



LIETUVOS AUKŠTOJI
JŪREIVYSTĖS MOKYKLA
LITHUANIAN MARITIME
ACADEMY

INTERNATIONAL SCIENTIFIC-PRACTICAL CONFERENCE

HARMONISATION OF THE UKRAINIAN AND
EUROPEAN HIGHER EDUCATION SYSTEMS:
CHANGES AND CHALLENGES

Collection of conference thesis

17 January, 2019



KLAIPĖDOS
UNIVERSITETO
LEIDYKLA
Klaipėda, 2019

Leidinio bibliografinė informacija pateikiama Lietuvos nacionalinės Martyno Mažvydo bibliotekos Nacionalinės bibliografijos duomenų banke (NBDB).

SCIENTIFIC COMMITTEE:

- dr. Inga Bartusevičienė, assoc. prof. of Lithuanian Maritime Academy
- dr. Olena Bezlutska, Associate Professor Department of Humanities,
Kherson State Maritime Academy
- dr. Viktoriia Dobrovolska, Head of the Department of Humanities,
Kherson State Maritime Academy
- dr. Vytautas Dubra, Head of Navigation department, assoc. prof. of Lithuanian Maritime Academy
- dr. Genutė Kalvaitienė, Head of Career and Communication department,
assoc. prof. of Lithuanian Maritime Academy
- dr. Alona Leshchenko, Professor of the Department of Humanities,
Kherson state Maritime Academy
- dr. Saulius Lileikis, assoc. prof. of Lithuanian Maritime Academy
- dr. Oleksandra Litikova, Head of the English Language for Marine Engineers Department,
Kherson State Maritime Academy
- dr. Oleksandr Lysyi, Director of Azov Maritime Institute National University
"Odessa Maritime Academy"
- dr. Vitalii Prosianok, Deputy director for educational and scientific work,
Azov Maritime Institute National University "Odessa Maritime Academy"

The thesis of the collection are single blind reviewed.

© Lithuanian Maritime Academy, 2019
© Klaipėdos universiteto leidykla, 2019

PREFACE

Shipping serves global trade by carrying huge quantities of cargo, all over the world, cost-effectively, cleanly and safely. Maritime education and training (MET) is necessary in order to increase awareness, to mitigate the trends and challenges influenced by the philosophical and sociological changes faced by society and the maritime industry.

Despite the fluctuation of global economics demand for shipping services over time will continue to rise. Today international trade has evolved to the point where almost no nation can be fully self-sufficient. Every country is involved in the process of selling what it produces and acquiring what it lacks to a certain degree: none can be dependent only on its domestic resources. But if the world depends on a safe, secure and efficient shipping industry, the shipping industry, in turn, is dependent on an adequate supply of seafarers to operate the ships that carry the essential cargoes we all rely on.

Thus the supply of qualified manpower must be guaranteed. Seafaring is a job that demands highly trained and qualified personnel: people who have the courage, strength and determination to spend long periods of time away from home; and the professional competence and wherewithal to respond to the hazards and challenges that the sea and the weather might throw at them.

The international scientific-practical conference “Harmonisation of the Ukrainian and European higher education systems: changes and challenges” was organised in the frame of the international postgraduate practical internship programme “Maritime education and training innovations in the European higher education area“. Participants of the internship programme were academic and scientific staff of higher marine education institutions of Ukraine – National University “Odessa Maritime Academy” and its Maritime institutes of Azov, Danube, and Izmail, also Kherson State Maritime Academy and Maritime College of the Kherson State Maritime Academy, Donetsk State University of Management, National Aviation University of Kyiv.

The programme of the internship and conference addressed several relevant topics, including the harmonization of professional and educational requirements for seafarers, marine navigators and ship engineers education and training according to the STCW Convention, seaport specialist education and training, seagoing and shore practice and career management, improvement of scientific and applied research, research platforms, methodology, publications, innovative teaching and learning methods in MET.

Organisers of the Conference

CONTENTS

<i>D. Astaykin, A. Golikov, O. Vedernykov. The Perspective Solutions of Navigation Tasks in Current Conditions</i>	5
<i>O. Bezlutska. Formation of Future Seafarers' Safety Culture in Professional Activity</i>	6
<i>L. Cheroi. Changes in Hidrological Processes in the Danube Delta at the Present Period under the Conditions of the Existense of Navigable Channels</i>	7
<i>O. Danylenko. To the Problem of Future Navigators Professional Training.....</i>	8
<i>V. Dobrovol'ska. Peculiars of Teaching Humanitarian Subjects in Kherson State Maritime Academy</i>	9
<i>V. Dubra, P. Fiodorov. Relevance Of The Use Of Simulators In Marine Navigation Studies: Student Opinion Survey</i>	10
<i>T. S. Kolechintseva. Technology of Implementation of Cross-Curriculum Bonds between Physics and the Disciplines of General Technical and Professional Cycles in Maritime Colleges</i>	11
<i>O. Kolmykova. Speech Tolerance as an Important Factor of Efficient Work Onboard a Ship</i>	12
<i>L. I. Kotliar. Development of Volitional Behavior of Future Officers of Sea and River Transport</i>	13
<i>V. V. Kramarenko, A. V. Fedorenko. Modern Trends in Organization of Safe Containerized Cargo Transportation</i>	14
<i>V. V. Kramarenko. Ship Safe Sailing in Congested Areas</i>	15
<i>A. Leshchenko. The Problem of "Professional Burnout" in Long-Distance Seafarers</i>	16
<i>O. Litikova. Communicative Method of Maritime Engineering English Competency-Based Teaching</i>	17
<i>V. Locaitienė, S. Lileikis. The Competencies Required by Port Economists, Stevedores, Technologists: a Pilot Study</i>	19
<i>I. Panchenko. Problems of the Ukrainian Education on the Way of Integration into the European Educational System.....</i>	20
<i>A. Slyusarenko, O. Soroka. Situational Awareness in the Bridge Team Management.....</i>	21
<i>O. Soroka. Cohesiveness as an Extent of a Value-Orientational Unity of a Crew In Ship Management.....</i>	22
<i>O. Soroka, I. Smokin. Ecdis and the Future of Electronic Navigation</i>	23
<i>T. Stovba. Development of International Cooperation in the Field of Maritime Education.....</i>	24
<i>T. Tarasenko, V. Zallozh, S. Maksymov, O. Dimoglova.</i>	25
<i>N. N. Timchenko, E. Y. Kuzmenko. The Need for Management of Maritime Cadets Competitiveness in Educational Reforming Conditions</i>	26
<i>O. Tymofyeyeva. Interpersonal Communication Skills of Future Marine Officers</i>	27
<i>V. Ya. Zheliaskov. Interactive Component as Means of Professional Communication of Future Navigators.....</i>	28

THE PERSPECTIVE SOLUTIONS OF NAVIGATION TASKS IN CURRENT CONDITIONS

PhD, Dmytro Astaykin, PhD, Anton Golikov, Oleksandr Vedernykov
Navigation department, National University "Odessa Maritime Academy", Odessa, Ukraine,
e-mail: mortech@mpt.onma.edu.ua

Navigation tasks can be solved with the help of modern technologies due to the progress of maritime facilities. Cartography issue is current to solve navigation problems. Electronic charts in a current form are the replacement of navigation data carrier. Therefore, the electronic chart remains a projection of the spheroid on the plane with all the attendant errors and corrections.

The use of electronic charts on board the vessel makes it necessary to rethink methods for solving navigation tasks. Virtual terrestrial ellipsoid will help to create 3D nautical charts for solving navigation tasks that were previously solved only in a general due to the complexity of the calculations. Such charts will not use the projection of the earth's surface onto the plane. This will eliminate errors during projection. The 3D nautical chart is represented as a segment of the earth's ellipsoid.

Navigation tasks solution is transferred to a segment of the earth's ellipsoid at a given scale. From the chain of creation of a planar chart: "Earth – ellipsoid – projection – chart" is removed "projection – chart" The three-dimensional ellipsoid segment remains at a given scale. Navigation tasks on such charts are solved by spherical trigonometry methods.

The main conclusion are the following:

1. 3D nautical chart is a new step in the efficiency of navigation processes.
2. The use of 3D nautical chart will improve the accuracy of calculations due to the use of spherical trigonometry methods.
3. 3D nautical chart should be used for visual perception of navigation processes.

