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Research Article

Teaching marine engineering terms through online methods in maritime training courses

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Abstract

Verbal communication is an integral part of seafarers' professional activity and a compulsory condition of vessels' safety, the prevention of marine environment pollution, the fulfillment of international and national legislation in the field of sea transport, and the organization and management of sea transport traffic involving multinational crews. The present study contributes to the resolution of professional communication linguistic support problems within the framework of the marine engineer's activities. Additionally, it ensures safety at sea by developing the terminological component of the foreign-language competence of marine engineers. The purpose of the research presented in this article is to identify patterns of teaching the English maritime engineering term system used in oral professional communication and technical documentation engaging the Moodle Platform. The concept of marine engineering terminology, as well as the principles of distinguishing it from a more general concept of «maritime terminology», was considered in order to achieve this goal. The article suggests a combination of the most efficient Moodle tools that can be used to develop trainees' specific terminological competence.

1. Introduction

The International Convention on the Training and Certification of Seafarers and Watchkeeping of 1978 (STCW-78), as amended in 2010, defines the requirements for the level of marine specialist foreign language training, paying special attention to the importance of seafarers' knowledge of maritime terms (International Maritime Organization, 2018). Meanwhile, a number of scholars note that Maritime English is a specific area where international standards are combined with national vocational qualification requirements, which makes it necessary to consider this factor in the teaching process (Logie, 2019; Tchkonia et al., 2019; Pazaver, 2019).

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As far as the subject area of navigation is concerned, marine engineering terms form a substantial part of this continuum, which requires more thorough formalizing to provide a more effective learning process. The lack of systematized descriptions of the vocabulary serving maritime professional communication within certain specialized areas in real professional communication can lead to misinterpretation of some maritime terms, which threatens to cause emergencies at sea. Thus, a study of this kind, on the one hand, makes a certain contribution to the development of linguistic support patterns for professional communication within the framework of the activities of a ship engineer. From the practical point of view, this study can be regarded as a contribution to solving the problems of maritime transport safety by forming the terminological component of the foreign language competence of a marine engineer working in a multinational crew.

The theoretical and practical values of the present research are conditioned by the fact that the study represents an attempt to comprehensively analyze maritime engineering terminology in the context of its ability to be presented through online technology. Creative online methods analyzed in the article can be applied in training and retraining marine engineering courses.

The present study represents a qualitative research, involving such methods of data collecting as observation, document review, and testing. The comparative analysis of traditional and e-methods of developing trainees' terminological competence, as well as of Moodle Platform instrument efficiency, was made through the SPSS 12.0 package tool. The approach realized in this study involved marine engineering term ordering, standardization, translation, and creation of terminological banks.

Online methods proved particularly effective when applied in a 40-hour refresher course delivered at Admiral Ushakov State Maritime University Retraining and Refresher Centre in compliance with Model Course 3.17 Maritime English (International Maritime Organization, 2018). This specialized course is intended for engine room department personnel. It was also tested with third-year engine cadets before their shipboard training practice.

The experience of e-teaching described in this paper is based on using Moodle Platform in the learning process. Moodle Platform (Modular Object-Oriented Dynamic Learning Environment) is frequently applied at educational institutions all over the world, and has already proved its efficiency (Galić et al., 2020; Yurzhenko, 2019; Erdogan & Demirel, 2017). This paper aims at sharing mechanisms of its usage in teaching a specialized vocabulary continuum based on the analysis of its linguistic specificity. The experiment involved Moodle tools as a possible effective solution to the problem of developing maritime lexical competence, with professionals going through training and retraining process within a short period of time.

Conceptually, this paper is based on the recognition of the role digitalization plays in all areas of life nowadays, and on the assumption that the digitalized reality has transformed our approaches to the process of teaching and facilitated the task of mastering professional skills, including professional linguistic competence (Ishida et al., 2019; Chen et al., 2017).

