UDC 376.112.4

### Frolova Olena, Voloshchuk Yana, Matiieva Kateryna

Kherson State Maritime Academy

#### SIMULATION AND ROLE-PLAY AS A LINK BETWEEN CLASSROOM AND SEAFARER'S LIFE

Summary. The article deals with the analysis of simulation and role-play activities as means of preparing future seafarers for professional communication on board ship, to assess their effectiveness and potential success. The necessity of application of the suggested activities into the academic process of higher maritime educational institutions has been grounded. The authors of the article discuss the advantages of simulation and role-play activities, study the communicative skills required by the IMO Model Course 3.17 in order to outline the choice of topics and activities for Maritime English lessons. The results of the analysis will be presented in this article. Besides, the recommendations of the further improvement of the Maritime English lessons will also be discussed. The establishment of a database of teaching and learning materials (simulations and role-plays) has been proposed by the authors. These materials may be used to raise the level of professional training of future seafarers in accordance with international standards, to familiarize the students with basic concepts of their future professional activity.

Keywords: simulation, role-play, multinational crew, real-life situations, communicative competence.

Фролова О.О., Волощук Я.Ю., Матієва К.В. Херсонська державна морська академія

# ІМІТАЦІЙНІ ТА РОЛЬОВІ ІГРИ ЯК ЛАНКА МІЖ НАВЧАЛЬНОЮ АУДИТОРІЄЮ ТА РЕАЛЬНИМ ЖИТТЯМ МОРЯКА

Анотація. Сьогодні підготовка майбутніх моряків до ефективної комунікації на борту є невід'ємною та обов'язковою умовою для майбутньої успішної кар'єри. Як наслідок, морські заклади освіти мають розробляти та застосовувати різноманітні навчально-методичні матеріали спрямовані на оволодіння навичками професійної комунікації, що сприятиме успішному функціонуванню цих фахівців у судновому екіпажі. Майбутні моряки повинні підтримувати зовнішній зв'язок між судном і берегом, судном та іншими суднами в звичайних і надзвичайних ситуаціях. Окрім цього, вони щоденно беруть участь у внутрішньо судновій комунікації з членами команди під час виконання різних видів робіт. Таким чином, існує нагальна потреба у якісній комунікації на борту для забезпечення безпеки екіпажу та судна, для ефективної взаємодії між членами екіпажу. Це питання є дуже важливим, оскільки велика кількість нещасних випадків у морі зумовлена саме проблемами невдалої комунікації та непорозуміннями. На жаль, сьогоденна комунікативна ситуація в змішаних екіпажах є доволі проблематичною і часто призводить до невдалих спроб порозуміння. Стаття присвячена аналізу імітаційної та рольової гри як специфічного виду роботи з підготовки майбутніх моряків до професійного спілкування на судні, а також оцінки їхньої ефективності та потенційного успіху. Обґрунтовано необхідність застосування запропонованих видів робіт у навчальному процесі морських закладів освіти. Автори статті розглядають переваги імітаційних технологій і рольової гри, вивчають комунікативні навички, зазначені у модельного курсу ІМО 3.17 з метою визначення орієнтовної тематики та цілей занять з морської англійської мови. Результати аналізу детально представлено у статті. Окрім цього, наведено рекомендації щодо подальшого вдосконалення занять з морської англійської мови. Запропоновано створення бази навчально-методичних матеріалів (імітаційні та рольові ігри), які можна буде використовувати для підвищення рівня професійної підготовки майбутніх морських фахівців відповідно до міжнародних стандартів, ознайомлення студентів з основами майбутньої професійної діяльності.

**Ключові слова:** імітаційна гра, рольова гра, мультинаціональний екіпаж, ситуації реального життя, комунікативна компетенція.