References

1. Koval D.S., Vedernikov O.M. "Creating a virtual terrestrial ellipsoid to solve the problems of maritime navigation", Transport technologies: infrastructure, navigation, transportation, automation: Materials of science and technology conference 16-17 November 2017 Odessa: NU "OMA", 2016, – P. 15.
2. Vedernikov O.M. About Electronic Charts // Transport technologies: infrastructure, navigation, transportation, automation: Materials of science and technology conference 16-17 November 2017 Odessa: NU "OMA", 2016, – P. 91.

FORMATION OF FUTURE SEAFARERS' SAFETY CULTURE IN PROFESSIONAL ACTIVITY

Ph. D., Associate Professor Bezlutska Olena

*Department of Humanities, Kherson State Maritime Academy, Kherson, Ukraine,
e-mail: bezlutskaya@ukr.net*

No industry, and especially shipping, can be considered completely safe, therefore the question of formation of future seafarers' safety culture in their professional activity is rather actual.

Seafarer's safety culture is an inevitable combination of a safe production environment and a steady, deliberate implementation of relevant rules and security requirements by all crew members.

The high level of safety culture for future seamen is a prerequisite for prevention of "human factor" manifestation in maritime navigation.

In order to form a culture of safety in professional activities of marine specialists it's necessary to ensure: special knowledge, skills and abilities; awareness of requirements and safety rules; practice and experience on a ship in safe environment.

The process of shaping the safety culture of professional activity for future seafarers consists of three stages:

At the first stage it is foreseen to forge «safe» thinking to future seamen in process of their study at a marine educational institution and learning the disciplines "Psycholog", "Maritime resource management", "Prevention of pollution of the marine environment", "Organization of crew operations in extreme conditions", "Safety of life and bases of labor protection" and others.

The second stage of security culture formation continues during training sessions on simulators, allowing future sailors to be trained to work in high-risk situations and to ensure a high level of psychological training of cadets based on optimizing their human resources, in particular, psychophysical and intellectual.

The third stage involves the use of already formed and the formation of new competencies related to the culture of safety during the practice of the ship, especially within the limits of dangerous and extreme situations.

It is thanks to the effective training in training, training and practice in the safe environment of the future seamen's vessel that it is possible to minimize the problem of false actions of representatives of the shipping company and to increase the level of safety culture and reliability of international maritime navigation.

References

1. Bezlutska, O. P. (2017). Psichologichni aspekty trenazhernoyi pidgotovky kursantiv Xersonskoyi derzhavnoyi morskoyi akademiyi do roboty v ekstremalnykh umovax. Traektoriâ nauki : *International Electronic Scientific Journal*, 3(2). <http://pathofscience.org/index.php/ps/article/view/287>
2. Zajceva, T. G. (2009). *Psichichna kultura yak faktor psyxoemocijnoyi stijkosti moryaka*. Xerson.
3. Torskij, V. G. (2012). Vospitanie «kul'tury bezopasnosti» kak faktor obespecheniya bezopasnosti moreplavaniya. *Transport*, 49, p. 57–62.

CHANGES IN HIDROLOGICAL PROCESSES IN THE DANUBE DELTA AT THE PRESENT PERIOD UNDER THE CONDITIONS OF THE EXISTENSE OF NAVIGABLE CHANNELS

Liudmyla Cheroi

Department of Navigation of Danube Institute of the National University "Odessa Maritime Academy", Ukraine

In the lower reaches, at a distance of about 170 km, the Danube River flows through the territory of Ukraine. Here, the main waterway of the Danube is divided initially into two sleeves: Kiliia and Tulcha, and then a few more 6 large watercourses. Tulcha sleeve diverges into Sulina and St. George's sleeves, which flow through the territory of Romania and flow into the Black Sea. The Kiliia sleeve, in its length, is divided several times and re-united into a single waterway, forming two internal and one external marine delta.

The waters of the Danube have strategic hydroeconomic significance for Ukraine and Romania - as a transport corridor, virtually inexhaustible freshwater resource, recreation and fishing.

One of the main issues for today is the problem of changes in hydrological processes in the Ukrainian part of the Danube Delta, namely redistribution of runoff in the conditions of the existence of navigable channels, as well as conducting future hydro technical works to improve navigation conditions.

Redistribution of drain on the sleeves of the delta is a continuous process, due to both natural and anthropogenic factors and, above all, hydraulic engineering work. A lot of unpredictable factors affect the dynamics of runoff, which complicates the forecaserations of redistribution and requires continuous monitoring and accounting of runoff in the Lower Danube (Almazov et al, 1963).

The main aim of the article is to assess the current state of redistribution of runoff, using previous studies of the flow of main sleeves in the Danube Delta.

The results of many measurements in previous years and in the current period conducted by the Danube Hydrometeorological Observatory provided an opportunity to consider the present conditions in the delta and track the dynamics of the current distribution of runoff in the watercourses of the Danube Delta.

References

1. Almazov, A., Bondar, K., Vagin, N. et al (1963). *Hydrology of the Danube*. Moscow: Gidrometeoizdat.

TO THE PROBLEM OF FUTURE NAVIGATORS PROFESSIONAL TRAINING

Candidate of pedagogical sciences Oleksandr Danylenko
Head of the department of Navigation of the Danube Institute of the National University
"Odessa Maritime Academy", Izmail, Ukraine, e-mail: obdab@i.ua

By number of seamen, Ukraine has the sixth position in the world after the Philippines, China, Turkey, India and Indonesia, and the fourth one in the ranking of officers (35,400 marine officers or 5.67% of the world's total in 2010). Over the past 15 years, the number of Ukrainian sailors has increased by 2 times, the officers - by 22.5%, the regular members - by 10.8%. According to the National Institute for Strategic Studies (2016), high professionalism, endurance, and interpersonal skills are considered characteristic features of Ukrainian sailors. The promotion of Ukrainian sailors to this market is not only prestigious but also economically beneficial for Ukraine. Special place in this process is occupied by specialists of the commanding staff of the ship's crew, including the captain's assistants who have been trained in the Navigation and Navigation Management specialization. Knowledge, skills and abilities required for solving professional tasks and practical problems in navigation and control of ships, management of technical systems and complexes of ships, operation of ship electrical equipment and automation equipment obtained during training provide future navigators with the ability to manage any modern ships domestic and foreign shipping companies. However, the relevance of improving the quality of vocational education of future navigators is due to a number of factors: the growing role of sea and river transport in ensuring the global transport system; the need to improve the competitiveness and professional mobility of Ukrainian sailors in the global labor market; the need to reduce the proportion of accidents and disasters at sea for the human factor; the need to take into account the special requirements for the professional competence of seafarers contained in the International Convention on the Training, Certification of Seafarers and Watchkeeping (2012), etc. At the same time the traditional system of training future navigators for professional activity requires a significant update, since due to the emergence of new challenges, requirements and threats in the field of navigation in modern conditions, a careful analysis of the learning outcomes - knowledge, skills, skills, ways of thinking, value orientations, professional qualities of navigators, which they are able to demonstrate after completing their studies in maritime institutions of higher education. The content of professional competence of future bachelors of navigation, as well as the forms, methods and techniques of its formation requires revision. It is also said to increase the relevance of the topic and the results of the analysis of future navigators training. Data from a pilot study indicate that cadets receive insufficient theoretical knowledge and do not acquire a sufficient level of skills and competences - components of professional competency. The modern system of their training and the mechanism of state order do not correspond to the modern requirements of the labor market, they do not provide a balance of needs and offers. The results of the analysis of the system of training future navigators allows us to conclude that there are certain problems in this process.

References

1. *Priorities of the State Maritime Policy in the Field of Operation and Development of the Maritime Economy of Ukraine* (2016).
2. *International Convention on the Training and Certification of Seafarers and Watchkeeping 1978 (consolidated text with Manila amendments)* (2012). 568 ps.