Online methods are regarded in this paper as an integral part of blended learning, which involves several delivery modes representing "a combination of technology and classroom instruction in a flexible approach to learning that recognizes the benefits of delivering some training and assessment online but also uses other modes to make up a complete training program which can improve learning outcomes and save costs as well" (Bañados, 2006, p. 534).

Teaching experts define blended language learning as a specific "learning and teaching environment" that implies the transition of the "face-to-face" stage to computer-assisted language learning. Such an approach enables learners to benefit from "independent self-study phases" via computerized tools and software, and traditional "face-to-face classroom

learning" (Bañados, 2006, p. 534). This study focuses on the Moodle tools that can be used in the self-study learning phase, followed by the testing phase.

2. Marine engineering terms in professional communication and documentation

As far as teaching methods are concerned, marine engineering terms represent a specialized stratum, which can be successfully taught online as long as they are able to be classified according to clear distinct criteria, suggested in this paper.

The cognitive approach to marine engineering terms involves their consideration not only in the field of fixation (in dictionaries), but also in the area of their functioning. The area of maritime terminology functioning is understood here as the use of maritime terms in technical documentation and oral professional communication. In these modes, the term does not appear in its ideal form, which makes this research quite relevant, since the traditional study of terminological units of a language is mainly limited to the sphere of their fixation (Yarovaya, 2005).

Of particular importance is the presence of a unified system for processing and decoding information in professional maritime communication in the work of mixed crews, since even a slight misunderstanding due to insufficient foreign language competence of communicants can lead to an accident. This fact demonstrates the importance that communication acquires in seafarers' work, especially in matters relating to interactions with other vessels at sea. Communication between crewmembers also plays an essential role in ensuring the safety of navigation. It is not only the safety of the ship and cargo, but also the protection of the environment and human lives, which depend on their communication skills and abilities. An analysis of major accidents at sea over the past 10 years shows that communication is an integral component of working at sea, which is responsible for almost all kinds of situations, and which depends on many factors that affect it in one way or another.

Effective communication for seafarers is of great importance, while insufficient communication between members of a ship's crew, as well as insufficient communication between ships or ships and shore authorities, can lead to significant losses of both human and material resources. In other words, misinterpretation or insufficient understanding of marine engineering terms can cause accidents, incidents, and litigation.

Within the framework of oral professional communication, one can distinguish formal (status, status-role) and informal (interpersonal) modes. There is also a familiar mode of informal communication. As a review of works devoted to the study of maritime oral and written communication showed, there are differences in the use of maritime special sublanguage units in the corresponding texts.

Professional communication in the field of shipping involves both written and oral professionally-oriented communication in English among members of a mixed crew, while performing pilotage, cargo operations, bunkering, oil spill response, towing, emergency response operations, procedures for using radiotelephone communications, etc.

In addition, the crew of a merchant vessel carries out legal and commercial activities in the form of business correspondence and record keeping. All these documentary texts are compiled in English, which is regulated by a number of international maritime conventions. In addition, emergencies and maritime search and rescue activities must be documented in the form of action plans and action reports, which requires using English as a means of international maritime communication.

Terms make up 70 % of the entire vocabulary of marine specialists (Zaitseva, 1989) Special maritime terminology, in its turn, is divided into subgroups in accordance with the professional role of a maritime professional (*navigator, ship engineer, electrician, etc.*). For example, such technical terms as *bridge*, *altering*, and *berth or no berth* belong to navigator

sublanguage. The terms *incinerator, oily water separator,* and *gas turbine* represent ship engineer sublanguage.

As for oral professionally-oriented communication, the range of marine special units is more diverse in terms of invention. Oral communication involves not only terms, but also professionalisms and professional jargon (**Figure 1**) (Mironenko & Mironenko, 2019).

