

## **THE IMPORTANCE AND EFFECTIVENESS OF THE TEACHING OF MARITIME ENGLISH (ESP) IN A MERCHANT MARITIME ACADEMY: INVESTIGATING THE OPINIONS AND POINTS OF PARTIES INVOLVED**

**Sofia Koutsogianni**

*Greek Merchant Marine Academy of Aspropyrgos (Greece)*

**Abstract.** It is widely known that the English language is the working language of shipping industry. In 2001, the International Maritime Organisation (IMO) adopted the Standard Marine Communication Phrases (SMCP) and via one of its major Conventions, STCW 95, the teaching of Maritime English – a core competence of all Deck officers used to minimize communication problems onboard vessels – has become a mandatory part of the education of officers in every white-listed training institution. The focus of the present study was the evaluation of the importance and the effectiveness of the teaching of Maritime English as seen by the students of a Merchant Marine Academy in Greece. The adopted research design was a combination of both qualitative and quantitative research so as to reach a better and more objective understanding of the research problem. However, it has to be mentioned that due to their bulk, the data collected by using structured interviews (qualitative method) were not analysed due to time limitations – their analysis, though, is to be conducted in the immediate future. The results of the quantitative leg of the research are extremely interesting, providing food for thought while at the same time creating space for further research.

**Keywords:** International Maritime Organisation; sandwich courses; Standard Marine Communication Phrases; adult education; Communicative Language Teaching; English for Specific Purposes; Maritime Education and Training; IMO model course 3.17

### **Introduction**

With the term “shipping” or “shipping industry”, reference is mainly made to all the activities and operations that are connected to the seaborne trade of goods. What controls and regulates the shipping industry of all countries is the International Maritime Organisation (IMO) and, to a great extent, its relevant legislation, i.e.

the International Conventions and Codes which fall under three main categories or fields: protection of human life and property at sea, protection of the marine environment and, finally, training and certification of the seafarers. Within this framework, the English language has been established not only as the “working language of the shipping industry”, but also as an important constituent of seafarers’ professional and communicative competence. Not only does the satisfactory level of the English language competence of the seafarers facilitate the smooth operation of the shipping business, but it also safeguards the safety of vessels, of human lives and of the marine environment, the last one having being developed to an issue of crucial importance. Investigations carried out in relation to the human factor and shipping disasters – focusing mainly on communication and behaviour – have shown that the cause of almost one third of the marine accidents is attributed to the insufficient command of Maritime English. One characteristic example are the VTS (Vessel Traffic Service) controlled areas, where communicatively relevant factors contribute for up to 40% of collisions involving the human element, most of them caused by failures in radio communications (Trekner 2007; Zariati, Ziarati & Calbas 2008).

Given that more than 80% of all SOLAS vessels are multinational and, mainly, multilingual floating communities, where the required Maritime English skills are not always feasible, the International Maritime Organisation (IMO), attempting to minimize Maritime English communication problems in 2001, adopted Standard Marine Communication Phrases (SMCP) and via one of its major Conventions, the International Convention for the Standards of Training, Certification and Watchkeeping for Seafarers (STCW/95, as amended) they became mandatory part of the education of officers at all white-listed training institutions around the world (Trekner 2007). Following the adoption of STCW, 1978, a number of IMO Member Governments suggested that IMO should develop model training courses to assist not only in the implementation of the Convention, but also to assist the seafarers in achieving the skills regarding new developments in maritime technology (2015). With reference to the IMO Model Course 3.17 for the teaching of Maritime English – developed to cover the competencies of the English language in the STCW Convention, 1978, as amended - training institutions and academies should note that this specific Model Course more than fulfils the competencies regarding the English language contained in the STCW. The key to the successful implementation of the above Model Course is an understanding of the aims and principles of communicative teaching and learning processes – International Maritime Organisation, 2015. Maritime English (ME) is an umbrella term which refers to the English language used by seafarers both at sea and in port and by individuals working in the shipping and shipbuilding industry and it lies in the domain of workplace English; maritime terminology poses a challenge due to its specialization and unfamiliarity (for

example, passengers sleep in *cabins*, meals are cooked in the *galley*, use of *port* instead of left) (Bocanegra-Valle 2013).

