# **Cooperation Projects in Maritime Education**

#### **Igor Marichev**

Admiral Ushakov State Maritime University (AUMSU)

This paper focuses on the cooperation projects in maritime education, that is considered as response to challenge of globalization of maritime activities, multi-cultural crew composition and increase of specialized ships. Maritime Universities continue to endeavor to improve methods of teaching, to develop technologies directed to training of highly skilled professionals, capable to work in the field of merchant shipping. Difficulties and problems which are encountered by Maritime universities during arrangements of the projects are presented. It is shown that partnership, working in collaboration on base of the international and national requirements aims to contribute and harmonize the Maritime Education and Training. It is proved that an international successful maritime training requires improved pedagogical methods and new ways of cooperation, which allow it to bring together like-minded maritime educators to network and share ideas and best practices.

The Educational Project which provides opportunity not only to strengthen connections among member institutions, by enhancing the sharing of experience and knowledge, but also promotes next step of evolution of maritime education is submitted.

**Key words:** cooperation project, maritime education and training, Maritime universities, pedagogical method, educational space, educators, partnership.

#### Introduction

The urgency of this article is proved by modern conditions of the world transport system; scale of transformations in the maritime industry, necessity of development of new approaches to a substantiation of strategy of its development; challenges from the maritime community; requirements to quality of transport service of the population that follows from a policy concerning development of sea activity as a whole.

The growth of the ships capacities is obvious and it has tendency for development. This process is resulted in increasing quality of operability, bringing onboard the ship the newest technology and people able to work in these new conditions. The constant improvement of technology and its implementation onboard ships, requires highly skilled specialists to perform professional functions.

Modernization of maritime education requires from all members concerned in it, actions on its optimization. Modern maritime universities today have the maritime education system including mechanisms assuming:

- support of the maritime content directed on formation at student of maritime universities fundamental and special knowledge;
  - differentiation of knowledge in view of new knowledge and new technologies;
- curriculums on the basis of invariant parts of the basic state curriculum and the educational information, aimed at formation of professional competences;
- integration of subjects within the frames of the special subject fields focused on the decision of industrial problems, arising in branch of navigation;
  - expansion of interactivity of the high school and shipping companies;
- satisfaction of social requirements, needs of educational sphere reflected in the State educational standards and external requirements of a labour market, defined on the basis of productive-target model for an estimation of quality of marine specialists' training and completeness of achievement of the purpose in the allocated productive directions;
  - creation of conditions providing adaptability of pedagogical process [5; 6].

Moreover, in order to correspond to challenges from maritime community maritime universities must review from time to time the different provisions in their manuals to see its appropriateness brought about by technology changes. But of course, it isn't enough. The educational process has a great impact on the career of future maritime officers and the issues of the safety and security are essential and to be taken into attention by educators in order to avoid catastrophes and for

saving human lives. International cooperation in maritime education has great opportunities and it is difficult to overestimate it. In this connection any attempt to extend frames of training through educational projects and participation in educational grants must be greeted.

# Part 1. Educational project

The quality of training of the seamen capable to cope with difficulties of their future work on board ships mostly depends on the lecturers and instructors. Keeping up with the trend of globalization of maritime activities, multi-cultural crew composition and increase of specialized ships, Maritime Universities continue to endeavor to improve methods of teaching, to develop technologies directed to training of highly skilled professionals, capable to work in the field of merchant shipping. In this connection we consider as compulsory to provide high skill for the personnel involved in maritime education, especially in the academic field. In this way, Admiral Ushakov Maritime State University (AUMSU) has been developing a number of projects dedicated to initial and continuous training of its stuff, both beginners, i.e. young lecturers in the maritime educational system and experienced lecturers. An international successful maritime training requires improved pedagogical methods and new ways of cooperation, which allow to bring together like-minded maritime educators to network and share ideas and best practices.

In this connection AUMSU has developed a number of projects among the there is a project «Educational Space», the urgency of which is proved by:

- challenges facing maritime education and training providers, and the Maritime industry;
- constantly growing requirements to quality and a level of future sea experts training;
- effective improvement of Maritime Education and Training standards first of all Standards for Training, Certification and Watchkeeping (STCW) Convention and newly proposed changes admitted at Manila and famous as Manila amendments [2; 7];
- implementation of new methods of teaching, development of technologies directed to training of highly skilled sea professionals;
- development of cooperation among universities in promoting intercultural exchange and cooperation among professors, lecturers and instructors of the maritime educational space.

Lectures, who want to participate in this project, are required to:

- possess high skill, academic and practical mastery of the taught field;
- be able to produce new knowledge based on multidimensional character of science;
- have a good communicative skill, covering scientific and foreign language (English) speaking;
- develop and independently cooperate in sphere of multilingual and multicultural projects;
- be responsible for his/her activity and conduct research according to good scientific practice.

Main purpose of the Project is to assist Maritime Education and Training institutions as well as their teaching staff in arrangement and introducing new training courses or in enhancing, updating or supplementing existing training material in order to improve quality of Maritime Education and Training system as a factor which strongly impacts worldwide the competitiveness of the shipping sector.