Professionalisms used in oral communication are characterized by a pronounced colloquial connotation, expressed through a metaphor, which is based on a certain motivating feature. Within the framework of professionalism as a linguistic unit, new knowledge is generalized (appearance, material and technical characteristics, etc.) based on associations with everyday objects (Latu, 2015).

Some researchers point out the use of jargon in oral professional communication. They note heterogeneous, relatively stable substandard forms of special lexical vernacular, which are of a explicit colloquial character. As Maritime English researchers note, such units are on the periphery of the shipping terminology system, and are a manifestation of its ambiguity (Mironenko & Mironenko, 2019).

English marine engineering terminology is closely related to other technical terms systems, namely to nautical, shipbuilding, geographical, and mechanical terminological systems; however, in our opinion, it forms a particular subsystem of general marine terminology. A comprehensive study of marine engineering terms made it possible to conclude that they form a system representing a terminological space of units in the form of lexico-grammatical groups in accordance with the hierarchical system of concepts used in this professional area. The specificity of the marine engineering term system is conditioned by the duality of its semantic center, represented by the concepts of a ship's mechanisms and types of ship engineer activities. The periphery of this terminological system contains general technical concepts and concepts of navigation.

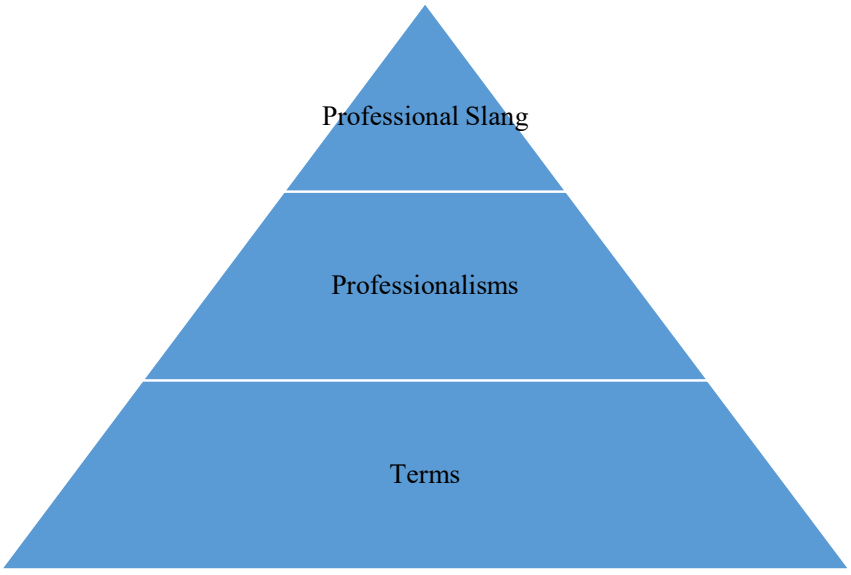

Figure 1 Inventory of specific maritime vocabulary.

3. The mechanism of teaching marine engineering terms through Moodle tools

Trainee knowledge of the design features and operative mechanisms from IMO Model Course 3.17. is regarded as absolutely fundamental for marine engineers (International Maritime Organization, 2015). However, the learning time is reduced as, within the framework of the training, as well as on retraining courses, trainees revise rather than learn this material. The instructor staff introduce and administer trainees' self-study, with interaction in the process of

training and testing procedures through organizing teaching and learning via Moodle Platform.

Moodle is based on five principles developed by Dougiamas (2003), the Moodle project manager, within his concept of "social constructivism".

Principle 1 regards all participants of the learning-teaching process as capable of performing both the instructor and the trainee roles. Such an approach creates a new mode of relationship between them.

Principle 2 presupposes involving learners into the process of explaining things to fellow students. We learn especially well when we create or try to explain something to other people. The thesis of learning by doing improves the process of mastering new skills that raises the role of self-checking, and reflection is remarkable.

Principle 3 involves team-learning processes. This is based on the belief that working cooperatively on one issue increases the degree of awareness of and promotes higher motivation in trainees. Fellow trainee work provides material for observation and analysis, and inspires new approaches to old problems, facilitating the process of finding clues in this way.

