

## STRATEGIES FOR LEARNING MARITIME ENGLISH IN INTERDISCIPLINARY FRAMEWORK

**Summary.** The article justifies application of interdisciplinary approach to study of Maritime English due to its advantages: meaningful learning experience, disciplines crossovers, real life applications, varied perspective, flexible problem solving, communication gaps, communication gaps bridging, critical thinking fostering, building confidence, greater creativity, transferable skills development. Here also put forward relevant to interdisciplinary approach learning strategies, aimed to contribute to bridging the skills gap of students and enhancing their employability. The list of these learning strategies includes the following: consideration of multiple intelligence; communication and interaction combination; developing horizontal alternatives; reasonable chunks of learning input; cross-curricular learning environment; series of essential questions; proper critical thinking activities.

**Keywords:** interdisciplinary approach, learning strategies, Maritime English.

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## СТРАТЕГІЇ НАВЧАННЯ МОРСЬКОЇ АНГЛІЙСЬКОЇ У МІЖДИСЦИПЛІНАРНОМУ КОНТЕКСТІ

**Анотація.** У статті акцентовано увагу на важливому значенні міждисциплінарного підходу до навчання, який сприяє успішному вирішенню студентами чисельних завдань, які потребують інтегрування окремих частин дисциплін, що вивчаються. Автором обґрунтовано використання міждисциплінарного підходу до вивчення морської англійської мови з урахуванням широкого спектру його переваг, а саме: цілеспрямоване створення міждисциплінарних зв'язків та більш глибокий змістовий контент; відкриття нових можливостей для студентів у результаті використання знань і умінь з інших дисциплін та власного життєвого досвіду; розгортання урізноманітненої перспективи; гнучкість у вирішенні проблем; долання перешкод у професійно орієнтованому спілкуванні; розвиток креативності та критичного мислення; посилення впевненості; розвиток міжгалузевих умінь і навичок. Використання міждисциплінарного навчання морської англійської значною мірою обумовлено тою великою кількістю професійних знань і умінь налаштувати навчальний процес, якою повинен володіти викладач. Він має бути здатним ретельно добирати навчальний матеріал, що відображає сучасний стан розвитку морських технологій, враховує зміст ММО конвенцій. Методичні розробки до занять з морської англійської, окрім міждисциплінарного підходу, мають відповідати вимогам комунікативного і компетентнісного навчання згідно з ММО конвенцією ПДНВ. У результаті проведеного автором теоретичного дослідження низки навчальних стратегій та практичного експериментального впровадження їх у навчання морської англійської, визначено саме ті навчальні стратегії, які найбільше сприяють успішному впровадженню міждисциплінарного підходу, а саме: врахування множинного інтелекту; комбінування комунікації та інтеракції; розвиток горизонтальних альтернатив; обґрунтований об'єм вхідного навчального матеріалу; створення міждисциплінарного навчального середовища; добір суттєвих питань; вправи на розвиток критичного мислення. Саме їх системне комбінування може гарантувати успішність у здійсненні міждисциплінарного навчання морської англійської.

**Ключові слова:** міждисциплінарний підхід, навчальні стратегії, морська англійська.

**Problem statement.** The nature and complexity of the challenges faced to the maritime industry today forces maritime education and training (MET) adapt to stay in line with the latest developments on the industry. The contemporary technological advances and specialization, extreme competition on labour market, growth of dangerous situations influenced by human error and miscommunication require reviewing of approaches and learning strategies applied in maritime education nowadays.

A common language is necessary for communication and to avoid accidents at sea. According to STCW (Convention of Standards of Training, Certification and Watch Keeping for Seafarers) the common language of all crewmembers in a multinational crew is English and, in fact, it is widely used in maritime sector. The most maritime professionals and seafarers use English while working in shipping industry. Often the reports about major maritime disasters and accidents testify human miscommunication and disability to cooperate.

So, the relation between safety at sea and competency in English are interlinked.

A row of **recent research and publications** testify that miscommunications occur due to language and cultural barriers. It follows that every seafarer is expected to demonstrate a high degree of proficiency in Maritime English acquisition and application in communication.

