

INNOVATIVE APPROACHES AND TECHNIQUES IN MARITIME ENGLISH STUDY PACK DEVELOPMENT

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ABSTRACT

The innovation project approved by the Ministry of Education and Science of Ukraine demonstrates the importance of the further improvements in Maritime Education and Training (MET) in the sphere of Maritime English proficiency. Within the framework of the national program “Computerized teaching/learning materials for professionally oriented subjects”, The Study Pack for Seafarers (Student’s Book, Work Book, Teacher’s Book, and English-Russian Dictionary of Maritime Terms) is being developed. The methodological principle of “early specialisation” in ME teaching, developed on the basis of linguistically centred concept (LCC), allows planning ME training from its very beginning as the integrated process including general English, general Maritime English and specialist Maritime English. LCC makes the emphasis on the language itself. Its algorithm facilitates the progress of acquiring professional knowledge, skills and abilities owing to high level of English. Thus, a linguistically centered course model for the 1st and 2nd year non-native learners becomes a step-by-step problem-solving procedure making the system of ME teaching and learning flexible and efficient.

Keywords: *ME, teaching/learning materials, LCC, “earlyspecialisation”.*

1. INTRODUCTION

The work at the project proposes the design of new types and formats of ME teaching/learning materials for full-time and part-time Maritime students. Being the supervisor of the project, the author outlines the conceptual approaches to ME training, describes the contents of the Study Pack components, and focuses on the basic principles of language training systems and complexes. The project is underway, and the first results have been obtained.

The Study Pack is being designed on the principles of *early specialisation* with the application of authentic texts and real-life situations. This entails some specific problems solution, such as: improving the students’ General English proficiency, developing their communicative skills in GE and ME, introducing specialist knowledge through the interdisciplinary links (Maritime English + Navigation/Marine Engineering), expanding students’ informational awareness by attracting materials from the Internet and other sources of information, implementing step-by-step assessment and self-assessment on the basis of the system of control. The work is accompanied by the intense linguistic and methodological research which has been described in publications by the project participants.

There is no secret: some students entering the Academy have a very low level of the English language proficiency. In this situation the only possible way to improve their language competences might be increasing their motivation. If a student is sure about the future career of a seafarer, he/she will come to the idea of mastering English. While acquiring the professional knowledge and skills he/she will definitely expand informational awareness required for vocational purposes with the help of English.

The paper gives the brief analysis of the information about the database created (terminology,

texts, grammar instructions and exercises, pronunciation and listening assignments, speaking practice strategies, SMCP teaching/learning materials, assessment and self-assessment systems, including computerised testing systems).

2. LINGUISTICALLY CENTRED CONCEPT

A linguistically-centred concept, or LCC, was first introduced in the paper entitled “Teaching Maritime English: A linguistic approach” [1]. The purpose was to show the influence of language on the process of acquiring professional knowledge by Maritime students.

The fact is: all special terms belong to language or sublanguage (specialised professional subsystem) being a unit of a bigger entirety in which it exists. On the other hand, these terms all together are the integral part of a well-structured system of notions belonging to a special professional field. It is not a contradiction; it is a matter of a language functioning as it serves not only to name objects or designate ideas but to relate and combine words in different ways so that language is continually moving and transforming itself. Thus, it should be stated that as a part of English, Maritime English forms a system like any other terminological system (Legal English, for example) according to general linguistic laws which govern the usage of these terms. In this respect it should be noted that only 7% of marine word stock are absolutely unique terms, others are adaptations of common words.

As a rule, in their practical work language teachers concentrate on the knowledge of special terms hoping that this solves all problems of students’ professional training. Unfortunately, it doesn’t. The experience shows that communication in its broad sense and on-board communication, in particular, become the most challenging issues for non-native speakers who constitute the biggest part of the world work force

supplied for the global shipping industry. Hence, the students' language proficiency is the decisive factor which pre-determines the strategy of many projects aiming to improve the quality of teaching/learning materials which should lead to the higher level of students' language proficiency.

It becomes obvious that ESP methodology requires an impact, and it comes from linguistics. It doesn't mean immersing maritime students into the ocean of theories about language; it mostly implies the implementation of new approaches to the language training planning as a whole and innovative techniques in language classroom activities, in particular.