Principle 4 focuses on the importance of considering the trainees' individual cognitive and personal characteristics, which allows instructors to tailor the course and to promote learners' aspirations to self-realization and self-presentation.

Principle 5 requires the learning environment to be flexible and comprehensible, providing all participants in the educational process with sufficient instruments to acquire knowledge, to improve skills, and to develop the necessary competencies in the educational process with simple tools for realizing their learning needs. The system should be understandable and convenient for all participants in the educational process and provide them with a variety of ways and means to solve educational problems: obtaining information, exchanging opinions, obtaining advice, assessment, prompt updating, etc. Taking into account these principles, all the tools of the MOODLE system are implemented: communicative, educational, and administrative. The implementation of feedback from the subjects of the educational process is one of the strongest aspects of MOODLE. The system supports the exchange of files of any format- both between a teacher-student and amongst students (Zaitseva, 1989).

The present study has revealed that Moodle Platform can be one of the most effective instruments for teaching and learning professional vocabulary in general, and marine engineering terms in particular. These tools can be used by an instructor to achieve the following objectives:

- to provide trainees with information about marine engineering terms.
- to arrange communication and interaction for exchange purposes among trainees.
- to cooperate in working out learning materials relating to marine engineering terms.
- to assess trainees' understanding of and their ability to recognize and to apply marine engineering terms in the process of professional communication.

The task of teaching rather complicated lexical units required some time to analyze the most effective order of applying different Moodle tools. This order can be represented in the sequence of concrete steps given below:

Lecture in Moodle instrument enables instructors to present theoretical information about the nature of marine engineering terminology as a system.

Chat allows students to actively communicate in small groups and gives instructors an opportunity to advise trainees.

Forum provides asynchronous communication which is delayed in time, enabling the exchange of information and opinion.

Wiki serves as a source of information capable of being edited by an instructor or students, as well as a tool for the cooperative creation of learning material.

Glossary enables trainees to define basic concepts, to group special terms, to edit their own term entry, and to add external comments;

Data Base serves as a venue for analyzing common and distinctive term features and dividing them into groups based on their similarities and differences (**Figure 2**).