PECULIARS OF TEACHING HUMANITARIAN SUBJECTS IN KHERSON STATE MARITIME ACADEMY

Ph.D (Candidate of Historical Sciences), Associate Professor Dobrovolska Viktoriia
Kherson State Maritime Academy, Kherson, Ukraine

Qualitative education is an important key of successful development both of Ukraine and of the European Union countries. The process of Ukraine's integration into the world maritime community envisages increasing requirements for future specialists of sea and river transport. Today, there is a change in the education paradigm, which shows itself in the implementation of a competent approach in a system of higher education. The author's attention is directed at the disclosure of the formation peculiarities of general competencies of Kherson State Maritime Academy students in the process of teaching humanitarian subjects.

The formation of general competences (Хуторський А., 2009) is actively applied in the process of studying all humanitarian subjects in the academy. The implementation of innovative approaches takes place in close connection with the European educational process. The mentioned above general competences meet requirements of the Bologna Process (Димань Т.М., 2017).

Teaching humanitarian subjects is carried out within the professional training of seafarers in accordance with Resolution 7,8,9,10 of the International Convention on Standards of Training, Certification and Watch-keeping for Seafarers of 1978 (including the Manila Amendments of 2010).

An important condition for the formation of general competencies is the strengthening of the personal orientation of higher education. To implement the above-mentioned teachers of humanitarian subjects use various forms and methods of organization of educational activities, focused on a particular student / cadet; stimulate cadets to express and to use different ways to solve situational tasks; create such pedagogical situations in the classroom that enable each student to show initiative and independence, to analyze and to evaluate the work of others; use a variety of cognitive activities.

During the 2015-2017 years, a scientific project "Innovative technologies for the formation of professional culture of a sea and river transport worker during the study of humanitarian subjects" was carried out by a team of the Department of Humanitarian Subjects of the KSMA. The author's team theoretically substantiated the concept and developed a model of the educational process based on a competent approach. The forms and methods of innovative technologies for the formation of a professional seafarer culture are reflected in the scientific publications of the project authors. These ideas are actively used in the process of teaching humanitarian subjects in the Kherson State Maritime Academy.

Thus, the development and introduction of innovative technologies for teaching humanitarian subjects in the Kherson State Maritime Academy allows making more effective strategy for training a marine specialist based on national and world experience.

References

1. Хуторський А. Ключові освітні компетентності. <http://osvita.ua/school/theory/2340/>
2. Димань Т. М., Боньковський О. А., Вовкогон А. Г. (2017) *Європейський простір вищої освіти та Болонський процес: Навчально-методичний посібник*. Одеса: НУ «ОМА».

RELEVANCE OF THE USE OF SIMULATORS IN MARINE NAVIGATION STUDIES: STUDENT OPINION SURVEY

assoc. prof. dr. Vytautas Dubra, Pavel Fiodorov
Navigation Department, Lithuanian Maritime Academy, Klaipėda, Lithuania,
e-mail: v.dubra@lajm.lt

It is important that students ship handling practice starts on the navigational simulators that enable to re-create the handling of ships in different situations while applying all the necessary procedures and using appropriate equipment because of the recent enormous technological progress. Marine navigation program students do have the opportunity to perform various simulated tasks, participate in different situations, communicate and ensure safe navigation from point A to point B in the modern twelve bridge common network class training simulator while studying on the fourth, third and even lower courses. Students are taught by highly experienced instructors they do perceive the information in different ways. Besides this there are no precise and defined methods for learning, what to begin with and whether the actions performed are useful and are not subjective instructions from one or more lecturers, provided. Therefore, the aim of our research is to find out the minds and impressions of students on the effectiveness of the navigational simulator, its pros and cons, the sufficiency of provided for learning time and so on.

The methodology of present research is the assessment and interpretation of the various course students' presumptions on certain suggested topics. For this purpose, in order to find out the students' opinions on the use of a navigational simulator, a total of fifteen different questions covering various aspects of the use of the navigational simulator were raised and formed the basis of the questionnaire.

Most of the respondents were suggested to fill the anonymous questionnaire and for some others there was provided a possibility to fill up created with the help of "Google Forms" online questionnaire, due to the fact that some students and graduates were at sea at the moment of the responses' collection. In general, 124 respondents were interviewed within the period of 1 month. This amount included 30 2nd course students, 30 3rd course students that had already had their first sea practice, and it is worth mentioning that they presented the largest group of the respondents due to the fact they were completing some courses programs. Also 24 students of the 4th course that are graduating from the LMA this year were interviewed, and the last part of the respondents' amount was formed by 40 LMA graduates of recent years that successfully work in different shipping companies as the watchkeeping officers. I

References

1. Baldauf, M., Schröder-Hinrichs, J.U., Benedict, K., Tuschling, G. (2014). Simulation-based team training for maritime safety and security. *Journal of Maritime Research*, 9 (3): 3–10.
2. Benedict, K., Kirchhoff, M., Gluch, M., Fischer, S., Baldauf, M. (2009). Manoeuvring simulation on the bridge for predicting motion of real ships and as training tool in ship handling simulators. *International Journal on Marine Navigation and Safety of Sea Transportation*, 3 (1): 25–30.
3. Sellberg, Ch. (2017). Simulators in bridge operations training and assessment: a systematic review and qualitative synthesis. *WMU Journal of Maritime Affairs*, 16 (2): 247–263.

TECHNOLOGY OF IMPLEMENTATION OF CROSS-CURRICULUM BONDS BETWEEN PHYSICS AND THE DISCIPLINES OF GENERAL TECHNICAL AND PROFESSIONAL CYCLES IN MARITIME COLLEGES

Master of Pedagogics, Associate professor Kolechintseva T.S.
Kherson Maritime Academy, Kherson, Ukraine, e-mail: aspirantfiz1978@ukr.net

Implementation of cross-curriculum bonds (CCB) is relevant for raising the quality of training and realization of a competence-based approach. That is why a goal of our article is the disclosure of potentiality of CCB of physics classes of future navigators as a factor of development of students' professional competency. Achievement of the mentioned goal implies a solution of the following tasks: determination of the concept of cross-curriculum bonds, their varieties, and classification; analysis of the probability of implementation of CCB between physics and general technical and professional disciplines; determination of means of CCB implementation.

Cross-curriculum bonds are relations between two or several curriculums that imply mutual usage and enrichment of common knowledge, practical skills, methods, approaches, forms, and means of education. Specialists classify CCB according to their structure, contents, directions of operation, time factors, and terms of activity.

In the course of studying the means of CCB implementation, the necessity of three-step technology was discovered. It includes a stage of adaptation (familiarization with materials of professional orientation on a level of life experience), a cognitive and practical stage (accumulation of knowledge and skills needed to solve a work-related task), and a phase of work-related application (attraction of students into solution of work-related tasks during physics classes).

Being consistent with this approach of CCB implementation, we have picked specialty-oriented matter, physical tasks similar to those suggested by the disciplines of general technical and professional cycles, and work-related tasks.

This way of the realization of cross-curriculum bonds lets tutors reveal practical importance of physics.

References

1. Berezyuk, O., Kara V., Savchenko V. (2010). Developmental Aspect of Formation of Professional Competency of Future Navigators. *Vishya Shkola*, 1, p. 53-59.
2. Steshenko, V. (1995). *Theoretical basis of realization of cross-curriculum bonds in an educational process*. Sloviansk: Sloviansk National Pedagogical Institution.

SPEECH TOLERANCE AS AN IMPORTANT FACTOR OF EFFICIENT WORK ONBOARD A SHIP

Ph. D. in Philological Sciences, associate professor of the Department of Humanities,
Olena Kolmykova
Department of Humanities, Danube Institute NU "OMA", Ismail, Ukraine,
e-mail: happysteinsteinbock999@gmail.com

The effectiveness of the work being performed onboard a ship depends on many factors and speech tolerance is one of them. The problem of speech tolerance is in the field of scientific interest of such researchers as A. Vasiliev, E. Morozov, A. Pogodina, Г. Pokhodzei, A. Skovorodnikov, etc. Though speech tolerance in multicultural international crews is of primary concern in work organization of the personnel onboard, it is one of the most neglected issues in researching the phenomenon of maritime crews.

Analysis of the accidents at sea makes it possible to come to conclusion that the so-called human factor resulted in majority of them. This is why it is so important to provide the merchant fleet with the seafarers who know English well enough not only to perform their professional duties. The crew members must also be able to gain mutual understanding.