A linguistically centred concept (LCC) presumes priority of linguistic analysis in any study of ME oral and written texts meant for MET academic use. In case of any application of authentic materials for educational purposes, a language teacher should understand the input and outcomes of such application. For instance, when explaining the difference between the terms "to collide" and "to allide" a language instructor would rather emphasise on word formation: "to collide – a collision", "to allide - an allision", then provide the students with definitions of the terms: "a collision - a violent impact of moving objects; crash", then specify the meaning in expression "ship collision" – "the collision of the two ships resulted in a serious damage, loss of lives, oil spills"; "an allision" – "the act of dashing against, or striking upon; the impact against a stationary object; collision of a ship with a fixed object, not a ship". Finally, the text studies will complete the work. It is expected that authentic texts will not be difficult for understanding after appropriate pre-text assignments. This example is given to draw attention to the latest terminographic sources which definitely save time when introducing new terms since direct translation is the shortest way to understanding a foreign term. Unfortunately, the terms "allide" and "allision" are not registered in majority of Maritime English dictionaries.

3. INNOVATIONS IN MARITIME ENGLISH TERMINOGRAPHY

Terminography is terminological lexicography. *Terminology* refers to a specific professional vocabulary which represents a collection of terms describing a single subject area. Terminography in the field of global shipping activities is assigned to register the scope of terms used by all its participants. Teaching terminology is a fundamental process connected with understanding main professional concepts. The creation of "English-Russian Dictionary of Maritime Terms" is an opportunity to analyse the scope of basic terminological entries, to select the most frequently used ones, to arrange them in the way which provides necessary references in spelling and meaning, suggests most frequently used collocations and examples, gives short descriptions of this or that term or phenomenon. Definitions make the basis of the bilingual dictionary. The theory and practice of terminography states the importance of close interdisciplinary contacts between a linguist and a specialist purposing the clear and professionally correct wordings for definitions.

Professional expertise carried out for this type of a dictionary sometimes demonstrates diversity in understanding the same concept by different experts. The problem is solved through finding the definition which suits all parties and corresponds to the best samples found in different sources.

"The English-Russian Dictionary of Maritime Terms" (10 000 entries) has been designed for different users: students, seamen, employees of shipping companies and ports, etc. In the field of Maritime education and training "The Dictionary" is intended for students in Navigation and Marine Engineering of all forms of training specialised in sea and river transportations.

The bilingual dictionary with English-Russian equivalents is due to the use of English and Russian (alongside French, Spanish, Chinese and Arabic) as working languages according to the International Maritime Organisation regulations. The aim of the authors is to display a modern terminological corpus consisting of the most common words and phrases, selected on the basis of their frequency in the authentic English materials that belong to the sphere of the world's merchant fleet operations.

The innovative character of the "Dictionary" manifests in describing the latest trends in the shipping industry and technological equipment of the commercial fleet having caused the appearance of new terms and their subsequent entry into the database of Maritime English word stock. The work makes the emphasis on the priorities of the practical use of the "Dictionary".

With the increasing influence of global processes in economy including shipping industry, the development of national terminography is aimed to create contemporary pieces of reference literature as well as teaching/learning materials for the further use in the field of economy and education.

The dictionary focuses on the specific means of arranging the lexical items: in the first place, this is spelling of the item; the second, the meaning of the word or term presented in the form of a definition or explanation; the third, its usage in context demonstrating combinability; fourth, interpretation of a word or term with synonyms, antonyms or illustrations. Since a special term is always associated with a scientific concept (theory, idea) or an object with specific properties, its definition is verified with the help of existing lexicographic and terminographic sources and considered through the practical experience of experts involved in maritime navigation and operation of ship machinery.

Basic principles of the Dictionary's design are the authenticity of the language material and its communicative nature required for educational purposes.

Linguistic units are defined as items most widely used in the texts thematically relevant with requirements of the International Maritime Organization, including: Personal data and personal documents. Interviewing. Letters. Numbers. Colors. Messages and message markers. Languages, nationalities, flags. Maritime professions and ranks. Responsibilities. The location of objects. Countries, bodies of water. Other geographical names. Maps and nautical charts. Longitude. Latitude.

Vessel: size, parts, structure, functional areas. Types of ships, their names and purpose. Movement and direction: navigation, sailing directions. Engineering. Mechanics. Equipment onboard ships. Marine diesel engines. Auxiliary machinery. Tools and instruments. Shiphandling. Navigation bridge. Engine room. Watches and watchkeeping. Standard Marine communication phrases (IMO SMCP). Weather and climate. Natural disasters. Emergencies. Actions of the crew in case of emergency. Emergency equipment. Mooring, anchoring. Pilotage. Port and its infrastructure. Port's administration, sanitary inspection, customs. Navais. Buoys. Beacons. Cargo. Types of cargo. Loading and unloading. Water and food supplies. Ordering and delivery of ship's supplies. Accidents. Injuries. Diseases. Onboard first aid. Basic ship documents.