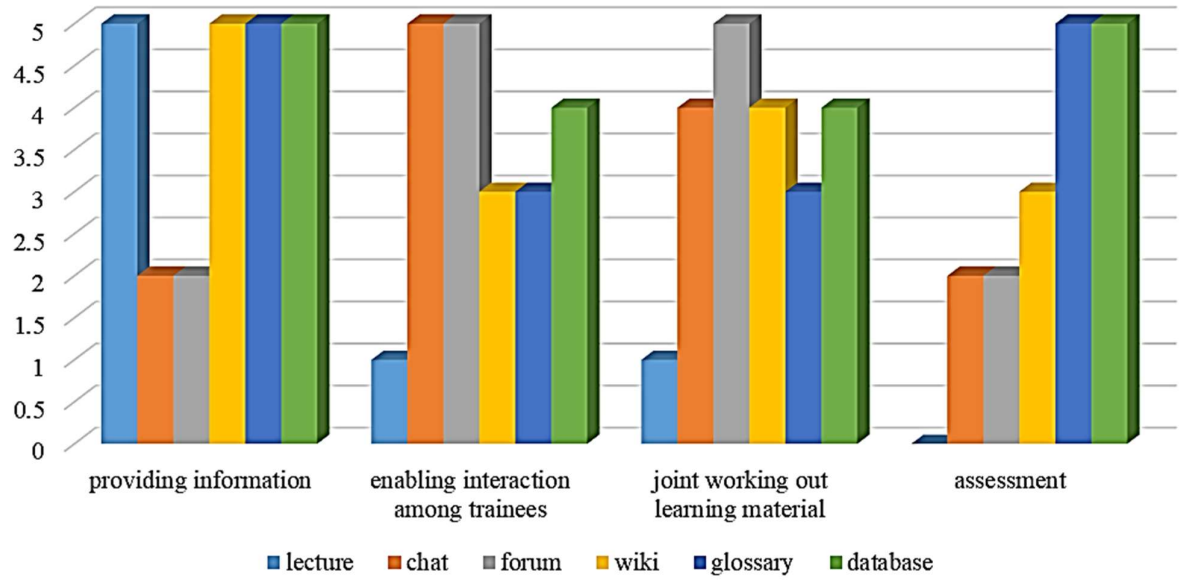

Figure 2 The effectiveness of Moodle tools in realizing an instructor's purposes for teaching marine engineering terms.

Figure 2 demonstrates that the Moodle tools listed above provide trainees and instructors with the means to fulfill the following didactic tasks: obtaining information, exchanging information and opinions, obtaining advice, assessing, prompt updating, cooperating, etc.

As can be seen, e-Lecture as an educational tool works best in providing information, making this process more exciting and effective. Moreover, YouTube sources make this an interactive process.

For managing interaction among trainees, the most powerful tools here proved to be Chat and Forum. They allow organizing an educational discussion in a real time mode. "Messaging" and "Commentary" services can be used for individual communication between the instructor and the trainee. These instruments can also be used for peer review.

However, the most effective Moodle tools for teaching marine engineering terms proved to be Glossary and Database. One can observe in the bar chart provided above (**Figure 2**) that these two instruments frame the process of teaching these lexical units. They play an essential role at the beginning of the process, at the stage of giving information and at the stage of assessing trainees' performance. They proved to be efficient, as they embrace all levels of Bloom's taxonomy: from knowledge, understanding, and application to analysis, synthesis, and evaluation.

Undoubtedly, they perform so effectively due to a specific object of teaching- marine engineering terms, which represent a complicated aspect of a seafarer's Maritime English competence.

4. Moodle "glossary" and "database" as tools of teaching marine engineering terms

The practical outcome of the teaching experiment described in this paper can be represented in the form of a glossary and a database compiled by the trainees at Admiral Ushakov Maritime State University.

The use of six Moodle tools within the 40 hours training course resulted in the database being made up by the learners. Following the route from e-Lecture through Chat, Forum, and Wiki, students managed to systematize marine engineering terms in the form of a glossary, which was later transformed into a database, containing all the necessary information about their structural and semantic features. 600 ship mechanic (SM) terms selected from technical documentation texts and oral communication samples underwent semantic and structural analysis. The terminological status of these units was also determined on the basis of comparison with lexicographic sources (dictionaries). The terms of ship engineering (SE) included words that have the semes "*technology*", "*mechanism*", "*vessel*", and "*activity*" in their semantic compositions.

The objective world of ship-engineering activity is specific, just as the conditions of communication and cognitive activity. As the analysis showed, these differences are revealed in the semantic organization of the ship engineering terminology system. Thanks to using the Glossary tool, trainees singled out two main thematic groups (TG) of SE terms. A thematic group in this study is defined as a logical category that reflects the division of the professional picture of the SM world and its fragments. At the next stage, the SE units were subdivided into semantic subgroups (SS) within each thematic group. The term SS in this work is used in a narrow sense, denoting a group of words united by the similarity of a categorial-generic semantic unit (archiseme).

Thematic Group 1 (TG1) contains the terms that name items of equipment, being the objects of a ship engineer's activity. Trainee and instructor interactions on Chat and Forum venues allowed uniting all the terms of this group by means of the seme "technique" "mechanism", which are opposed to the seme "nature" (**Table 1**).

Table 1 Glossary- Thematic Group 1 "Ship Equipment".