There are different ways of achieving speech tolerance. Apart from teaching English in maritime academies, it is important to instill in cadets respect for other cultures and religions. To achieve this goal it is reasonable to work out different educational programs aiming at getting acquainted with different cultures. It could be helpful to carry out role-playing games, "indulging" the participants into the most typical situations that can happen onboard a ship. As a basis there can be taken dialogues and polylogues, with participation of representatives of different nationalities as interlocutors.

Besides, it will be important to familiarize with pantomimic speech used in various countries, as one and the same gesture can have different meanings in different cultures.

To sum up, it is necessary to point out that the ensurance of speech tolerance in international crews is an important factor which can help to reach the crew integration regardless of national or religious difference.

References

1. Бородин, Н.В. (2010). Морской английский язык в обеспечении безопасности мореплавания. <http://cyberleninka.ru/article/n/morskoy-angliyskiy-yazyk-v-obespechenii-bezopasnosti-moreplavaniya>
2. Васильев, А.Д. (2004). Об относительных преимуществах толерантности. *Актуальные проблемы изучения языка и литературы: толерантность и интеграция*. Абакан.
3. Морозов, Е.А. (2012). К вопросу о статусе речевой толерантности в спорте. *В мире науки и искусства: вопросы филологии, искусствоведения и культурологии*: сб. ст. по матер. XI междунар. науч.-практ. конф. Часть I. Новосибирск: СибАК,
4. Погодина, А. А. *Толерантность: термин, позиция, смысл, программа*. <http://his.1september.ru/2002/11/2.htm>
5. Походзей, Г. В. (2013) Развитие иноязычной межкультурной компетенции курсантов речного училища в центре языкового обучения/ дисс. кандидата педагогических наук : 13.00.02]. <http://www.dslib.net/teoriavospitania/razvitie-inojazychnoj-mezhkulturnoj-kompetencii-kursantov-rechnogo-uchiliwa-v-centre.html>
6. Сковородников, А.П. (2000). К становлению системы лингвоэкологической терминологии. *Речевое общение: специализированный вестник*, 3(11), с. 70-78.
7. Шарифуллин, Б.Я. (1952). Толерантность и объективность. *Речевое общение: специализированный вестник*, 8-9 (16-17), с. 118-121.

DEVELOPMENT OF VOLITIONAL BEHAVIOR OF FUTURE OFFICERS OF SEA AND RIVER TRANSPORT

Ph.d., associate professor Kotliar L.I.
*Department of Humanities of the Danube Institute National University
"Odessa Maritime Academy"*

Personality satisfies its social needs in a particular group. Personality in the group performs one of four roles: a) conformist; b) deviant; c) controller; d) leader (official or unofficial).

The overwhelming majority of group members strive to follow the role of conformist - 77 - 80%. The role of the deviant is determined by the need of the individual to stand out, the need to become an informal leader, to participate in an informal group - up to 20%. The role of the controller is assumed by those who are strongly motivated to support the formal leader - 1 - 3%.

The questioning on leadership in the formal student group, shows a psychological situation, in general, does not allow for the presentation of the volitional qualities of the individual and which hinders the implementation of the volitional act by the members of the group.

The decision-making process is affected only by the group leader - 65-75%.

The leader focuses on: fixing and achieving goals - 91%; preservation of the group and its attractiveness - 31%; in two plans simultaneously - 22%.

Practically the leader performs the role of leader when: a) makes decisions; b) supervises that decisions are made c) exercises pressure (prestige and sanctions) d) personally controls.

The above psychological atmosphere allows each member of the group to self-realization.

MODERN TRENDS IN ORGANIZATION OF SAFE CONTAINERIZED CARGO TRANSPORTATION

V. V. Kramarenko, A. V. Fedorenko

*Danube Institute National University "Odessa Maritime Academy", Ismail, Ukraine,
e-mail: vika88kramarenko@gmail.com*

Maintaining appropriate stability under various loading conditions remain to be a crucial objective for safety navigation in the course of container ships' operation. Breach of a container ship stability is normally caused by complex effect of multiple various factors, such as squally winds, irregular waves, hydrodynamic effects of free surface of liquids kept inside of certain spaces on board, deck cargo vibrations and oscillations, and, finally, complicated ship's dynamical reactions in cases of cargo shifting.

Annual increase of containerized goods transportation nowadays is about 10-15%. Such transportation has a number of advantages: containers are simple and hermetic by their construction; they provide easy transshipment in multimodal transportation; transportation control and documents' processing are easily computerized. Marine transport is much cheaper than any other means of transport and container service enables to save money even more due to prompt cargo handling technique and great container carrying capacity of modern specialized ships (up to 18000 TEU). Multimodal containerized cargo transportation enable to reduce a number of border-crossing procedures, i.e. simplifies forwarding operations and documentation processing.

Despite the fact that accidents caused by ship's loss of stability contributes only to 1% of total marine accidents quantity, they are the most hazardous type of an accident since are accompanied with twice more loss of life number than in case of hull and/or machinery damage. In general, this kind of accidents contributes up to 70% of all victims of marine accidents. Accidents involving ship's stability loss are classified into three categories: sudden capsizing (1), gradual heeling (2) and sinking with list (3). About 50% accidents involving stability loss occur suddenly; 31% as a result of gradual heeling, 19% is caused by sinking with list. Complete crew rescue succeeded in only 29% cases of ship's capsizing. 23% of such cases are accompanied with total loss of human lives.

Ship's equipment with automatic control systems demand seafarers' prompt reaction in complicated navigational situations and capability to control multiple variable parameters of environment and to take a prompt decision in situation of lack of time and incomplete data. Though automatic seaworthiness control systems provide a certain support in ship handling under severe sea state, emergency situations may be such that the crew may fail to handle the ship safely and to succeed in keeping the ship's survivability.

Research results showed that increased demands to reliability and promptness of marine cargo transportations, container service in particular, impose the problem of further actions to improve safety navigation. Monitoring systems' implementation enables to handle this problem at a new quality level and to prevent accidents involving hazard to human life, cargo and environment.

References

1. Транспорт России. Информационно-справочный портал. [Электронный ресурс]. Access mode: <http://www.transportall.ru/article/sea/fesco.html>
2. Семенов, Ю.Н., Портной, А.С. (1999). *Аварийность и оценка риска в морском страховании*. С-Пб.: Изд. центр СПбГМТУ.
3. Российская группа компаний Транзас. Access mode: <http://www.transas.ru/products/shorebased/fleet/navi-manager/>

SHIP SAFE SAILING IN CONGESTED AREAS

V. V. Kramarenko

Danube Institute National University "Odessa Maritime Academy", Ismail, Ukraine

e-mail: vika88kramarenko@gmail.com

Safe navigation within established routes in congested areas, channels and canals with restricted navigable areas is closely associated with taking into account ships' dimensions, their maneuvering characteristics and hydrodynamic forces generating sucking effects. Therefore dimensions of congested areas should be thoroughly taken into account prior taking an attempt to sail through them. Research showed, that navigable lanes, through which shipping routes run should be plotted so as to avoid deviation from traditional optimum tracks, where ships used to proceed prior regulations have been imposed. The more substantial are such deviations, the higher is the chance for some ships to steer courses not matching an axis of a particular lane.

A ship sailing in congested areas is restricted in her capability to maneuver due to proximity of coastline and banks and other navigational dangers, insufficient depth and intense shipping. Keeping a ship steady within planned programmed track plays a key part in providing safe navigation. Safe navigation within straight lane may be achieved by means of high-precision observations showing to the seafarer that his ship deviated from pre-plotted course and enabling to compensate effects of unfavorable factors. Calculations and planning of turns are the most important elements of preliminary plotting and passage planning in congested waters. As a rule, ship's motion taking a turn within navigable lanes differs in shape from radial arc. The latter is a particular turn shape, which occurs very seldom. Thus, ship's track within curved lane is a random element depending on turning technique and determining parameter. Ship's track as she changes her course may vary in shape depending on criteria applied to optimize maneuver, such as time, when the turn should be performed for a certain duration; angle of rudder placement, if it should be transferred to a certain position; ship's inertia, when it should be kept within a certain limits, etc.