The entries of the "The Dictionary" are:

- common words (room, response, direction);
- general science units (information, achievement, to promote, ability, experiment);
- general maritime terms (marine, maritime, boat, ship, vessel, engine);
- special terms used in navigation and marine engineering (crankshaft, mooring, list, capsized).

The entries are arranged in alphabetical order according to the pattern "English" - "Russian" equivalents.

The dictionary consists of two parts – the Main part and the Appendix. The Appendix provides the readers with linguistic and professional information.

4. LINGUISTICALLY-CENTRED CONCEPT AND MARITIME ENGLISH TEXT BOOKS

Innovations are introduced in the area of Maritime English Study Packs development. English for Specific Purposes is considered to be the methodological foundation of ME. It is known that ESP is a sphere of teaching English language including Business English, Technical English, Scientific English, English for medical professionals, English for waiters, English for tourism, etc. According to National Curriculum for Universities [2], ESP serves to meet specific needs of learners, makes use of underlying methodology and activities of the discipline it serves, is centred on the language appropriate to these activities in terms of grammar, vocabulary, study skills. It's worth mentioning that ESP is generally intended for intermediate or advanced students who are well trained in language. If so, Maritime English for beginners can't be cent per cent ESP creation. Then, what should it be?

Within the framework of the innovation project the Introductory Maritime English Course has been developed. The Introductory Maritime English Course is purposed for the first- and second-year non-native learners of English who are about to commence their Maritime academic career through a Bachelor Degree in Navigation or Marine Engineering. Three influences behind the development of the study book and as such its contents and the form are taken into consideration. These are the a) lack (or absence) of professional Maritime experience of the students, b) lack (or absence) of

Maritime English language proficiency, c) lack of General English language competency.

The study book is supposed to meet the interests and requirements of the future seafarers in a new sphere of knowledge whereby the coordinated work of English language teachers and specialist teachers is required. The Course fills in the current gaps and adds new necessary requirements by combining English language and Maritime specialist skills with the existing General English language foundations. The Introductory Maritime English Course is a study pack consisting of four parts: Student's Book, Workbook, Teacher's Notes/Resource Book. The Course contains 23 Units:

- 1) Introducing oneself
 - 2) Discussing personal details: Occupation
 - 3) Discussing personal details: Country. Language. Nationality
 - 4) Describing places and locations
 - 5) Describing quantity.
 - 6) Using geographical names for geographical places.
 - 7) Discussing people: Home, family, education, likes and dislikes.
 - 8) Describing daily routine, functions and duties.
 - 9) Describing directions.
 - 10) Describing motion (1)
 - 11) Describing motion (2)
 - 12) Describing living and non-living objects (1)
 - 13) Describing living and non-living objects (2)
 - 14) Describing events and activities.
 - 15) Describing a process.
 - 16) Describing machines, machinery and tools.
 - 17) Describing results. Reporting recent events.
 - 18) Describing the whole and its parts.
 - 19) Comparing living and non-living objects.
 - 20) Describing ways of doing things: Active and passive actions.
 - 21) Describing past events.
 - 22) Discussing future actions.
 - 23) Classification of living and non-living object.
- Revision. Self-assessment. Supplements.

Each Unit is represented by descriptions of the teaching goals and learning outcomes in Language Skills Development, Maritime English Professional Competence and General English Language Competences. Each Unit has a strict structure consisting of tasks, a series of exercises, self-assessment materials, supplementary materials, comments and keys. The concept of The Course presumes that both General English and Maritime English sources should be used in the process of learning. It certainly helps to broaden the potential skills of the language use in different life situations including professional ones. The learning materials used in the Course are mainly adaptation of real-life situations and scenarios with references provided. The exercises have been developed specifically for maritime students. Self-assessment materials take into account the idea of International Standards. The Course contains tasks purposing the individual work of students: notes, reports, PowerPoint presentations, etc.

The Study Pack is of blended type, which implies the combination of General English, General Maritime

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English and Maritime English contents. The authentic materials of this professional spectre cover the students' needs in:

- vocational (thematically relevant) texts;
- supportive grammar instructions and exercises;
- reading practices;
- writing assignments;
- listening strategies;
- speaking strategies;
- materials of control;
- self-assessment programmes for each Unit.

The curriculum is built up on the basis of LCC. The priorities are given to general English competency which includes abundant communicative work on the level of a sentence/phrase and a text/description, narration, etc. Thus, LCC presumes the implementation of units of EGP (English for general purposes) at the input aiming the assessment of ESP in the format of ME abilities as the outcome through skills development. A linguistically-centred course model for the 1st and 2nd year non-native maritime English learners becomes a step-by-step problem-solving procedure. See Table 1 as a sample.