Maritime English (ME) is a branch of ESP and is a very important part of the Maritime field; the International Maritime Organization (IMO) designed the 3.17 model course on Maritime English so as to meet the requirements of the STCW Convention, 1978, and the minimum standards in the STCW Code (International Maritime Organization 2015). English for Specific Purposes (ESP) focuses on developing procedures appropriate to learners whose fundamental purpose is to learn English for mainly educational or professional reasons and not simply to study the language system (Dudley-Evans 2000). ESP courses are centered on the context: the English language is taught as a subject related to the learners' real needs in a particular field of human activity – consequently, learners are highly motivated as they are aware of the specific purposes for learning English (Popescu 2000).

### **1. The importance and the effectiveness of teaching Maritime English: research design**

When it comes to teaching Maritime English to students of Academies and institutions, it is of primary importance for the instructor to make sure that students have not only assimilated and absorbed in the best possible way all the terminology taught but mainly – in a practical level – that they can effectively apply it, i.e., the acquired terminology, so as to carry out the everyday routine activities assigned to them during their sea service and employment onboard vessels, initially as deck officers and, at a later stage, as fully qualified professionals in the maritime industry. This refers us to the “sandwich principle” implemented in maritime education: Maritime Education and Training (MET) in Europe is based more or less on this principle with the 2<sup>nd</sup> and 3<sup>rd</sup> year of cadetship followed by two institution time periods ashore separated by a sea period (Woo 1985). The education and training of Merchant Marine officers in Greece, which takes place in Merchant Marine Academies, consists of six academic semesters and two semesters of practical training onboard vessels, the first upon the completion of the 2<sup>nd</sup> semester and the second upon the completion of the 6<sup>th</sup> semester. One important and fundamental advantage of the “sandwich principle” is that it connects the market with the education/training fields. Merchant Marine Academies in Greece fall under the higher technical and vocational education: their mission is both the theoretical as well as the practical training of the future deck officers of the Merchant Navy.

The previously mentioned points are strongly reflected in the amended Convention for the Standards of Training, Certification and Watchkeeping (STCW, 2010, Manila Amendments): the requirements in the field of Maritime Education and Training (MET) are considerably high, especially when it comes to the issue of communicative competence in the use of Maritime English (Trenker & Cole

2012). In order for all the above to be achieved, the IMO designed and developed a relevant training course, the IMO Model Course 3.17 for the teaching of Maritime English, which aims not only at facilitating and helping the seafarers develop and acquire skills and knowledge in relation to the usage of the English language (Table A – II/1 of STCW Code, see Figure 1), but also to their achieving of communicative competence in relation to specific standards of competency (“... *The course is intended to provide guidance to assist Administrations in developing their own training programmes to achieve the standards of competency for English language as set out in the STCW Convention, 1978, as amended*”). The methodology of the above Model Course is based on the principles of the Communicative Approach: this approach meets the requirements of the STCW Convention, 1978, in that it promotes practical, communicative competence in English at a level that will enable trainees to satisfy the competences related to the English language set out in the STCW - International Maritime Organisation (2015). It is of crucial importance for seafarers to “be able to use and understand English”; this means that s/he can interpret messages s/he hears and reads correctly and can also respond to these messages appropriately and comprehensibly. When seafarers have acquired this ability, they actually prove their communicative competence in English -International Maritime Organisation, 2015.

The IMO Model Course 3.17 consists of two parts: the research part, on which the present paper is based, focuses on the teaching of Specialised Maritime English (SME), i.e. the second part of the Model Course. The overall purpose of SME is “*to achieve the effective communication competences of specific maritime duties through the application of the English language*” (2015). The notion of communicative competence - defined as the ability to use the appropriate language in the appropriate circumstances - is a crucial one (Hymes 1972; Jeon 1985) and can be achieved by adopting a communicative approach to language teaching (CLT): its focus being not only on the functional dimension of language, but also on the structural within a communicative framework (Littlewood 1981).

As already mentioned, the research was carried out in the School of Deck Officers of a Merchant Marine Academy in the Attica Prefecture and its aim was to determine the importance and effectiveness of teaching English Maritime terminology (Maritime English and Standard Marine Communication Phrases/SMCP) in the specific Academy, as these are perceived by students of the 2<sup>nd</sup> and 5<sup>th</sup> Semester, as well as of graduates (quantitative part of the research). The research questions that had to be answered were the following:

- i) how important do you consider the teaching of Maritime English
- ii) how effective was the application and the practice of all your language skills (listening, speaking, reading, writing) by using the already acquired knowledge of Maritime English to perform your everyday routine and communication duties onboard, i.e., your actual workplace

**STCW Code**

**Part A: Mandatory standards regarding provisions of the annex to the Convention**

**Table A-II/1 Navigation at the operational level**

**Competence**

Use the IMO Standard Marine Communication Phrases and use English in written and oral form.