Problem statement. Modern shipping industry requires well-qualified workers. As the consequence, one of major tasks for maritime institutions is the development of teaching and learning materials aimed at formation of seafarers' professional skills necessary for both safety and communication within the crew. Effective communication is extremely important between ship and shore in ordinary and emergency situations. Moreover, the seafarers are engaged in daily routine communication on an intra-ship level. Thus, there is an urgent need in clear, accurate on-board communication and effective interaction among the crewmembers because a great number of maritime accidents are caused by communication failures and misunderstandings. Regrettably, real situation with communication in multinational crews is rather troubled

and often results in unfortunate attempts to understand each other.

We think that much attention must be focused on the development of successive and systematic teaching and learning materials in the field of professional communication which would enable future seafarers to meet challenges of a modern diverse maritime industry. The improvement of such materials as guidelines for effective communication in multinational crews must be done dynamically and continually. It is necessary to outline specific and logical instructions as for the development of teaching and learning materials which would meet the requirements of the International Convention on Standards of Training, Certification and Watchkeeping (STCW) [6]. The IMO Model course 3.17 "Maritime English" [5] is also considered as a guidance for our study.

publications. Recent research and The problems connected with effective communication amongst crewmembers, balanced and efficient cooperation on board the ship have been deeply studied and examined by E. Bandeira, P. Björkroth, P. John, W. van Leunen, A. Noble, B. Pritchard, A. Sihmantepe. According to P. Björkroth, P. John and A. Noble, "the safe navigation of a vessel from its point of departure to its destination depends largely on the quality of the bridge team's performance, under the leadership of the Master or the Officer of the Watch (OOW). The team's performance will stand or fall subject to its ability to interact. The most important element of interaction on the bridge may be defined as verbal communication. In order to harness the competence of the whole bridge team in complex matters of navigation, everyone on the bridge must be able to express information relating to their observations and offer their interpretation of situational analysis" [7, p. 137].

Most of their research papers [1; 2; 7] are focused on features of conversation in maritime VHF communication and the necessity to train future seafarers for a diverse working environment on board.

The purpose of the research is to conduct an analysis of simulation and role-play activities as means of preparing future seafarers for professional communication on board ship, to assess their effectiveness and potential success.

Presentation of the main material. From the foregoing, it is important that the development of simulation and role-play activities is aimed at linking Maritime English classroom and real seafarer's life. In our study we would like to prove that these activities serve as an important component of the regular curriculum of maritime institutions.

According to Elisa Bandeira, simulation and role-plays present a number of advantages:

- 1. These activities are rather fun and motivating.
- 2. All students get the chance to express themselves.
- 3. The world in the classroom becomes more realistic.
- 4. These activities offer a wider range of language opportunities.
  - 5. Students practice their English.
- 6. Students can spend time beforehand drilling the structures to be used [1, p. 70].

As for the Maritime English teacher, he/she can be involved in different roles as:

- 1. A Facilitator a person providing some professional language and terminology according to the context:
- 2. A Spectator a person evaluating the performance of students, not only in terms of language skills but also in performing the real-life situation;
- 3. A Participant a person who takes part and plays the role of supervisor (the Master, the Chief Mate, the Pilot etc.) [1, p. 70].

The main Maritime English competence formulated in the STCW [6] is "Use the IMO Standard Marine Communication Phrases and use English in Written and Oral Form". As the situations which require the use of Maritime English (at sea and in port) are numerous, we have decided to analyze the detailed syllabus of the IMO Model course 3.17 "Maritime English" [5] in order to outline the skills which require the application of simulation and role-play activities. The parts under analysis were 'General Maritime English' (table 1) and 'Specialized Maritime English for officers in charge of navigational watch' (table 2).

