and development of the university and make the full play of alumni in the talent cultivation, scientific research and technological services of our university.

4) Developing education and training services

Continuing to develop the current training projects with our brand. Strengthening the cooperation with Government at all levels, industry (enterprises) and other institutions to expand the training market. Developing the training programs with our brand based on the three key disciplines of marine science, fisheries and food to establish training base project of the State Oceanic Administration in colleges and universities, strengthening the cooperation with world-class universities and renowned training institutions to introduce high-end training

projects and actively promote and training programs with nations and regions involved in “the Belt and Road Initiative”.

5. Deepening the reform of personnel system to strengthen talents construction

1) Focusing on the introduction of high-level talents and the cultivation of young teachers

With centering on the development targets of disciplines and specialties, we are insisting on the principle of the combination of introduction and cultivation to carry out in-depth implementation of the talents developing strategy, gathering a group of leading talents with the international academic vision and industrialized service capacity in the frontier of academic research and industry technology, forming several high-level teaching teams led by distinguished teachers, elite academic innovation teams and major technology research innovation teams led by leading talents at home and abroad. With strengthening introduction and cultivation of high-level talents and young talents with excellent academic potential, we are focusing on the introduction of foreign teachers, providing support for the cultivation of high level groups and innovative teams, establishing innovation bases to attract more talents, and bringing together academic masters to create brands of international academic conferences and foster “academic circle of friends”. In order to strengthen personnel training in interdisciplinary areas, we are going to provide support for the

introduction of elite talents of related disciplines and basic disciplines, by the way of intensifying the construction of badly-needed talent team, strengthening the cultivation of distinguished teachers, encouraging teachers to conduct international academic exchange and industry-university-research practice to explore the linkage mechanism between the university and industry talents such as marine areas.

2) Optimizing the systematic allocation of human resources

Innovating the setting forms and resource allocation of grass-root organizations to improve the management and utilization of quota planning and optimize total amount and structure of human resources. Innovating the ways of short-term work for famous experts and retired scholars at home and abroad, improving the flexible employment system including dispatching, short-term employment, contract employment etc. exploring multiple ways such as annual salary, agreements wages, project wages to employ high-level scientific and technological talents, and inspiring the vigor of secondary units by building a adjustment mechanism with the combination of the universal coordination of the university and the autonomous setting of departments and colleges.

3) Improving the employment assessment and incentive mechanism

In order to deepen the institutional reform of position

appointment and professional and technical post appointment, we have been improving the classified evaluation of the whole process of faculty management from their entry to appointment, from promotion to reward and punishment, establishing different assessment systems including the first period assessment, assessment in a certain employment term, team assessment, non-assessment for the long-term employment faculty etc., strengthening the assessment results, and establishing mobility mechanisms. With encouraging researchers to conduct science and technology achievement transformation during the part-time or on-the-job absence to expanding two-way flow mechanism for research staff, we are going to explore the system reform on the fund-allocation of the secondary colleges oriented by "task + performance" and allocation of institutional departments guided by "post + performance", attracting external resources and stimulate the internal energy, and gradually establishing and improving the incentive system and mechanism to ensure stable growth of income for the faculty. Strengthening the construction of faculty's ethics to establish the personnel with morality and international outlook, who will be in line with national needs, promote the development of industries and help students with their development in innovation and entrepreneurship.

6. Enhancing foreign exchanges and cooperation to promote the international influence

1) Systematically deepening the joint support by the ministry and

the municipal government

Exploring the new mechanism of building a university with the joint support by the ministry and the municipal government. Striving for more support from the State Oceanic Administration, the Ministry of Agriculture and Shanghai Municipal Government. Continuing to strengthening the communication with the ministry and the municipal government, improving the quality of the graduates jointly cultivated with the State Oceanic Administration and the Ministry of Agriculture, expanding the scope of cooperation, and exploring the mechanisms of sharing the responsibility of undertaking major research tasks with the State Oceanic Administration and the Ministry of Agriculture. Making efforts to improve our capacities of serving national strategies and regional economic and social development. Actively expanding the cooperation with the State Environmental Protection Department, Shanghai Environmental Protection Bureau etc. to facilitate the research and talent cultivation in the water environment governance, the utilization of water resources etc.

- 2) Comprehensive implementation of internationalization strategy
In order to make full use of the position advantage of being located in Shanghai to vigorously promote the internationalization of the university, we are going to strengthen systematic planning to promote internationalization strategy. With expanding the layout of international cooperation to create new mode of international cooperation, we are going to deepen

the substantive cooperation with those who have signed partnership, making full use of the existing platforms of international cooperation, strengthening the cooperation in major scientific research projects, teacher training, student development, and integrating high quality educational resources abroad into the whole process of teaching and research to achieve synchronous lifting on levels of teaching, scientific research and academic reputation. Studying the quality guarantee system of international education and actively promoting the international professional certification, mutual recognition of curriculum credits and international joint cultivation. Expand the scale of international exchange of Chinese and overseas students. Improving the overseas study and study tour to advances their academic abilities and integrate it into the discipline construction effectively. Increasing the intensity of opening major discipline education to promote international cooperation with those counterparts abroad sharing similar advantages of disciplines and specialties and carry out various forms of cooperation in personnel training and joint programs. Strengthening the construction of disciplines and curricula delivered solely in English to improve the conditions and level of internationalization.