**Knowledge, understanding and proficiency**

*English language*

Adequate knowledge of the English language to enable the officer to use charts and other nautical publications, to understand meteorological information and messages concerning ship's safety and operation, to communicate with other ships, coast stations and VTS centres and to perform the officer's duties also with a multilingual crew, including the ability to use and understand the IMO Standard Marine Communication Phrases (IMO SMCP).

**Criteria for evaluating competence**

English language navigational publications and messages relevant to the safety of the ship are correctly interpreted or drafted.

Communications are clear and understood

**Table A-II/4 Navigation at the support level**

**Competence**

Steer the ship and comply with helm orders in the English language

**Knowledge, understanding and proficiency**

Helm orders

**Criteria for evaluating competence**

Communications are clear and concise at all times and orders are acknowledged in a seamanlike manner.

**Figure 1.** IMO Model Course, IMO 2015

iii) are there any factors that negatively affect the effective teaching of Maritime English

iv) are there any factors (in relation to teaching methodology, use of audio-visual aids, teaching material) that you consider to have a positive effect towards a more effective teaching of Maritime English

The conducted research falls under the “embedded design” category, meaning that the collection of primary qualitative data preceded the collection of quantitative data – however, as it was previously mentioned the latter data were not analysed due to their volume which affected the space limitations of the accompanying dissertation thesis, leaving, thus, space for a further analysis. From this point on, our focus will be the quantitative section of the research which started in December 2018 with the distribution of the designed questionnaire. For the collection of data, students of the 2<sup>nd</sup> and the 5<sup>th</sup> current semesters, as well as graduates of the Academy who had already entered the job market of the Merchant shipping industry were used as units of analysis. The prerequisite for the choice of students as participants (target population) in the research was the completion of at least one of their two training periods onboard (each of them

has a duration of 6 months) so that they could evaluate the extent to which the teaching of Maritime English helped them to cope both linguistically and communicatively with the real workplace conditions, as prescribed by STCW. In order to facilitate the accessibility of the students to the questionnaire used as a research tool (Likert scale used), a database had been created four months ahead of the actual research (June 2018). The questionnaire was initially forwarded to the participants' email account as a link (using the docs.google.com platform) and in a second stage – as a time saver – by using a social media platform, which, as an alternative, increased the response rate to the research (responses were submitted from graduates who were underway in regions such as America or Singapore). It has to be noted here that before the questionnaire distribution, the participants had been informed – both orally and in writing by means of an accompanying letter – of the details of the research so as to receive their consent. The questionnaire consisted of seven parts: the first one is the demographics part (participants' gender), the second and the third part include items (questions) about the General education and the foreign languages background of the participants; the fourth part consists of questions about the study in the Merchant Marine Academy, whereas the fifth unit includes items about the expectations with regard to the course of Maritime English the current students had before starting their studies. The sixth unit relates to issues /items covering the study period in the Academy and, finally, unit seven relates to and includes questions about the extent to which they use Maritime English in the actual workplace.

So, generally speaking the items included in all parts cover the following important issues: participants' profile, their educational background (including that of foreign languages), their demands/expectations (before the beginning of their studies) and their evaluation of the Maritime English course (while studying) and the extent to which they actually used this specific terminology after their graduation (while onboard). This last point or the starting point of the research related, in fact, to the learning objectives and communicative competences that had to be acquired by the (current) students and graduates of the Academy as per the STCW Code. Furthermore, the participants were asked to give their opinion about the extent to which they considered the knowledge of General English as a facilitator towards the assimilation/internal absorption of Maritime English and to which extent the previously mentioned objectives and their expectations are achieved within the given educational framework. Note that a pilot stage of the research and the questionnaire was conducted before the actual distribution took place.

## **2. The importance and effectiveness of teaching Maritime English: data presentation and analysis**

The collected data was statistically analysed and interpreted: the Alpha Cronbach internal consistency coefficient in our case was calculated to 0.912.