A further unique element of the program is the involvement of Visiting Professors. Under the mentioned Project renowned maritime experts come to the AUMSU from a very diverse range of countries and institutions, including sea companies and maritime academies and universities. The Host University provides students of required department, technical facilities for lecturers, minimum technical requirements for lecturer's hardware. It is agreed that Universities should support professors, lecturers and instructors who wish to teach an educational course outside their own University. Also in order to minimize time costs professors, lecturers and instructors can use video conferences and distant learning systems.

# Part 2. The concept «Educational Space»

Choice of the name of the project «Educational Space» is not accidental. Recently in pedagogical works the concept «educational space» is used very often. Authors of different pedagogical publications consider the general essence of concept «space» and on the basis of knowledge which has been developed, open its features in separate areas of education.

Studying essence of educational space, teachers address to philosophical sources in which the patrimonial concept «space» is given, and to the characteristic of other adjacent general scientific concepts, to the ideas which have been put forward by great thinkers of the past, and to modern methodological works.

For example, according to Aristotel [1], the space is a property of objects which are in it, and a place in which the object settles down, is something difficultly seen. I. Kant [4] understood space as the form of all phenomena of external feelings, about impossibility of understanding that spaces can't be. Researchers also grounded on statement of M. Heidegger [3], according to which the place is some point of space for existence, arrangements of object in it.

Gradually knowledge about space as about an arrangement of objects in emptiness developed. Last decades teachers even more often use concept «educational space» with consideration of sets of various pedagogical circumstances. Opinions of different authors on the maintenance of this concept essentially disagree. However it becomes clear, that the success of process of training depends on correct construction of educational space.

We've distinguished the basic attributes of educational space. They are:

- filling of emptiness by material and (or) virtual educational objects;
- prevalence (concerning objects and their quantity) and coherence of educational objects;
- determination of educational objects of space [5; 6].

Educational objects include: the contingent of learners (pupils, students, etc.), the staff of teachers, state standards of education, the educational literature, educational-material resources, hostels, etc. Prevalence of objects is characterized by their «volume» and quantity. Determination of educational objects consists in the following. Each of them has the sphere of existence, the borders, differs from others. Objects of one level of the maintenance consist of objects of another (more concrete, detailed).

# Part 3. Pedagogical parameters of educational space of maritime university

Creation of elite maritime university assumes conformity to the certain parameters. Pedagogical parameters of educational space of maritime university are: a place of educational interactivity; lectures; learners; means of training; the order for preparation of specialists; the content of education of specialists; educational techniques and technologies and ways of interaction with manufacture of the customer. The account of the specified parameters is obviously necessary for development of elite maritime university, as component of the world educational space.

There is an opinion, that all higher education is elite on quality of the given education accessible to the most prepared and creatively focused part of youth. But practically it is very difficult to create elite high school now days, even already because the elite means the selective, the best. The high school in Russia does not presume to select and teach students only with a high level of preparation with the purpose of formation of elite. Elite formation assumes the big competition, but use of results of uniform graduation examination – opposite, denies it. The idea of uniform graduation examination is theoretically attractive and in the certain measure is justified. But its lack that it passes in the form of the test. Transition to this form of examination leads to decrease of a level of the mass graduate. The general education is stratified: on education for mass and another absolutely different education for elites.

Admiral Ushakov Maritime State University in Novorossiysk (Russia) is the largest educational maritime institution and a unique higher educational institution in the south of Russia, training marine specialists for shipping companies, ship-building and shipyards, ports and transport terminals. AUMSU has a good reputation and among its characteristics the term «elite high school» is often heard. Of course, the creation of the elite high school is a very complicated task, which demands hard work of great number of people. Its task is not only to prepare specialists for navigation,

engineering and shore side activity, but to bring up elite professionals capable to be leaders, to influence the behavior of others so that contribute to organizational success, survival and growth.

In connection with the reform of marine education, AUMSU has become the center uniting the whole complex of maritime educational establishments on territory of Southern Federal Area. Such association is caused by:

- necessity of financing of branch educational system due to federal public funds, means of branch business, as basic consumer of its graduates, and commercial educational activity of high schools;
- urgency of the coordinated action of branch and regional plans for development of academy and its transition in the status of university;
- entering of Russia in the world economic space and adaptation of the Russian educational system in the European and the world educational space;
- necessity of understanding of developments of marine professional training for the Russian Federation [6].

Transition of AUMSU in the status of university put forward new problems which demand the prompt and productive decisions. This transition is connected with development of sea branch and the international character of activity that compels high schools to refuse from earlier narrow branch orientation in training of specialists, and to pay attention to fundamental education of future marine specialists, to raise not only their special level, but humanitarian knowledge too.

Modern high schools and AUMSU, too, play the leading part in transferring the advanced knowledge, in formation of highly educated intellectual elite. Management of educational space of the academy assumes the expansion of functions of activity of subjects of education, integration of the content of common cultural, professional and social training, change of set and unity of all components, environments, structures and levels of educational process, change of the social and economic mechanism of management of the establishment.