Accidents occurring during sailing in congested waters are caused mainly by lack of time available for a seafarer to estimate the situation and to take a decision. Stress reduction of seafarers' work is achieved nowadays by means of automatic navigation systems transferring seafarers' activities mainly to control and, only under certain circumstances, direct handling. Two types of automatized maneuvering are applicable with modern shipboard autopilots, with pre-entered angular speed (1) and pre-entered turning radius (2). The latter is normally brought to turning at a pre-entered angular speed defined on the basis of turning radius and ship's speed taken as a constant value.

Thus, the available to date automatic aids of maneuvering don't guarantee keeping a ship at an expected track. Safe sailing still lies on the seafarer's shoulders who controls the turning basing on personal experience, which does not always enable to identify and to avoid development of hazardous situation in due time.

References

1. Вагущенко, Л.Л. (2008). *Системы автоматического управления движением судна*.
3. Таратынов В. П. (1980). *Судовождение в стесненных районах*.

THE PROBLEM OF “PROFESSIONAL BURNOUT” IN LONG-DISTANCE SEAFARERS

Doctor of science, professor Alona Leshchenko

Department of Humanities, Kherson state Maritime Academy, Kherson, Ukraine

e-mail: alena020114@ukr.net

The safety of modern navigation is the primary concern of all international Maritime institutions. The specificity of the conditions of long-term and round-the-clock stay of personnel on Board the ship reduces the level of reliability of professional response for the occurrence of professional burnout.

“Professional burnout” is actively studied by modern science, but the problem of „professional burnout“ of a seafarer is insufficiently studied (Maslach, 1981; Sukhanova, 2006).

So “professional burnout” is a process of gradual loss of emotional, mental and physical energy, which leads to a decrease in the quality of work (Maslach, 1981). It has three stages: emotional exhaustion; depersonalization (indifferent attitude to acting stimuli); reduction of professional achievements (feeling of incompetence).

The work of marine specialists is characterized by a significant number of psychotraumatic stimuli, which affect a long period and around the clock and it reduces the reliability of professional activities, which is proved experimentally

Two groups were created: experimental and control (20 people with work experience of more than 5 years). Signs of professional burnout were found in all subjects. For participants it was characteristic: dissatisfaction with themselves in professional activities and communication with colleagues; significant emotional isolation; indifference; increased level of anxiety etc. In both groups, 45% and 45% respectively are at risk of emotional exhaustion. The “depersonalization” stage is typical for 25% of the experimental group and 35% of the control group. “Reduction of personal achievements” is typical for 30% of sailors of the experimental group and 20% of the control group.

To overcome the problem, a program of psychological training was developed to prevent professional burnout. The program contains two blocks: theoretical and practical. In the theoretical block, the participants of the experimental group studied the essence of the problem of professional burnout, its negative value etc. The practical block was aimed at mastering the methods of conscious psychological self-confidence (auto-training, psychological switching).

After the training, with the help of a control survey, positive dynamics of minimizing the signs of “professional burnout” was revealed. Therefore, the proposed program is effective and allows you to overcome the signs of professional burnout.

References

1. Maslach, C., Jackson, S. (1981) The measurement of experienced burnout. *Journal of Occupational Behavior*, 2, p. 99–113.
2. Sukhanova N., Kazakevich E. (2006). Psychotherapy of emotional stress consequences in seafarers. *Questions of psychology*. 6, p. 155–159.

COMMUNICATIVE METHOD OF MARITIME ENGINEERING ENGLISH COMPETENCY-BASED TEACHING

Ph.D., Associate Professor Litikova Olexandra
*Head of the Department of English Language for Marine Engineers,
Kherson State Maritime Academy, Kherson, Ukraine*

Not always getting of educational certificates by maritime institutions graduates – future seafarers – guarantee availability of correspondent to their occupation professional skills. These skills are of utmost importance to ensure safe running of the ship equipment and survival at sea. Lack of critical competencies leads to unintentional carelessness and even criminal negligence on the working place and the consequences may range from ridiculous to striking.

Therefore competency-based learning is so significant, as a process of learning, developing and forming of concrete skills unlike to abstract learning. It's characterized with its extremely fine grained nature.

Attentive viewing of STCW Code (1995) and STCW Manila amendments (2010) reveals graduated manner of Maritime Engineers competency-based training. First of all, professional training of marine engineering personnel is accomplished on three levels: the 1st is the support level (ratings, wipers, oilers, fitters, the 2nd and 1st class motormen, forming part of engineering watch); the 2nd operational level (officers in charge of an engineering watch in a manned or periodically unmanned engine room) and the 3rd management level (chief engineers and 2nd engineers on ships with main propulsion machinery of 3000kw propulsion power or more). Gaining of each professional level is ensured by learners in course of gradual mastering of certain number of competences: 13 – on the support level; 17 – on the operational level; 14 – on the management level. Besides, mastering of each competence must be confirmed by the availability of formed learning outcome in form of correspondent individual skills. Further this student may be permitted to proceed with higher learning and still be missing some skills that are crucial to that higher level.

Up to STCW in process of Maritime Engineering English learning succession of competences on the highest management level shows that mastery of the last competence – use of leadership and managerial skills – becomes possible as the result of gaining of communicative competences sufficient for doing the following actions: 1/ managing the operation of propulsion plant machinery; 2/ operations of planning and scheduling; 3/ assessment and maintaining safety of propulsion plant and auxiliary machinery; 4/ managing fuel lubrication and ballast operations; 5/ managing operation and troubleshooting of electrical and electronic control equipment; 6/ managing safe and effective maintenance and repair procedures; 7/ detection and identification the causes of machinery malfunctions and faults correction; 8/ management of measures to ensure safety of life at sea, security, marine environment protection; 9/ maintaining life-saving, fire-fighting and other safety systems. And certainly this last competence of “leadership and managerial skills” has its own learning outcome in the form of individual communicative skills set, among which are the following: 1) planning and coordination; 2) personal assignment; 3) time and resource management; 4) prioritization; 5) effective communication; 6) situation and risk assessment; 7) assertiveness and leadership; 8) ability to select course of actions (The Manila Amendments..., 2010).

Accordingly to STCW Code all skills of marine engineers independently on their rank must be accomplished by means of the working language of mixed crews – English language. The IMO acknowledged communicative method the only suitable for a competency-based teaching of English language in 2000 already. In that year there was published and launched into learning the International Model Course 3.17 for seafarers which is based on principals of communicative method.

There are some explanations why this very method was acknowledged as well for Maritime Engineering English language learning.

There is a common for some practicing teachers (S.Tomniac (2011), P. Trenkner (2010), A.Gabrielli (2012) consideration that “Engineering Maritime English is a symbiosis between language, communication and alligator spanner wrench” (Cole, Trenkner, 2010; Gabrielli et al, 2012). This subject demands from learner accumulation and elaboration a plenty of linguistic, communication and technical knowledge.

On a certain stage it becomes impossible to accumulate details without their rearrangement; a learner will be unable to move further if does not deny the previous knowledge model in favor of its new structure and content. If we introduce new pieces of learning information as different shapes we will understand that only their displacement makes process of information accumulation progressive and able to develop.

If we use traditional learning with just thoughtless plain reading of professionally oriented texts and doing homogeneous exercises for linguistic competence formation, this method activates mostly the left half of learners’ brain, which is logical, verbal, linear, vertically analyzing, non-emotional and is occupied with details, and is responsible for knowledge deepening, without putting these details into order. But if we use communicative method with its motley interactive teaching techniques, the right side of the learners’ brain considerably activates during horizontal processing of information and putting all accumulated details in emotionally-spatial order with further synthesizing them in one big picture. Using interaction as both the means and the goal of study, this method is focused on communicative competence with learning outcome in form of individual communicative skills.

Thus we see that communicative method is greatly contributing to maintain self-extending system of Maritime Engineering English learners’ linguistic and technical knowledge, puts the most number of learning information details into spatial order, facilitates development of communicative skills of learners and graduated formation of Maritime Engineering professional competences.

References

1. Cole, C., Trenkner, P. (2010). Raising the Maritime English Bar: the STCW Manila Amendments and their impact on maritime English. *Proceedings Maritime English Conference IMEC 22*, Alexandria Arab Academy for Science, Technology and Maritime Transport. p. 3–16.
2. Gabrielli A., Gabrielli C., Pahlm H. (2012). Engineering Maritime English: a symbiosis between language, communication and an alligator spanner wrench. *International Maritime English Conference IMEC 24*, Yangon, Myanmar. p. 41–52.
3. *The Manila Amendments to the Seafarers’ Training, Certification and Watchkeeping (STCW) Code*. STCW/CONF. 2/34. - 3 August 2010. p. 104–107.