Table 1. Course Syllabus excerpt

INPUT	LANGUAGE PROFICIENCY	SKILLS DEVELOPMENT	PROFESSIONAL COMPETENCE	OUTCOMES/ ABILITY
<p>Unit 6. Using geographical names for geographical places. <i>Unit structure:</i> 6.1. Describing geographical places: Chokeypoints 6.2. Latitude/ Longitude system 6.3. Geographical names 6.4. Maps and charts</p>	<p>Phonology: Pronunciation of geographical names. Grammar: Articles and no article with geographical names. Pronouns and the sentence structure. Vocabulary: Nomenclature of names of oceans, biggest rivers. Nouns denoting water bodies. Latitude. Longitude. Maps and Charts.</p>	<p>Reading: for gist, for detail Writing: Making notes. Summary. Listening: understanding coordinates of places Speaking: <i>Topics:</i> Describing a locality.</p>	<p>SMCP: Explaining ship's position Topics: Maps and charts. Weather maps. Latitude. Longitude.</p>	<p>Self-Assessment Test for Unit 6: <i>Reading</i> <i>Writing</i> <i>Listening</i> <i>Speaking</i> Ability of reading a map or a chart, using appropriate geographical names, giving coordinates</p>

Working out the teaching and learning strategies is extremely important both for a teacher and students because it helps to distribute time and to specify teaching/learning goals:

Step 1. Defining modules and units. This step pre-sets blocks of units based on the functional principles of GE materials arranged thematically.

Step 2. Developing skills. This section represents parameters of practical acquisition of GE and ME through interaction and textual work in speaking, reading, listening and writing. Selection of series of tasks for the language classroom activities is decisive in creating maritime communicative context.

Step 3. Attaining abilities in ME. This part describes the material, further skills development and abilities in ME according to IMO course model.

Step 4. Performing assessment. This step is represented by the parameters of academic control of language proficiency level, scope of materials, thematic contents and contents for different skills, frequency and types of control, tasks for individual work, etc. Efficiency of assessment is usually evaluated through ME national and international standards and may be measured in terms of certification.

The inner set-up of maritime English gives a clue to the format of a blended type of the Maritime English Introductory Course. For non-native learners of ESP it's important to have an additional support in grammar, phonology, word formation, in order to make further progress in ME learning.

5. INFORMATIONAL AWARENESS AND MARITIME ENGLISH PROFICIENCY

Linguistically centred concept makes it possible to evaluate the systemic and structural features of Maritime English. Systemic (pertaining to a system, or affecting an entire system) character of ME appear in the set of specialised (mainly, technical) sublanguages interacting among themselves to describe in the most appropriate manner all material and non-material entities known in maritime affairs. General English is the foundation in ME training. General Maritime English is represented by language resources used in language samples (oral and written) on the subjects common for both navigators and marine engineers. Maritime English for navigation. ME for marine engineering. ME for ship's documents and correspondence. ME for radio communication. SMCP.

IMO conventions, regulations, manuals. ME semiotic systems (international code of signals, a phonetic alphabet, etc.). ME for visual aids (nautical charts, graphs, tables, pictures, diagrams, etc.).

This innovation gives a new approach in understanding what an informational search for educational purpose is and how to make it more efficient. This work focuses on the analysis of the strategy of informational search and aims to describe search tools/engines (defined as a software programme that searches a database and gathers and reports information that contains or is related to specified terms, or as a website whose primary function is providing a search engine for gathering and reporting information available on the Internet or a portion of the Internet). Virtual informational resources as Wikis encyclopedias (knowledge management systems) suggest examples of search modes. The process of using Wiki is accompanied by selection of wordings which are characterized by various degrees of non-native English learner's language proficiency. This factor greatly influences the final result of the search. The multifunctional character of maritime English, which manifests in its systemic and sub-systemic parameters, causes particular difficulties referring to terminological variations. In this situation good English language proficiency is required. Maritime English has many specific features in comparison with General English. Hence, there are many difficulties in the search process. For example: you want to find information about navigation and you come to know that this is a general term meaning "the act of setting and holding a course; navigation of an airplane solely by instruments; navigating according to the positions of the stars" and, of course, "the guidance of ships or airplanes from place to place". This is also the term of computer users meaning "the skill or process of plotting a route in the Internet, for example". When using the world-wide web, one should make a correct wording (i.e. corresponding to the search subject which sometimes appears in your head as a native-language version). The use of online dictionaries for better naming of the subject you look for is very helpful (For example: «судомеханик» - is not "an engineer" but "a marine engineer"; «морская карта» - is not "a sea map" but "a nautical chart"). It's a language teacher's work to explain the core Maritime words (often, the oldest ones) "marine, maritime, seafaring, sea, nautical, navigation, ship, deck, bosun" and others, which serve as markers referring the concept to the Maritime sphere, for example: "marine engineer, maritime education, marine diesel, ship's parts, bosun's chair, nautical school, etc." It's reasonable to consider these words as Maritime English basics which should be taught to students helping them to perform the Internet search and to differentiate spheres of knowledge.