As it was previously stated, the aim of simulation and role-plays is to make classroom environment similar to that of a vessel's one and to create a scenario during which communication between crewmembers takes place. Students would be ex-

Table 1

## Detailed teaching syllabus of 'General Maritime English' (adapted to the research needs)

Required performance:	Skills:
Understand helm orders	– carry out dialogue between pilot and helmsman accurately correctly
Understand commands in emergency situations on board	<ul> <li>use SMCP message markers correctly to precede instructions, questions and answers in simulated external communications</li> <li>demonstrate understanding of the meaning and use of the vocabulary in SMCP for simulated external distress communications regarding fire / explosion /abandon ship</li> </ul>
Understand commands in emergency situations on board	<ul> <li>use SMCP for simulated external distress communications regarding fire / explosion / abandon ship</li> </ul>
Discuss cargo handling procedures	<ul> <li>use SMCP relating to loading capacities and quantities to exchange cargo details in simulated onboard communication</li> </ul>
Describe weather conditions; understand forecasts	<ul> <li>use SMCP message markers during simulated external communications for giving information and warnings regarding meteorological information</li> <li>simulate external radio communication regarding meteorological warnings using message markers from SMCP</li> </ul>
Report details of incidents at sea; simulate VHF communications for distress and urgency messages	<ul> <li>use SMCP and message markers during simulated external distress communications for giving information and warnings regarding collision and grounding</li> <li>use SMCP and message markers during simulated external urgency communications for issuing requests regarding technical failure and cargo problems</li> </ul>
Explain personal injuries at sea; request medical assistance	<ul> <li>use SMCP for requesting medical assistance with appropriate urgency message marker</li> <li>use standard phrases from the International Code of Signals to describe medical problems</li> </ul>
Describe the principles of watchkeeping	– simulate handing over a watch using checklists

Table 2

Detailed teaching syllabus of 'Specialized Maritime English for officers in charge of navigational watch' (adapted to the research needs)

Required performance:	Skills:
1.1.1 Use English in written and oral form to use charts and other nautical publications	– simulate preparing the ship with the appropriate routeing chart by necessary procedures
1.1.3 Use English in written and oral form to communicate with other ships, coast stations and VTS centres 1. Routine communication	- simulate how to use the International Phonetic Alphabet and practice on various maritime scenarios with colleagues - simulate the standard routine communication procedure of using VHF - role play VHF communication with other ships for collision avoidance /with pilot stations while entering port/with VTS centers for arrival, departure, transmit report and etc.
2. Emergency communication	– simulate correct and appropriate responses to the Distress alert for acknowledge by written and oral form
1.1.7 Use English in written and oral form for cargo handling work in port	<ul> <li>simulate how to take the necessary equipment/fittings and measures to adjust trim and stability of vessel under different loading conditions by appropriate words and expressions</li> <li>simulate how to give orders for appropriate securing and lashing of cargo under different situations</li> </ul>
1.1.12 Brief introduction of Emergency responses 1. General	– construct different emergency situation and simulate appropriate action can be taken
2. Emergency situations involving marine accidents and incidents, maritime pollution, anti-piracy and etc.	<ul> <li>demonstrate the ability to report the location and condition of safety equipment and simulate to take appropriate procedures for survival at sea by means of survival craft</li> </ul>
3. Emergency situations involving medical assistances	<ul> <li>simulate correct first aid treatment for a range of medical emergencies under different situations and exchange opinions on personal responses to various hypothetical situations</li> </ul>
1.2 How to Use IMO Standard Marine Communication Phrases (SMCP) 1 General 2. External communication phrases	<ul> <li>simulate distress communications with given standard phrases under different scenarios such as search and rescue communications, man overboard, requesting medical assistance</li> <li>simulate pilotage communication with given standard phrases for pilot request, embarking/disembarking pilot, tug assistance</li> </ul>
3. On-board communication phrases	- simulate the communication with operative shiphandling phrases under different scenarios such as entering/leaving port, dropping anchor, handover of watchkeeping responsibility

pected to use various competences obtained during their training (e.g. Maritime English, Nautical Science, background knowledge) and put these to use in a simulated real-life situation [3; 4].

The instructor manual of IMO Model Course 3.17 [5] provides Maritime English teachers with 30 different activities with the emphasis on accuracy of use of Standard Marine Communication Phrases which rely on clear on-board communication. In order for future seafarers to learn the phrases, it is necessary to spend regular time revising short sections of SMCP.

However, among the activities listed in IMO Model Course we want to highlight only those given below.