3) Providing strategic services for “the Maritime Silk Road”

Expanding the university function of serving the national "the Belt and Road Initiative", promoting exchanges and

cooperation with countries and regions along “the Belt and Road” and “21st Century Maritime Silk Road” in particular, strengthening the studies on the countries and regions along “the Belt and Road”, and vigorously promoting international students’ education and joint programs with those countries and regions.

7.Improving the function of the campus to provide support and service for the development of the university

1) Improving campus infrastructure

Further strengthening the infrastructure construction and renovation of facilities to integrate the internal resources and optimize the allocation of space, continuing to advance the construction of buildings for teaching, research, management and coastal bases.

2) Strengthening the construction of public service system

Building public resources platform and system of service at the university-college level. Co-building sharing experiment platforms with the rational allocation of new lab resources, focusing on the construction scientific research innovation platforms of national, provincial and ministerial levels and other major innovation experiment platforms, promoting the construction of labs in environment, culture and information and strengthening the laboratory safety.

Improving the construction of library information service platforms. Promoting library innovation in service, technology

and management, strengthening printing and electronic resources and the construction of intelligence library to enhance the quality of information services, cultural exchange and research services.

In order to promote the construction of smart campus, we have been establishing sound informational technology specification and standard system, speeding up infrastructure construction, deepening system platforms, collaboratively sharing application system and strengthening information security management system to actively build a reliable network and information environment with specification and security, fully achieve interconnection and exchange of systems, exchange and sharing of the information and big data analysis service, promote the profound integration of the information technology with teaching, research, management and service of the university and build efficient and convenient electronic university affairs system.

In order to improve the guarantee system of rear service, we have been building socialized employment mechanism of service management and transactional work, strengthening the resource management, improving the allocation mechanism and promoting the reform of paid use of resources and exit mechanism. Establishing and implementing the operational mechanism of independent services combined with the purchase of social services to improve service quality and lower operating costs.

3) Promoting the construction of campus culture

With strengthening the construction of University culture, fostering and carrying forward University spirit, we have been establishing and improving the system of culture inheritance and spirit education to create the campus culture featured with marine culture. In order to strengthen the research and publicity of excellent traditional Chinese culture and Socialist core values to give full play to its enlightenment and education, we are sticking to the principle of guiding knowledge education with value education to integrate the whole process of teaching and education with Socialist core values. Forging a sound culture of teaching to guide teachers to devote themselves to education and research and guide students to learn with passion, method and diligence, forming splendid atmosphere of teaching and learning in line with the university spirit. Intensifying the study of university history and education conditions. With exploring the establishment of sound mechanisms for cultural education to cultivate faculty and students with features of SHOU as well as the spirit of “Diligence, Sincerity, Dedication and Practicality”, we are strengthening the construction of marine culture, and forming the marine culture with our unique characteristic through studying and exploring.

4) Actively managing mass work

Improving the income distribution system to increase staff income in a steady manner. Improving the welfare system and

reward system and showing concern on the physical and mental health care of the staff by enriching activities for their spare time. Paying attention to the growth of young teachers and providing aid to those from poor families. Continuously providing services for the retired, especially those in hard conditions. Caring for students, especially those from poor families. Giving full play to the role of organizations such as the labor union, the Communist Youth League, Women's Committee in the mass work.

5) Strengthening the construction of environmentally-friendly campus

Deepening the construction of energy-saving campus by continuing to make efforts in energy saving and emission reduction. Strengthening the publicity and education of faculty and students' awareness of thrifty to advocate a healthy lifestyle and cultivate the good habit of frugality, actively carrying out energy-saving innovation on campus to explore new ways of cutting expenditure, planning campus construction as a whole to prioritize the efficiency and sustainable development.

6) Improving the construction of safe campus

Establishing and improving the long mechanism of maintaining campus security and stability to enhance the safety and security management of the university. Strengthening campaigns and education of the faculty and students'

awareness of safety precautions and maintaining security and stability, improving campus security management, campus security prevention and control system to improve the capacity to respond to emergencies, improving security consciousness and attaching importance to security work.

8.Improving the management system to accelerate the construction of modern university system

1) Improving the decision-making mechanism

With adhering to the system of presidential accountability under the leadership of the Party Committee, we have been managing the university by law and with democratic management to form a scientific and rational decision-making mechanism. Constantly improving the rules of procedure and the decision-making process of the Party Committee and administration to establish a scientific allocation of decision-making mechanism, improving the decision-making mechanism combined with faculty and students' participation and expert advice to give the full play of organizations such as academic boards, Teacher's Representative Committee, Student's Representative Committee in democratic decision-making.