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.864	.912	30

**Figure 2.** Cronbach Alpha coefficient (Koutsogianni 2019)

After applying descriptive statistics for the analysis of the data of the quantitative research (approximately 200 responses were submitted) the following points are worth mentioning: 78% of the participants were male whereas 22% female. When it comes to the participants' educational background, 44% are secondary education graduates, 23% university graduates (it is worth mentioning at this point that there is a considerable percentage of the students in Merchant Marine Academies in Greece who are university graduates and they choose the option of vocational education and training due to the variety of options that are provided for professional life) and there is also a 1% of postgraduate degree holders. As it is seen from the above characteristics, the trainees/students in the Merchant Marine Academy are all adult learners and their education and training falls under the wider field of Adult education: adult education includes all those forms of education that approach the students-trainees as a responsible and mature person that has a strong saying when participating in the learning process, in which s/he transfers any former- learning or not – s/he might have while at the same time has and develops sets of expectations from this learning process. These expectations relate to the learning objectives adult learners set to be achieved upon completion of their participation in the learning process and which might relate to both behavioral changes, as well as to developing and growing new professional/work skills (Rogers 2002). In the MET case, all of the above relate to how the trainees will develop new skills and acquire knowledge that will help adapt both linguistically and, mainly, communicatively in a new workplace, that of vessels.

As far as the English language competence is concerned, there is a remarkable 10.5 % of the participants with no English language certificate, whereas 25% of them have reached the C2 level and a 44% are B2 certificate holders. There was, also, a 21.5% of the participants who had demonstrated a considerable sea service before starting their studies in the Academy. With regard to the significance, the participants – those with an experience of working onboard before their studies - attribute to the study of Maritime English, 34.9% of them answered that Maritime English is highly important, whereas 65.1% that it is very important. Finally, 2.3% of the participants who had already had some sea service answered that they did not use Maritime English at all. Apart from the descriptive statistics, some

remarkable correlations between different answers were made. For example, female participants were not so often in need to use Maritime English in comparison to male participants. This related to the fact that female participants tend to choose shortsea vessels instead of seagoing (male participants) in which there is not so urgent demand – according to their answers – to use Maritime English in routine operations. Some further correlations are: the participants with a higher educational background consider that studying Maritime English is very important and would like to have more terminology included in the coursebooks. The participants with a high English language level competence believe that the knowledge of the General English facilitates the study of Maritime English and they would like to see different Maritime English classes based on the different language level. There is, also, a general, tendency or “desire” – based on correlations between different questions – for more terminology to be included, for a change in the coursebooks tasks format. Also, many of them believe that by studying Maritime English they could understand the use of SMCP onboard much better, that the knowledge they assimilated helped them carry out their routine duties onboard and another percentage (61%) stated that more hours of studying Maritime English are needed and a 49.3 % percentage believe that Maritime English is highly important in their workplace.

### **Conclusions and summary**

The completion of the research and the collection of quantitative data not only prepares the ground for considering all those factors that acted as “obstacles” and which prevented us from reaching better and – why not – perhaps more objective and comprehensive results (the research could then be repeated under different and more detailed and enlightening results. The choice of the above field of research was – by nature – a very challenging and interesting task for the researcher. However, it led to certain practical issues: the volume of primary data collected with the use of the qualitative methodology made its analysis and presentation impossible to include in the dissertation thesis. Such an analysis would certainly positively affect the reliability and validity indexes of the research, but, due to the word limit of the dissertation thesis for which the research was conducted, the abovementioned exclusion was a one-way choice. However, this prepares the space and room for further detailed analysis and interpretation. Another practical issue that came up during the design stage of the research related to the questionnaire designed for the quantitative part: it would be preferable if less items were included or if some of them were merged into two. Another point, which relates to the quantitative part of the research, is the extent of objectivity with which all the participating students answered the questionnaire: there are thoughts as to whether the relationship of “instructor-student” affects the participants when answering certain questionnaire items.

On the other hand, the completion of the research gives rise to the question how all of the above can be used to the benefit of MET and for improving the effectiveness of the teaching of Maritime English: an increase in the number of hours assigned to the course of ME (Maritime English) or even enriching the ME sessions and classes with some real-life and work-place resembling projects that could act as a simulation of the real workplace. To sum it up, all research is certainly a starting point for further work to be done and undoubtedly will provide invaluable food for thought; consequently, the present research should be seen as an opportunity for further work that would take us some steps ahead.

## NOTES

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✉ **Mrs. Sofia Koutsogianni**

ORCID iD: 0009-0005-7321-4784

Greek Merchant Marine Academy of Aspropyrgos

Aspropyrgos, Greece

E-mail: koutsoyanni@gmail.com