THE COMPETENCIES REQUIRED BY PORT ECONOMISTS, STEVEDORES, TECHNOLOGISTS: A PILOT STUDY

MSc.Vilma Locaitienė,

*Port Economics and Management department, Lithuanian Maritime Academy, Klaipėda, Lithuania,
e-mail: v.locaitiene@lajm.lt*

assoc. prof. dr. Saulius Lileikis

*Port Economics and Management department, Lithuanian Maritime Academy, Klaipėda, Lithuania,
e-mail: s.lileikis@lajm.lt*

Port companies require employees characterized by specific professional competencies and at the same time – by general, i.e. social and personal ones. The European higher education system in terms of the Bologna Process should provide opportunities for students to develop their professional competencies needed. Students of modern port curriculum attend maritime academies. The scientific content of a competency usually includes knowledge, abilities, skills and attitudes in relation to the documents of the Bologna Process and national legislation. Specific investigations of the competencies, required by port personnel, have emerged over the past two decades. The purpose of the research is to characterize the need for the competencies required by port economists, technologists and stevedores by assessing both – the need for professional competencies required by port terminal employees, and the importance of personal and social competencies required by port terminal employees. This is a pilot study. It allows to prepare for the future complex diagnostic study of the competencies required by Klaipėda State Seaport employees. Methods such as scientific literature analysis, questionnaire survey of port experts, statistical analysis, data interpretation, comparative analysis and synthesis were used in the research.

The methodological principle, on which the research is based, is a comprehensive development. It highlights the importance of the universal personal development in relation to the physiological, psychological and spiritual needs of the personality in terms of his/her vocational education from the point of view of the port work reality, i.e. economic, managerial and technological functions, psychological self-management, communication and cooperation, leadership and self-leadership. The questionnaire was prepared according to the scientific literature, to the competencies developed in study programs such as Maritime transport logistics technology, Port and shipping management, Port and shipping finance at Lithuanian Maritime Academy, and to the port scientific, academic and practical experience of the coauthors of this article.

Narrowly thinking specialists, characterized by limited competency, do not fit the needs of the modern port. Professional competencies of the terminal staff should include general knowledge of business, management and logistics, as well as specific knowledge of the port, shipping and port finance, and attitudes and abilities. Rapid technological and social change requires a specialist, who can react to the demand for skills rapidly, think analytically and be creative. This is determined by his/her personal characteristics, skills and social competencies.

References

1. Murphy, P.R., Poist, R.F. (2006). Skill Requirements of Contemporary Senior- and Entry-level Logistics Managers: A Comparative Analysis. *Transportation Journal*, 45 (3); 46–60.
2. Ngamvichaikit, A. (2017). The Competency Development of Multimodal Transportation Management for Logistics Professional in Thailand. *International Journal of Trade, Economics and Finance*, 8 (1): 62–62.
3. Nicolae, F. *et al* (2017). The relations between the port business framework and the qualified manpower competencies. "Mircea cel Batran" Naval Academy Scientific Bulletin, 20: 86–88.

PROBLEMS OF THE UKRAINIAN EDUCATION ON THE WAY OF INTEGRATION INTO THE EUROPEAN EDUCATIONAL SYSTEM

Associate Professor Ph.D. Iryna Panchenko
the Department of Economics and Maritime Law, *Kherson State Maritime Academy, Kherson,
Ukraine, e-mail: im.pan4enko@gmail.com*

These days the Ukrainian universities pass a phase of reforming of the higher education system. It is connected with accession of our country to the Bologna Process and formation of integrated European educational system.

From the moment of accession of Ukraine to Bologna Process it was done a lot of work that brought closer our education system to the European. Nevertheless on the way to educational European integration there is a number of the problems which require the solution. Let's distinguish some of them.

Lack of appropriate financing of reforms in the field of education. The law "About Education" fixes expenses of the education sector of not less than 7% of GDP, however in practice the government has never even reached this level yet over the last years. Against the background of insufficient financing of education Ukraine tries to undertake reforms on necessary additional resources. Experts note that on financing of the Bologna reforms by member countries of Bologna Process went out about 60% of the budget of the national Ministries of Education and separate higher educational establishments in the transition period (Димань, 2017). In Ukraine the target financing of the Bologna reforms it was not carried out at all.

Discrepancy of competences (qualification) which university graduates of Ukraine must have to real requirements of society and business. This problem could be helped by a system which is used in higher educational establishments of Switzerland where after the theoretical preparation in a subject the practical application of the gained knowledge on production follows at once.

The academic mobility of students and teachers in the Ukrainian realities is re declarative point, than a real opportunity to get an education or to increase the scientific level abroad. Internationalization of the higher education demands financial injections and as the state does not provide them, so this financial burden is shifted to shoulders of the person which wishes to go to training.

Lack of the smoothly running scheme of partner communications between business and higher educational establishments. Prospective students choose specialty in parameters which have nothing in common with its demand in labor market. This problem could be solved due to stimulation of the companies by the state (for example, at the expense of tax benefits) to cooperation with the universities in the priority industries and also joint development and deployment of the educational programs meeting requirements of national economy.

Evidently, there are many unresolved problems on the way of integration of the Ukrainian education to the European educational system. Ukraine should study the international experience of management and financing of the higher education, gradually and deliberately introducing new conceptual models of the state educational policy.

References

1. Димань, Т. М., Боньковський, О. А., Вовкогон, А. Г. (2017). *Європейський простір вищої освіти та Болонський процес*. Одеса: НУ «ОМА». С. 94.

SITUATIONAL AWARENESS IN THE BRIDGE TEAM MANAGEMENT

Senior Lecturer Anatoliy Slyusarenko, Senior Lecturer Olena Soroka
*Department of Navigation, Danube Institute of the National University "Odessa Maritime
Academy", Izmail, Ukraine, e-mail: slanativ@yahoo.com, elkazej@rambler.ru*

To get acquainted with the information on the future voyage task, understand its meaning, and use it in a safe passage of a vessel, one has to obtain it from different sources. We call the received information, brought to all and having made crew members ready to fulfill their direct responsibilities following the route of passage, SA (situational awareness).

There are many different definitions of SA, but what is really important for crew members is the perception of the environment inside and around the vessel, the ability to foresee the further execution of tasks along the vessel passage route.

There are several types of human perception of the environment: visual, auditory, kinesthetic perception, perception of the position of body parts in space, and tactile perception.

Depending on the individual characteristics of a person, the leading types of perception can be analytical, synthetic, subjective, objective, descriptive, explanatory, and substantive.

The classification is conditional, and in reality, there are different combinations of these types of perception. All the reality as it is perceived by us is divided into two unequal parts: that which is in the foreground and has clear contours, the background, and that which is in the background: the contours are fuzzy and blurred.

The ability to support SA is the ability of all officers onboard to perfectly, accurately, and comprehensively assess this integrated sensor database.

Most individuals who have deeper range of knowledge and professional experience in perceiving and solving accompanying problems are most likely to be better integrated into this database. But when the information is inadequate, too extensive, incorrect, SA can be lost partially or completely.

The SA may include an interpretation of a sequence to solve an existing problem as soon as possible, which requires an appropriate decision or action. A crew must take into account and assess the high priority. The success of such actions depends on the knowledge obtained and professional experience gained.

References

1. *Bridge Procedures Guide*. London: Marisec Publications.
2. Swift, A. J. *Bridge team management. A Practical Guide*. FNI.

COHESIVENESS AS AN EXTENT OF A VALUE-ORIENTATIONAL UNITY OF A CREW IN SHIP MANAGEMENT

Senior Lecturer Olena Soroka

Department of Navigation, Danube Institute of the National University "Odessa Maritime Academy", Izmail, Ukraine, e-mail: elkazej@rambler.ru

A clear and effective functioning of any bridge crew is based on the principles of good communication and human management. One of the main requirements for the management of a ship is the moral and psychological state of the team, which characterizes the degree of psychological readiness of people to solve certain tasks, carry out appropriate actions in the team, has its own psychological structure, the main components of which are emotional and volitional states characterized by specific meaning (professional, moral, political, aesthetic, religious, etc.), orientation, level of functioning (from apathy to enthusiasm), the degree of community for the given staff, durability, and reliability.