For the search of information, our students usually use Google. Beginning in 1996, Stanford University graduate students Larry Page and Sergey Brin built a search engine called "Back Rub" that used links to determine the importance of individual web pages. By 1998 they had formalised their work, creating the

company you know today as Google.

Wikis are a valuable source of information. Ward Cunningham, the developer of the first wiki software, WikiWikiWeb, originally described it as the simplest online database that could possibly work.

When choosing the website or selecting texts or statistics, copying pictures or images, one should be attentive about its content. For non-native learners in this situation good English language proficiency is required.

6. "EARLY SPECIALISATION" IN ME TRAINING AND SEARCH FOR NEW FORMATS IN EDUCATIONAL TECHNOLOGIES

The term "*early specialisation*" presumes acceleration of ME training process during the 1st and 2nd years of studies at higher Maritime institutions. Currently the two syllabi (one for English for general purposes and the other – for English for specific purposes) work in parallel in Ukraine.

It's expedient, in order to save time and finance, to implement the blend type of a syllabus and a study pack corresponding to the concept.

Advantages come primarily with the teaching/learning strategy:

- higher motivation in studying English as a whole;
- clearer goals for improving English in new educational environment;
- immediate introduction of general maritime English alongside the major subjects;
- transparent picture of students' language skills development;
- registration of individual student's progress dynamics.

Since the innovation project is underway, the main concern is the format of the study pack parts. The government programme "Computerised teaching/learning materials for professionally oriented subjects" pre-sets the possibility of choosing the most appropriate option. The research in digital education has shown a contradictory situation. *First*, educational technology is a growing academic field which recognises the centrality of technology in education. *Second*, digital technologies have greatly changed the ways in teaching and learning languages by opening a wealth of opportunities to interact with people and resources. *Third*, digital technologies are only a part of the entire scope of formats and methods of foreign language teaching. *Fourth*, foreign language teaching more often involves blended techniques (face-to-face vs. e-teaching practices) [3].

On the basis of the facts studied, it becomes clear that the ME teaching/learning materials have to be developed in particular formats assuming the following considerations as far as the students' needs are concerned:

- Face-to-face teaching/learning materials;
- Interactive character of e-materials;
- Additional e-training with a virtual teacher;

- ‘Twinning’ (combined language and specialist online training) on some topics.

7. CONCLUSIONS

It is well known that the labour market is the best criterion in one’s professional achievements. The students of Maritime institutions are lucky to have the opportunity of assessing their ME language proficiency during on-board practice. The way from the Academy or University to the international crew of a merchant vessel usually lies via a crewing company which certifies the students’ readiness to be enrolled for the work at sea. Fluent English is considered to be the gate pass in a long line to get the job of the type.

As far as the Maritime English is concerned, the competitive atmosphere in the field of MET is quite natural. According to BIMCO (Baltic and International Maritime Council), Eastern Europe has become increasingly significant with large officer numbers. The Far East and South East Asia, and the Indian sub-continent remain the largest sources of supply of ratings and are rapidly becoming a key source of officers. Thus, improved training and recruitment levels need to be maintained to ensure a future pool of suitably qualified and high calibre seafarers [4].

The majority of countries mentioned above are non-English speaking countries. So, the main task of the ME instructors is to develop efficient methods, techniques and up-to-date materials facilitating the process of teaching English to non-native learners.

Any advancement in education, in ME, in particular, is mostly successful with government support.

Basically, the changes and innovations influence the current situations by means of textbooks and

curriculums. The ultimate goal of these changes is the work for improving national standards. In Ukraine, some of national standards in Maritime English are attached to Specialist National Standards. The separate set of ME requirements does not exist. The innovation project developed in Kyiv State Maritime Academy might become the beginning of such activity through

- specifying requirements for different levels of ME language proficiency;

- development of teaching/learning materials in different formats;

- implementation of new types of assessment including computerised testing for full-time and part-time students.

8. REFERENCES

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