Semantic Subgroup 1.1 The integrating semes - «mechanism», «plant»	**Semantic Subgroup 1.2 The integrating semes - «process», «conduct», «system»**	**Semantic Subgroup 1.3 The integrating semes «component», «part».**
e.g.	*e.g.*	e.g.
Engine:	*-Hot and cold water service system*	*-fine strainer*
-In-line engine	*-Engine room fixed water mist*	*-coarse strainer*
-V-type engine	*firefighting system*	*-intake strainer*
-High speed engine	*-High pressure water cleaning system*	*-oil suction strainer*
-Medium speed engine	*-Fuel oil filling and transfer system*	*-crank:*
-Low speed engine	*-Auxiliary boiler fuel oil service system*	*crankcase*
-Crosshead engine	*-Incinerator and emergency generator*	*crank pin*
-Trunk-piston engine	*fuel oil service system*	*retainer*
-Main engine	*-Stern tube lube oil system*	*socket*
-Auxiliary engine	*-Cooling sea water system*	*clutch*
-Fuel oil settling tank		
-Fuel oil service tank		
-Waste oil tank		
-Soot collecting tank		

This TG contains the names of complex devices, mechanisms, and systems. The analysis, conducted by students via Chat and Forum tools, enabled learners to distinguish three semantic subgroups within this TG, based on three integrating semantic units: *mechanism, process,* and *component.*

Synchronous and asynchronous discussions in the Chat and Forum allowed identification of another thematic group, including nominations for a ship engineer's main professional activities.

Based on the e-lecture materials explaining the concept of ship engineering as a kind of activity, trainees subdivided this TG into 6 SS, which include units that name the actions carried out by a ship engineer during a ship's main marine operations (**Table 2**).

Table 2 Glossary- Thematic Group 1 "Ship engineer's main professional activities".

SS 2.	**Examples**
SS 2.1	*Overlap, fresh water generator, evaporator, condenser, sea chest, to slew / swing, hydraulic tool, pneumatic tool*
SS 2.2	*Puller, crack, machinery breakdown, brazing, rupture, casting defect, carbonization/ gumming-up, hydro jetting by fresh water, antifouling paint applying*
SS 2.3	*sewage treatment plant, incinerator, oily water separator, bilge, bilge pump*
SS 2.4	*bunker barge, bunker tank, sampling point, bunker hose connection, bunker hose disconnection, ullage*
SS 2.5	*throughput, drip tray, cargo pump, winch hydromotors, scupper, rpm, loading arm, cow system / inert gas system*
SS 2.6	*emergency diesel generator, emergency fire pump, auxiliary boiler emergency operation mode, emergency switch board, loss of boiler water level, bunker spill*

Trainees identified six integrating semantic nuclei, discriminating six areas of a ship engineer's professional activities: maintenance, repair, pollution prevention, bunkering, cargo operations, emergency situations.

SS 1 "Maintenance" includes terms that name the main types of duties performed by a ship engineer during the passage of a ship, aimed at maintaining the main and auxiliary mechanisms and plants. The semantic nucleus of the verb "to maintain", meaning "to keep something in good condition, to take care of something", integrates this SS.

SS 2 includes units serving the activities of a ship engineer to eliminate breakdowns and malfunctions. These terms are united by the semantic center "to repair" meaning "to make something worn or broken work again". This group is also divided into three subsections: the type of malfunction, the method of eliminating the malfunction, and the tools with which the repair activity is carried out; that is, the terms in these subsections have the semes of the object, operation, and means of repair.

SS 3 reflects the relevance of such a fragment of a sailor's professional language picture of the world as the need to comply with environmental protection rules regulated by the Convention on the Prevention of Marine Pollution from Ships (MARPOL), and names the types of activities of a ship engineer united by the concepts of "pollution" and "protection". The types of subsections within this subgroup reflect the categorization of terms by types of pollution, methods of combating them carried out by MS, and means of combating them.

SS 4 consists of terms used when a ship engineer performs his duties during the bunkering of a vessel ("bunkering"- "provision of fuel to vessels and the storage of petroleum products in tanks"). These terms are united by the concepts "*fuel*" and "*providing*".