The cohesiveness of a team depends on the climate in the crew. One of the important integral characteristics of a group, collective psyche is cohesiveness as one or another extent of value-orientational unity of the team.

Cohesiveness has two mutually related aspects distinguished: theoretical and substantively practical. Cohesiveness acts as the result of the manifestation and mutual influence of intragroup integration processes and is characterized by the degree of solidarity of purpose and motives of life and activity of the group. A highly-cohesive crew shows its highest ability.

A team's cohesiveness is facilitated by favorable external, objective circumstances and internal ones. The main directions of work on the unity of the team's cohesiveness and creation of a favorable moral and psychological atmosphere are:

1. Correct solution of organizational issues.
2. Proper organization of activity and its provision with means, materials, etc.
3. Purposeful conduct of educational work in the team on building moral and psychological health, professionalism, openness, etc. among crew members.
4. Enhancing the authority of the manager and the body of active functionaries, their following of an adequate style of interaction with employees, a psychologically sound incentive of the staff, valuation and final activities in the team.
5. Avoiding, overcoming, and prevention of negative social and psychological phenomena that interfere with team cohesiveness, of individualistic, egocentric self-affirmation of employee(s), negative leadership, which leads to the formation of negative, spontaneously formed microgroups, discontent, fears, rumors, and conflicts.

References

1. Kryvoruchko, P. P. (2002), *Psychological support for professional activities of shipboard professionals in long-distance voyages*. Cand. Sci. (Psych.) dissertation, 20.02.02, Kyiv Military Humanitarian Institute, Kyiv, Ukraine.
2. Krachkovska, K. S. *Psychological peculiarities of ship crew cohesiveness*. Available at: http://www.er.nau.edu.ua/bitstream/NAU/13108/1/page_038.pdf

ECDIS AND THE FUTURE OF ELECTRONIC NAVIGATION

Senior Lecturer, Olena Soroka, student, Ivan Smokin

Department of Navigation, Danube Institute of the National University "Odessa Maritime Academy", Izmail, Ukraine, e-mail: elkazej@rambler.ru, edelweiss464@gmail.com

Electronic navigation systems, which have recently been used as an aid, are gradually becoming an indispensable element of vessel fitting-out, crowding out the usual paper maps. The relevance of this topic is in electronic cartographic systems having become an integral part of shipping today; convenience and high functionality are the basis for their active development and implementation on ships. The main advantage of the systems is the significant reduction of the accident rate and increase in the efficiency of passages due to the significant automation of the navigation process. The most advanced electronic navigation tool is the ECDIS (Electronic Chart Display and Information System), which automates the navigation process, providing the navigation officer with all the necessary information through its sensors, displayed on the electronic map. Due to the fact that all data are combined on the display, the possibilities to evaluate the navigation circumstances, as well as to take a responsible decision, increase. The system allows plotting a route and controlling deviations from it, calculating safe courses, providing control of the autopilot, keeping a logbook, and much more.

The introduction of ECDIS simulators in all maritime educational institutions to obtain professional skills and knowledge is mandatory. Today, a universal model of hydrographic S-100 data is being created, which will be an addition to the navigation maps, displaying additional data: weather, tides and ebbs. Users of cartographical systems need such functionality badly today. The International Maritime Organization (IMO) is developing and introducing the concept of e-Navigation, which involves improving the safety of navigation throughout the world through the active use of modern technologies, increasing the information support of ships and shore services, and improving the exchange of navigation data between them.

References

1. Control Engineering Russia (2014). Available at: <https://controlengrussia.com/otraslevye-resheniya/e-lektronika-obespechit-bezopasnost-sudohodstva-2/>
2. IMO Resolution MSC.232(82) of December 5, 2006.

DEVELOPMENT OF INTERNATIONAL COOPERATION IN THE FIELD OF MARITIME EDUCATION

Candidate of Economic Sciences, Associate Professor Tetiana Stovba

*Department of Economics and Maritime Law, Kherson State Maritime Academy, Kherson, Ukraine,
e-mail: stovba_t@rambler.ru*

The XXI century will be characterized by the following trends:

- globalization of markets and hypercompetition will require a high rated professional response to the challenges;
- rapid and intensive development of information, and communication technologies and nanotechnologies will be of "subsectoral nature", promoting the cardinal change in the character of competition, and will allow to "jump" over a decade of economic and technological evolution (Korea, China, India, etc.).
- enterprises and corporations will require the labor market to provide them with new specialists. This means that those institutions that generate new knowledge and possess modern innovative technologies will get the advantage. These HEIs should be competent to train the required professionals, etc.

The analysis of development strategies of HEIs in Europe, USA, Japan, Korea and China shows that the main strategic areas that ensure their competitiveness, are: the establishment of clusters; constant generation of new knowledge; development of various forms of postgraduate education – lifelong education, distance education, etc.

Therefore "dissolution of boundaries", the appearance and development of "Coopetition" – a combination of cooperation and competition, will require activation and diversification of the activity based on outsourcing, outtasking, outstaffing, as well as on the effective cooperation of companies and institutions, which helps to overcome the existing problems in higher education and to improve its quality, because the acquisition of essential competencies form the ability of the individual to react quickly to changes in the environment, and to adapt to them in time, as well as allows to ensure competitiveness of the professional in the labor market and in society (Аутсорсинг, 2019).

References

1. *Аутсорсинг, аутстаффинг, инсорсинг, ауттаскинг, аутплейсмент*. Retrieved on January 13, 2019 from http://www.rusconsult.ru/common/stati-nashih-ekspertov/stati-nashih-ekspertov_39.html.

IMPLEMENTATION OF THE SCOPE OF ENERGY EFFICIENCY INTO TRAINING PROGRAMS FOR BACHELOR'S LEVEL SEAFARERS

Ph. doctor of engineering sciences, Tetyana Tarasenko,

Doctoral student Vitalii Zalogh

Doctoral student Sergiy Maksymov

Graduate student of Izmail State University of Humanities Olga Dimoglova

Department of Engineering Sciences, Danube institute of National university

“Odessa maritime academy”, Izmail, Ukraine, e-mail: zalogh@ukr.net

The introduction of the Conventional requirements for managing the energy efficiency of ships in international maritime shipping determines the need for fleet specialists to have knowledge of the fundamental principles enshrined in their energy efficiency management plans, as well as skills for implementing measures to improve energy efficiency.

Improved training of marine bachelors with respect to the formation of professional competencies, understanding the importance and involvement in the management of energy efficiency in the operation of vessels.

Formation of systematized knowledge and practical experience in planning and implementing measures to achieve maximum indicators of the ship's energy efficiency under operating conditions.

The use of disciplinary and interdisciplinary methods in the formation of topics of theoretical lecture courses and practical tasks on energy efficiency management in the study of specialized disciplines by cadets and students of various specializations.

Due to the fact that the conventional requirements for managing the energy efficiency of ships under current conditions have already been introduced, maritime specialists who fall into their professional sphere without systematized knowledge of all the aspects of energy efficiency increase a risk group of lack of awareness of importance to relevant activities. Furthermore, for instance, the navigator may underestimate the need for choosing a rational speed that is according to the criteria of energy efficiency.

In the meantime, was identified energy efficiency theme which isn't rather time-consuming in sufficient basic knowledge and studying profile disciplines, but will facilitate to a common understanding of the processes and the formation of professional competencies providing a successful career and further professional growth, on the one hand, and improving energy efficiency is directly linked to the environmental performance of the fleet on the other. Thus, improving energy efficiency is a proxy indicator of reducing harmful emissions into the atmosphere.

The studies in groups of navigators and 4th year marine engineers of the Danube Institute have shown that the required level of competence in the field of energy efficiency is achieved by systematizing theoretical and practical classes in specialized disciplines, as well as independent work with a total of 20 academic hours in the study of specialized disciplines plans, only by modification to the relevant work programs.