### Part 4. Personnel criterion in estimating educational space

The special attention should be paid to personnel criterion. Though constantly increasing role of material base of educational complexes, skill of their pedagogical staff remains a major factor defining quality of performance of the main functional problem – maintenance of a level of training of the command staff of fleet according to the international and national requirements.

Scientific qualification of teachers, their professional-pedagogical competence influence on the formation of new generation of specialists – educated, with a high level of the general and professional culture, intellectual, capable to be competitive, to perform active professional and social activity in the changed social and economic conditions [8; 9].

The basic personnel problems of educational complexes in modern complex economic conditions are: leaving of the skilled teachers in commercial structures; reduction of quantity of the young specialist acting in postgraduate study and doctoral studies and wishing to devote itself to teaching work; «the latent migration» of highly skilled lecturers of the higher school who are compelled to be engaged because of economic difficulties in the activity which has been not connected with educational process that leads to loss of their qualification, to decrease in interest to teaching work and the responsibility for results of the work. In this aspect it is necessary to organize practice of carrying out of methodical conferences and seminars on actual questions of training seamen according to requirements of State educational standards and in compliance with the requirements of STCW Convention and Code [2; 7], and also carrying out of certification of teachers on conformity to the specified requirements.

For regular increase of skill level of teachers, especially of special disciplines it is necessary to make active their periodic practice on vessels for work on regular command positions, and also as heads of practice of cadets, to provide passage of practice by them on corresponding sea simulators.

The primary goal of personnel selection of educational complexes consists in perfection of training system, improvement of professional skill and retraining of the scientific and pedagogical staff, increase of prestige of their work on the basis of material and moral incentive, in maintenance of high requirements to this category of workers on the basis of spent competitions and an estimation of their activity according to final results.

Pedagogical skill is not acquired during training in high school. It is formed only during practical activities and postgraduate training. Conditions for becoming the teacher on a way of perfection of pedagogical skill can be provided only by the organized system of postgraduate education. In this connection the AUMSU conducts work on creation of special structure, namely, pedagogical laboratory. The estimation of a level of individual training, creative scientific potential, pedagogical qualities define an elitism of the staff, and, hence, and an elitism of high school.

The AUMSU launched the international educational center which provides the resources for advising and effective guidance to lecturers and students regarding educational projects and other academic matters. The important essential fact is the teaching and business language is English and so competency in speaking, reading, writing and listening in English is essential. In this connection extra attention is given to the process of English studying both for lecturers and students. Another important step in achievement of set tasks is preparation of lecturers for teaching special subjects in English language. It is new enough for Russian Universities, because under State educational standards all material must be provided in national language. This training of lecturers is also provided in frames of International education center in the AUMSU.

#### **Conclusion**

International by its nature, shipping is creating connections among countries and nations, with a great value for economical changes and transport activities. The world economy and maritime industry, as a part of it, are changing and the requirements become more and more complicated.

- 1. The development of the maritime transportation and activities connected with it imposes the necessity of having more trained people involved in operation, able to perform functional responsibilities in their work. This ability can not be considered as a native one, and it must be developed through academic studies and specific training, including both theoretical knowledge and also practical skills.
- 2. Partnership, working in collaboration on base of the international and national requirements aims to contribute and harmonize the Maritime Education and Training. To achieve these new challenges is necessary to redesign the training system. It isn't easy to change the actual format of maritime training system and mentalities. And extending of maritime universities' activity through educational projects based on partnership is of great value. It should be mentioned that projects are not only scheme to act but opportunities for new search, lecturers' innovation and creativity.
- 3. Creating database in the frame of educational projects for mobile lecturers and students in order to help them to choose courses offered at other universities within the network which are equivalent to the course at their home university provides not only academic compatibility but further development of both universities and maritime education as a whole.
- 4. The Educational projects developed and suggested by the AUMSU are open and flexible ones, able to easily adapt to all requests coming from maritime universities. These Projects will be profitable for all who involved in the maritime educational system, because they have been elaborated according to the Conventional requirements and directed to increasing of lecturers competencies through promotion of knowledge's and technologies in the academic maritime field.

#### **References:**

- [1] Aristotel. Compositions. In 4 volumes. M.: Idea. 1983.
- [2] IMO, STCW 78/95, London, (1995)
- [3] Heidegger, M. Art and space / Time and life. 1993.
- [4] Kant, I. Critique of pure reason. M.: Science. 1998.
- [5] Marichev, I. Maritime academy in educational space. Novorossiysk. Admiral Ushakov State Maritime Academy. 2006.
- [6] Marichev, I. Systemic arrangement of the educational space. Palmarium Academic Publishing. AV Akademikerverlag GmbH and CoKG. Saarbrucken. Deutchland / Germany. 2014.
- [7] Revised STCW Convention and Code adopted at the Manila Conference.
- [8] Richard E. Boyatzis. Power motivational training: a new treatment modality. Annals of the New York Academy of sciences 273. 1976.
- [9] Sala, N. The Internet and the "learning by doing" strategy in the educational process: a case of study, International conference on advanced learning technologies. -2001.