SS 5 includes terms serving cargo operations performed by a ship with the participation of a ship engineer, which include the unifying concepts "cargo", "load" ("cargo"- the goods that

are being carried in a ship", "to (un)load"- to put (take) a large quantity of cargo into (out of) a ship).

SS 6 includes terms serving communication within the framework of a ship engineer's activities in emergencies. The terms included in this group have a common semantic center "danger" and "immediately" ("emergency" meaning "an unexpected and dangerous situation that must be dealt with immediately"). They are also grouped into subsections depending on their belonging to groups united by such categories as the type of anxiety, the type of teaching, and methods of elimination.

These results show how students and teachers can use the Moodle Glossary tool to systematize and categorize professional terms selected and discussed at previous stages by means of the Moodle Chat, Forum, and Wiki tools.

The course was crowned by the trainees compiling a Ship Engineering Terms Database. This was achieved through the Moodle Database tool enabling learners after exchanging, editing, analyzing, and synthesizing semantic and structural information relating to 600 terms.

All analyzed terms underwent word-formation analysis, conducted by trainees, in order to identify their structural specificity. At the first stage, they were divided into groups according to the number of components. The statistical analysis revealed the predominance of multicomponent terms, which made up 78 % of the total number of marine engineering terms, and only 22 % of the analyzed units consisted of one word. Students proved that the most productive way of term formation within the framework of the term system under study was the syntactic method.

The fragment of the marine engineering terms database compiled by a group of trainees using the corresponding Moodle instruments provides users with information about each term entry concerning their thematic, semantic, and structural specificity and the presence of synonyms and pseudo equivalents, as well as Russian equivalents (**Table 3**).

Table 3 Database "Structural and semantic specificity of ship engineering terms".

English marine engineering term	Synonym	Thematic group	Number of components	Formal structure	Semantic structure	Pseudo equivalents
acknowledge an alarm	reset	2.1/2.2	2	N+N	1N+P	-
atomize:	-	2.1	1	affixation	1N	-
atomizing steam or air	-	2.1	4	P1+N+Conj+N	1N+P	-
Atomizer	-	1.3/2.1	1	affixation	1N	+
Barrel	-	1.3/2.1/2.2	1	simple	1N	-
Bellow	compensator	1.3	1	simple	1N	-
bilge holding tank	oily bilge tank	1.2	3	N+P1+N	1N+P	-
Boom	jib, derrick	1.3/2.1/2.4/2.5	1	simple	1N	+

The areas (columns) in the database (**Table 3**) were created to set the type of information to be entered and to specify the remaining parameters. The names of each area were designated to be quite laconic to make it convenient for the future use when creating templates for entering and viewing records. Each area in the database must be nominated uniquely. The field description is optional. Generally, the Moodle database allows you to store a wide variety of information: dictionary entries, illustrations, biographies, geographical objects with their locations, and much

more. After setting all the areas, it is necessary to set templates- forms that can be used later to view and add data.

The prepared database frame is filled with information in the "Add record" tab. In working with the database, the most evident advantage is the possibility of multi-user access. This means that several users can enter data simultaneously. A trainee can enter, edit, and delete only their own data; the instructor can enter, edit, and delete the data of all learners, and can also assess the data entered by the student. All other learner-participants on the course can see the new data of their fellow students only after the instructor corrects them and confirms their adequacy.

For example, the database tool used in this paper allowed the trainees to conclude that, in oral communication, marine engineering terms tend to be compressed. As a result, one-component and two-component terms are used in approximately equal proportions in oral communication.

Structures consisting of three or more units are reduced, due to the omission or contraction of elements that carry peripheral meanings, clarifying and concretizing the nuclear meaning. However, in oral communication, the opposite trend, when a multicomponent term is replaced with a single-component unit that carries a peripheral meaning, can also be observed.