References

1. Horb, S.Y., (2015). Monitoryng enerhoeffektyvnosty sudov. *Avtomatyzatsiya sudovykh tekhnicheskikh sredstv*, 21, p. 48-53. Access mode: http://nbuv.gov.ua/UJRN/asts_2015_21_11
2. Suvorov, P.S., Tarasenko, T.V., Zalogh, V.I., (2018). Otsenka osnovnykh faktorov, opredeliayushchykh enerhoeffektyvnost sudov vnutrenneho plavanyia. *Avtomatyzatsiya sudovykh tekhnicheskikh sredstv*, 24, p. 94–102.
3. Mohit Sanguri, (2012). *The Guide to Slow Steaming On Ships*. Marine Insight.

THE NEED FOR MANAGEMENT OF MARITIME CADETS COMPETITIVENESS IN EDUCATIONAL REFORMING CONDITIONS

Candidate of Economic Sciences, Associate Professor Timchenko Nadezhda Nikolaevna,
Department of Economics and Law of the Sea of Kherson State Maritime Academy, Ukraine,
e-mail: aspirantya_hdma@ukr.net

assistant professor Kuzmenko Elena Yurievna
Department of Economics and Law of the Sea of Kherson State Maritime Academy, Ukraine,
e-mail: panasenkova.elen@gmail.com

In today's conditions of tension in the labor market, the growth of competition between higher education institutions, the issue of competitiveness and employment of high school students, and especially specialists in marine higher education, is of particular importance. World crewing companies require graduates of maritime specialties as professional knowledge, skills and abilities, including sailing practice for at least 12 months in the day department and 36 months in the correspondence department [1], as well as the corresponding high personal characteristics that form not only qualifications, but also the competence of a future specialist. In our opinion, this is initiative, willingness to make independent decisions, take responsibility, lack of barriers in communication, readiness for intensive work.

We believe that the competitiveness of cadets is a special type of economic thinking, aimed at ensuring constant self-development and mastering the relevant technologies and methods. The main qualities that a modern, competitive student or student must possess is the ability to study, moral qualities, organizational skills, political culture, personal organization, and work ability.

In our opinion, a competitive student or student will strive to maximize the resources offered by the external environment (parents, self-defense, croaking), forming and developing certain personal and professional qualities for successful employment.

It is a complex consideration of the aforementioned problem that allows to determine the main directions of increasing the efficiency of each participant in the system of training marine specialists. A higher education institution, when improving the quality of employment of students, receives "intangible assets", that is, the issuance of more literate, professionally trained specialists, enhances the reputation of the university, resulting in increased material assets. Employers receive economic benefits by increasing the professionalism of young people and saving money on their retraining. For students or students, the benefits are to increase their competitiveness in the labor market due to the acquisition of special technologies and the formation of their competitive thinking, which allows you to intensify the process of effective self-development.

References

1. The Order of the Ministry of Infrastructure of Ukraine No. 567 dated 07.08.2013 "On Approval of the Regulation on the Status of Seafarers' Officers and the Procedure for their Approval". *Official Bulletin of Ukraine*. No. 70. p. 115.

INTERPERSONAL COMMUNICATION SKILLS OF FUTURE MARINE OFFICERS

Doctor of Philosophy Oksana Tymofyeyeva

Department of the Humanities, Danube Institute of National University "Odessa Maritime Academy", Izmail, Ukraine, e-mail: tymofoksana@gmail.com

The human resources of the shipping industry are represented by multinational and multilingual crews. The ship for seafarers is the place of work and living for a certain period of time. Seafaring has a different pattern of work, as living and working conditions are combined with the ship being both a working and living environment, and the seafarer's employment record has a free-lancing character (Carter, 2005). The crewmembers communicate with each other when they work and when they have rest time. Two types of communication aboard the ship can be distinguished: working/operational or duty-on and social/interpersonal or duty-off. The requirements to seafarers' competency are stated by STCW as well as to the level of English as the working language. The seafarers' interpersonal communication during duty-off periods and the development of skills require additional consideration.

The skills of interpersonal communication should be developed during training period of the cadets as future marine officers at Maritime universities. It is mostly done at the English classes. As the future heads of the ship's departments the cadets should know what kinds of actions are best suited to a specific situation. They will acquire necessary skills as the ability to choose and follow the best through with a behavior according to the situation. They should be motivated as being driven to communicate in a manner best suited for the context (McConnell, 2018). The communicative language learning (CLL) as the main method of teaching Maritime English involves the use of activities that require interaction with others. The examples of such activities are role plays, interviews, information gap, pair work, group work, etc. In this way the interpersonal competence is developed as a part of the language learning process. It will give the cadets confidence to use their language skills outside the educational establishment. Thus they will become competent and effective communicators who are able and willing to interact with others in a positive manner.

References

1. Carter, T. (2005). Working at sea and psychosocial health problems: Report of an International Health Association Workshop. *Travel Medicine and Infectious Disease*. 3, p. 61-65.
2. *International Convention on Standards of Training, Certification and Watchkeeping for Seafarers*, 1978. <http://www.imo.org/en/OurWork/HumanElement/TrainingCertification/Pages/STCW-Convention.aspx>
3. McConnell, Charles R. (2008). Interpersonal Competence in the Management of People: *The Health Care Manager*, Volume 37, Issue 4, p. 358–367.

INTERACTIVE COMPONENT AS MEANS OF PROFESSIONAL COMMUNICATION OF FUTURE NAVIGATORS

Candidate of Pedagogical Sciences, Associate Professor Zheliaskov V. Ya.
Head of the Department of Humanities, Danube Institute of National University "Odessa Maritime Academy», Ismail, Ukraine, e-mail: zhelvas72@gmail.com

The professional activity of future navigators in most cases is related to the specific work conditions on the maritime transport with multicultural crews and it is difficult to cope with some issues without a constructive dialogue, based on the ability to perceive and understand other cultural opinions and values within the framework of intercultural communication.

This aspect of the professional activity of future navigators plays an important role in the areas of cooperation, trade, peacekeeping activities, when the parties enter into professional communication and interaction with carriers and the representatives of other ethnic, national and state groups, whose culture and means of communication may vary significantly. Therefore, an interactive component as a means of professional communicative interaction has an important influence upon the professional activity of future navigators.

Interactive component of professional communicative interaction of future navigators is a correlation of rational and emotional factors in professional communication, ability to manage the ship's crew, take an adequate role position, provide support, formulate requirements and constructively resolve conflicts (Smelikova, 2017, p. 266).

The interactive component of professional communication is the interaction of crew members which is associated with the organization of their common activities. N. Perevozniuk defines this phenomenon as "the process of combined individual efforts of the parties in which everyone's right for the continuity and originality of their own development is realized" (Perevozniuk, 2016, p. 23). It should be noted that clear and understandable foreign-language professional communication remains a very important necessity for crew members of large cruise liners and vessels, where it is necessary to interact effectively with passengers, many of whom speak different languages and who know little or do not have the slightest idea of how to observe safety rules on a vessel.

This emphasizes the obligation for crew members to have a high level of proficiency in English, in order to accept and give clear orders to maintain rules and cooperate with representatives of different nationalities. Thus, the interactive component as a means of professional communication of future navigators is of particular importance in special and non-standard situations of maritime activity.

References

1. Smelikova, V. B. (2017). *Preparation of future navigators for professionally oriented communication by means of case-technologies.*: Diss. Candidate of Pedagogical Sci. 13.00.04. Kherson, Kherson State University. 308 p.
2. Perevozniuk, N. M. (2016). *Formation of foreign-language business communication of future economists in the process of studying professionally-oriented disciplines.* Diss. Candidate of Pedagogical Sci. 13.00.04. Kherson, Kherson State University. 348 p.

Klaipėdos universiteto leidykla

INTERNATIONAL SCIENTIFIC-PRACTICAL CONFERENCE

HARMONISATION OF THE UKRAINIAN AND
EUROPEAN HIGHER EDUCATION SYSTEMS:
CHANGES AND CHALLENGES

Collection of conference thesis

Klaipėda, 2019

SL 1335. 2019 02 19. Apimtis 4 sąl. sp. l. Tiražas 90 egz.

Išleido ir spausdino Klaipėdos universiteto leidykla

Herkaus Manto g. 84, LT-92294 Klaipėda

Tel. (8 ~ 46) 398 891, el. paštas: leidykla@ku.lt