2) Standardizing operation system

Improving the regulation system cored with SHOU Rules to form a dynamic work mechanism of “repealing, modifying, and making”, the work mechanism and process to advance the

reform of operation system of administration and other university affairs, and coordinate operation mechanism led by Party Committee, establishing the effective mechanism of party power, administrative power, academic power and democratic power to explore the system and operation mechanism of "Professors' Academic Governance", reconstituting organization system to establish and improve the classified assessment method. Establishing integrated management system.

3) Strengthening the supervision and management

Improving the democratic management and supervision mechanism. Improving the management system of internal supervision of leading body to improve the quality of its democratic life and strengthen the self-monitoring within the leadership, advancing campus-affair publicity to facilitate the supervising system. Establishing and improving the decision-making mechanism to value and improve the studies on legality and feasibility of major rules and decisions, establishing and improving the evaluation mechanism with the combination of studies by functional departments, consultation from experts, discussion by teachers and students and external evaluation.

4) Deepening the two-level management

Promoting two-level University-College management to clarify the responsibilities, rights and interests between the university

and colleges relations, transform the functions of departments, strengthen the educational entity and management main body of colleges. Rationalizing the system to optimize the organization system based on the orientation of colleges and improving college governance structures to guide them to establish the mechanisms of grass-root academic organizations' participation in the decision-making. Strengthening differentiated guidance and management to establish the classified performance evaluation system of the college. Promoting the two-level allocation and assessment to explore the shift-down management mode in personnel management, financial management etc.

Part Three Supporting Measures

1. Strengthening the Party's leadership to provide political guarantee

In order to improve the ability of leading groups at all levels of operation and governance and to give full play to the enthusiasm and initiative of the masses of party members and cadres, we are going to enhance cadres' sense of responsibility, opportunity and innovation, with making efforts to improve the scientific level of the party building and promoting sound and rapid development of the university. Promoting the comprehensive construction of Party ideology, organization, style of work, fighting corruption and upholding integrity and system, facilitating their abilities in self-purification, self-improvement, self-innovation and self-upgrade and building learning-oriented, service-oriented, innovation-oriented party organization to provide a strong political, ideological and organizational guarantee for the development of the university.

2. Providing institutional mechanisms via in-depth implementation of the comprehensive reform program

With carrying out in-depth implementation of the comprehensive reform program to deepen the reform of talent cultivation mode, personnel system and scientific research system, we are going to provide institutional mechanisms for the effective promotion and implementation of “13th Five-year Plan” by accelerating the pace of reforms in key areas and crucial links.

3. Advancing the implementation of rules to provide system guarantee

In order to advance the implementation of rules to accelerate the construction of modern university system adhering to the democratic management principle of the party leadership, presidential accountability, and professors' academic governance to improve the management system and operation mechanism of the university, we are going to build the University Advisory Committee with the participation of plural bodies in decision-making, the reporting system of the university operation and management to mainly form reports on business operation, human resources, financial operation and audit analysis.

Optimizing the allocation of resources to give priority to issues in key areas and key links affecting the university development. Establishing and improving the allocation management and cost-sharing system of public resources.

4. Raising funds via diversified channels to provide more support

With actively expanding the source of funds and improving the mechanism for raising funds through various channels, we are going to stimulate independent financing ability of secondary colleges and actively obtaining other external sources of funding like competitive funding and making effective use of indirect funding.

With centering on development strategies of the university, we will optimize the financial expenditure structure, with making effective

use of assets to improve fund use efficiency, strengthening budgetary financial management and internal control to intensify the capacity of production, learning and research at the University, adhering to the principle of budget openness and establishing a financial reporting system.

5. Conducting widespread publicity and mobilization to increase the degree of consensus

With strengthening publicity on planning to the faculty and students via a variety of media and forms to enhance the sense of identity, responsibility and mission of the faculty and students over the development ideas, goals, strategic tasks during the next five years, we are going to improve the implementation of the plan and effectively guide them to take participation in involvement and oversight. We will make our grand achievements with the support and wisdom of all.

6. Strengthening the amendment and adjustment to the planning during the implementation to make it more rational

In order to strengthen the organization and implementation of the planning, we are going to set up planning and implementation work leading group to enhance the macro guidance, strategic management and implementation capacity of the planning. With strengthening the assessment and monitoring of the implementation of the plan, we will explore and improve the tracking evaluation system by third-party social forces and improving the assessment mechanism and system of

accountability.

We are going to make necessary adjustments and revisions on related content and initiatives according to the assessment and examination of the implementation of the plan, and to solícite wide opinions on adjustments which can only be made with the approval by the decision-making body such as Standing Committee of the Party Committee.