Jean-Baptiste R.G. Soupez, Senior Lecturer in Yacht Design and Composite Engineering in Southampton, United Kingdom, in his collective with J. Ridley scientific paper "Fostering Maritime Education Through Interdisciplinary Training" [17] has set forth the results of conducted by both them study of some principal for interdisciplinary Maritime English learning notions. In Pejakovic's work (2015) [15, pp. 111–116] they found, that initially the term Maritime English was introduced by the British linguist J.R. Firth (1890-1960), who introduced this term as a label for strictly reduced linguistic system that is used for a particular ac-

tivity. Other authors, according to J.B. Soupez and J. Ridley, also stress on its restricted nature: “Maritime English develops students’ ability to use English at least to intermediate language level” (Mercado, 2013) [12, pp. 1–12]; “This ESP course focuses on learners’ immediate and future wants and needs” (Bruton, 2009) [5, pp. 1–15].

Raju Ahmmed considers, that if only Maritime English learner’s needs have only academic inclination to provide them with ability to understand classroom activities, read professional texts, take notes, express own ideas and opinions, there wouldn’t be so important to speak about the necessity of interdisciplinary framework of future seafarers training [2].

But Albayrak and Sag (2011) mention that the maritime students should have awareness about the maritime environment, training in security, leadership and teamwork, situational awareness, decision making, health issues and professional conduct and use of standard operating procedures [1, pp. 17–24]. And if they do not have these skills, quality and competency, they may not get their desired employments. It becomes evident from Shen and Wang study (2011) of the fact that many ship-owners would rather spend much more money in hiring Indian or Philippine sailors with good English level rather than sailors from China who can just briefly introduce themselves in English when they are interviewed in crewing companies [16, pp. 176–179].

To teach future seafarers Maritime English interdisciplinary teaching instructors should have abundant professional knowledge, develop teaching skills and arrange training. They have to choose textbooks and study materials which are related to the latest maritime technology, IMO regulations. Also they should meet the requirements, set by STCW Convention, by developing good syllabi, classroom materials and adopting effective teaching approaches as communicative, competency-based and interdisciplinary. As maritime cadets should acquire knowledge and skills in so many subjects, as: Theoretical Mechanics, Electrical Equipment, Power Plants Operation, Marine Law, Economics of Marine Industry, Transport Technologies, Physics, Mathematics, Chemistry, Labour Safety, Technical Mechanics, Metrology, Hydromechanics, Technical Thermodynamics and Heat Transfer, Automatic Control Theory, Maintenance and Repair of Machinery, Maritime Conventions and Regulations and others, – interdisciplinary approach should be used to teach across curricular disciplines.

The necessity for a strong and diversified professional network in the maritime industry (Martin, Thomas, 2001) and the inherent interpersonal and communication skills required (Haugstetter and Grewal, 2005) make interdisciplinary education a pedagogy more in line with the present expectation of graduates and employers [17, p. 3].

Bransford analysed priorities of interdisciplinary education from the side of neuroscience, cognitive science, social psychology and human development, as: helping students to overcome a tendency to maintain preconceived notions and recognition of biases [4, pp.1–9].

Langa and Yost (2007) [10, p. 12] emphasize on applicable character of interdisciplinary approach to help students see the connections, generalize and

transfer knowledge to a variety of problem-solving situations in the real world.

Analysis of earlier studies shows that they were mainly devoted to propagating of the importance and advantages of interdisciplinary learning of different subjects, including Maritime English, but hasn’t been yet made emphasis on pertinent learning strategies which are called to succeed with interdisciplinary approach.

So, **the purpose of the article is to** define certain learning strategies suitable for interdisciplinary education and justify their use for successful study of Maritime English in interdisciplinary framework.

**Presentation of the main material.** The actual role of learning strategies is to help to initiate learners into effective ways to help learners engage in activities based on ideas about how people learn.

Jason R. Freeman in his article “Learning Strategies” considers learning strategy to be an individual approach to complete a task. More specifically, a learning strategy is an individual’s way of organizing and using a particular set of skills in order to learn content or accomplish other tasks more effectively and efficiently in school as well as in non-academic settings (Schumaker and Deshler, 1992). Therefore, teachers who teach learning strategies teach students how to learn, rather than teaching them specific curriculum content or specific skills [8].

Our analysis of a variety of different studies allows us to identify a number of learning strategies suitable for interdisciplinary education, in particular for Maritime English study. The most notable among others is understanding of interdisciplinary learning strategies grounded by Svetlana Nikitina (2002) [14, p. 6]. She names three of them: contextualizing, conceptualizing, problem-solving. Without diminishing the significance of the study made by her we want to suggest the results of our research.