5. Results

This study, conducted within the framework of a seafarers' training course, has proved that Moodle tools used for teaching trainees marine engineering terms enabled them to conduct comprehensive structural-semantic, word-formation, and comparative analysis of the English marine engineering terminological system. The tools made it possible to identify the patterns of the system's semantic and word-formation organization, the features of its functioning in technical documentation and oral professional communication, and the types of English-Russian equivalents.

Moodle tools proved their efficiency as instruments of teaching ESP (English for Specific Purposes), since they enabled the students- participants in the experiment- to classify marine engineering terms semantically and structurally based on these terms with the combinability and potential to form speech patterns, both in oral professional communication and documentation on board.

The application of the Moodle Platform on the experimental course has demonstrated that marine engineering terms can be successfully taught through a combination of such Moodle instruments as Lecture, Chat, Forum, Wiki, Glossary, and Database.

The mechanism of developing the terminological competence of trainees consisted of three stages: a diagnostic check of trainees' linguistic awareness, experimental integration of the combination of the Moodle tools described above, and a final check of learners' terminological competence at the end of the training course.

It is important to note that Moodle tools, unlike traditional methods of teaching vocabulary, have great motivational potential, since they transform trainees from objects of the teaching process into active subjects, not only learning from texts, but being capable of consciously identifying and categorizing the lexical targets of their course. The instructor initiates discussion and analytical work with terms, plans the structure of the database table, sets the required areas, prepares templates for entering and viewing data, formulates a task for data input, and corrects, comments, confirms, and evaluates the created entries. Trainees identify terminological units, exchange the obtained data, and fill, analyze, and synthesize the glossary and the database. Comparison with the results of the initial check revealed the trainees' improved terminological competence, which is supported by the average improvement value between 36 and 48 %.

6. Conclusions

Based on the results of the experiment, we can claim the efficiency of the suggested sequence of online tools has been proven. Hopefully, the choice of this strategy can be of interest to

all scholars involved in the process of training or retraining seafarers in the framework of linguistic performance, which contributes to tackling the industry's problems related to safety. In the practical part of the study, on the basis of a comprehensive analysis, it was discovered that, linguistically, ship engineering terms are units of language that function in the system of the general literary language, as well as in the system of marine terminology. A comprehensive linguistic analysis of the English terminological system of ship engineering as an integral system made it possible to identify the specifics of its semantic, formal (structural), and functional organization. Differences in the functioning of such units in the texts of technical documentation and oral professional communication were identified.

The results of the study indicate that the development of marine engineering as one of the applied technical directions has led to the formation of an independent terminological system, in accordance with the structure of the concepts of this branch of knowledge. The elements of this terminological system form hierarchical paradigms. This system has close links with other terminological systems of the marine industry and the terminological system of general mechanics. The originality of this term system is revealed in its semantic organization. The originality of the marine engineering terminological system is also determined by the specifics of the semantic and word-formation organization of its constituent units. Most of them are multicomponent (mainly two-component) nuclear terms with a periphery. The functioning of marine engineering terms in professional communication is complicated by the presence of synonyms within the terminological system and pseudo-international vocabulary among the English-Russian correspondences of some terms. The use of words similar in different languages in form and spelling, but differing in meaning, can lead to misunderstanding and incorrect interpretation of the content of a text.

The use of Moodle online means in the maritime English language course resulted in a predominantly positive effect on trainees' performance. This mechanism is characterized by a greater ability to motivate contemporary seafarers, as it provides greater independence, flexibility, objectivity, self-discipline, and creative cooperation of learners and educators. We suggest applying a consequence of Moodle tools as a form of distance learning mode which results in being most useful for teaching terms as an integral part of seafarers' foreign language competence. The results of the study have a certain practical value for research into the technological advancement of maritime English competence, which is essential for tackling the issues of safety, security, and environmental protection, both on board and ashore.

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