Guided SMCP role plays: Prepare a guided dialogue using SMCP and also some simple role cards to vary the information contained in the dialogue. Once the class has completed and practised the guided dialogue, hand out the role play cards to pairs of students and ask them to try the dialogue again but using the new information they have on their cards. It is more authentic if students are seated so that they cannot see each other [5].

Free SMCP role plays: Prepare a range of situations onboard a vessel that would require seafarers to use SMCP. To make the situations more realistic, present each one differently in an authentic message format that requires action (e.g. a telex, an urgent weather warning recorded on tape, an incoming VHF communication, a problem reported by a crew

member, an order from the Captain, etc.). The students should work in pairs, improvising a suitable dialogue in quick response to each situation using appropriate SMCP [5].

We believe that these activities are appropriate to training maritime professionals for further international seagoing service as they are very effective in arising future seafarers' enthusiasm for work within multilingual and multinational crews.

Besides, we suggest more ideas that can be applied:

- 1. The Maritime English teacher is advised to use simulation and role-play activities at Maritime English lessons. They can cover different professional circumstances, e.g. VHF communication, bridge watchkeeping, emergency drills etc. The help of technical aids (VHF radio, smart board, bridge simulator) is preferable. The activities shall focus mainly on skills described in IMO Model course 3.17 (table 1, 2).
- 2. The teacher shall use authentic and real-life / near-real information. As it is difficult to take the students to real working site area, authentic real-life / near-real information can be rather useful for the trainees to meet with challenges of a natural working environment. All the contexts that are created in class aim shall be as real as possible, including names of existing ships, characters according to seafarers' stereotypes, real institutions, real ports, real documents, etc. [1, p. 74]. The activities are advised to be backed up by visuals such as

photos of ships showing their external and internal areas, equipment, parts of the ship and machinery, ship's diagrams and other realia. The information is selected from different resources: maritime accident reports, maritime officers' memoirs, ship's log books, ship's and shipping company's correspondence, maritime journals, the Internet etc.

3. Role-plays can be helpful when making presentations of daily life scenes of the crew in dramatized form. The best way is to have these scenes acted out be the trainees. Each scene shall be planned to demonstrate a professional problem. After the role-play is performed it shall be discussed in a class. But the teacher shall conduct role-plays keeping in mind the language skills of the learner group. The emphasis is obviously on speaking, covering both internal and external communications.

Conclusion. The main aim of simulations and role-plays is to make the environment of Maritime English classroom closer to that of a ship's and outline certain scenarios of professional communication in multinational crews. The students (trainees) are expected to apply different skills obtained during their training (both in Maritime English and Seamanship) and put these to practice in a simulated real-life situation (crewmembers dealing with routine and emergency scenarios).

It is advisable to establish a database of teaching and learning materials (simulations and roleplays). These materials may be used to raise the level of professional training of future seafarers in accordance with international standards, to familiarize the students with basic concepts of their future professional activity.

#### **References:**

- Badeira E. (2013). Simulation and Role-playing an Interface between Maritime English Classroom and Seafarer's Real Life. Proceedings of IMEC-25. P. 68–75.
- Björkroth P. (2015). Piloting Pilots in a Full Mission Simulator Practicing Non-Technical Skills. Proceedings of IMEC-27. P. 7–17.
- 3. Frolova O. (2016). Developing training course focused on future seafarers' sociocultural communication in multinational crew. *Pedahohichnyi almanakh*. Issue 31. P. 200–206.
- Frolova O. (2017). Interdisciplinary Integration in Teaching Maritime English. Pedahohichnyi almanakh. Issue 33. P. 210–215.
- 5. International Maritime Organization (2015). IMO Model Course 3.17. Maritime English. London: International Maritime Organization.
- International Maritime Organization (2001). International Convention on Standards of Training, Certification and Watchkeeping for Seafarers 1978, as amended in 1995 and 1997 (STCW Convention). London: International Maritime Organization.
- 7. John P., Björkroth P., Noble A. (2013). Making SMCP Count! Proceedings of IMEC-25. P. 136-151.