1. So as interdisciplinary study promotes for students understanding in heterogeneous ways *consideration of multiple intelligence* in learning process with all set of their diverse background, interests, talents, beliefs and values according to prominent psychologist Howard Gardner (1983) will enhance student engagement and thus learning. Direct evidence of such strategy use was got at a school in Michigan where integrated curriculum and thematic plans were based on the ideas of Howard Gardner multiple intelligence. The results of the program included “sustained enthusiasm” from the staff, parents, and students, increased attendance rates, and improvement in standardized test scores, “especially from students with the poorest test results” (Bolak, Bialach, Duhnphy, 2005) [3, pp. 57–60].

2. For better elaboration plenty of heterogeneous learning units should be processed by learners in process of *communication and interaction*. So different techniques of this learning strategy include the following: peers sit and talk; whole group discussion; polling; group quizzes; jigsaws; sorting strips; mingle activities and others [19].

3. Dedy Subandowo, following the ideas of Edward de Bono, assumes *developing horizontal alternatives* more advantageous, than senseless vertical accumulation of learned units. He asks: “Why do students must study many things that they do not really understand?” [18, p. 5] Much more reasonable in this respect is to locate horizontally beside obscure learn-

ing units those details which would provide precise for understanding of learners collocations.

4. Hugh Dellar and Andrew Walkley, co-authors of Outcomes series of books, assert that all learning *input should be treated* to learners lexically, i.e. *in reasonable lexical chunks*, with right kind of questions. [6] This will enable the learner: to understand the meaning of the item; to hear/see an example of the item in context; to pay attention to the item and notice its features; to do something with the item – to use it in some way; to repeat these steps over time, when encountering the item again in other contexts. Though there may be a problem in teaching chunks of collocations in Maritime English. As Long (2015) points out, “while children learn collocations implicitly, collocation errors persist, even among near-native L2 speakers resident in the target language environment for decades” [6, pp. 307–316].

5. Especial attention in interdisciplinary teaching should be paid to *the development of cross-curricular learning environment*. The teacher should find out what students already know and is the level of their knowledge, select special topics in properly designed units with cross-curricular ties between subjects, establish links to the students’ lives naturally and contextually, heightening their interest and motivating them. Their steady interest to interdisciplinary approach is possible to cultivate due to continual emphasizing the purpose of learning and using different skills, knowledge and attitudes for the success in their lives and workplaces [7].

6. According to Dr. Heidi Hayes Jacobs, an author and internationally recognized education leader known for her work in curriculum mapping, curriculum integration, and developing 21st century approaches to teaching and learning, smooth implementation of cross-curricular units study is impossible without *a series of essential questions* framing the process of interdisciplinary learning [9, p. 20]. As well assessments goal of learning output should be aligned with these essential questions.

Each essential question should be: somewhat complicated, encouraging students to divide it into simpler

problems; rooted in concepts that are clearly applicable across subjects; completable within the allotted time frame, relevant and interesting to students.

7. With repeated exposure to interdisciplinary learning environment learners develop more advanced epistemological beliefs, enhanced critical thinking ability and an understanding of the relations among perspectives derived from different disciplines. Newel considers, that to form metacognitive skills of learner the teacher should facilitate this by developing their critical abilities, increasing empathy for ethical and social issues, enabling in such way to tolerate ambiguity and accommodate, synthesize and integrate diverse perspectives [13, p. 89–111]. The scholar stresses, that this process becomes possible if to apply *proper critical thinking activities*. Among them he points out the following: 1) introduce alternative perspectives; 2) use case-studies and problem-based learning; 3) combine ideas; 4) tailor approach for mixed groups; 5) enrich undergraduate learning environment; 6) use team teaching; highlight extra and co-curricular opportunities.

**Conclusion.** Implementation of all mentioned in this article learning strategies in process of interdisciplinary learning of Maritime English makes us possibly to contribute to all those learning outcomes stipulated by IMO Model Course 3.17 and IMO STSW Convention. Different forms of assessment of students’ learning output reveals some improvement of their critical thinking; better bias recognition; preparation for future problems; ability to apply research skills; deep delving into several subjects at once; evolution of communicative skills professional inclination.

The list put forward learning strategies: consideration of multiple intelligence; communication and interaction combination; developing horizontal alternatives; reasonable chunks of learning input; cross-curricular learning environment; series of essential questions; proper critical thinking activities, – implies that interdisciplinary learning of Maritime English may achieve further success in case of their systemic combination.

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