# Practical On-Board Experience as a Significant Predictor of Positive Perception towards English Language Learning

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The English language is becoming increasingly important in both English-speaking and non-English-speaking countries. In the modern age, although English language skills are not the only criterion for career development, they are an indispensable tool for career advancement or obtaining a job. The aim of this study is therefore to investigate whether experience in the professional field can be considered a significant predictor of maritime students' attitudes towards the need to learn English. For this purpose, students of undergraduate studies of Marine Engineering at the Faculty of Maritime Studies, University of Split, with no work experience (N<sub>1</sub>=65) and students of the *Special Training Programme* of Marine Engineering at the Faculty of Maritime Studies with at least three years practical experience (N<sub>2</sub>=38) have been asked about their attitudes towards this issue. The participants completed a newly constructed questionnaire on the need for English as a professional language. The results show a very high reliability of the questionnaire, (r ranges from 0.83 to 0.95 with p<0.01; t<0.73 with p>0.67). Furthermore, the Mann–Whitney U test has revealed a significant difference in the attitudes between the groups of participants for five out of the six variables (p<0.01). Additionally, it can be concluded that experience is a significant predictor of attitude, which implies that English language learning is a necessity in maritime practice.

#### **KEYWORDS**

- ~ Maritime English
- ~ SMCP
- ~ Experience in practice
- ~ Survey on students' attitudes

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#### **1. INTRODUCTION**

Today English is an international language for maritime communication in a multinational, multicultural, and multilingual environment. Communication plays a major role in the maritime industry, whether among crew members, officers, ship-to-ship, ship-to-shore, or VTS to ships (Berg et al., 2013; Ahmed, 2013; Astratinei, 2016). On merchant ships, 80% of the crew belong to different nationalities with different languages (Hanzu-Pazara and Arsenie, 2010). The term Standard Marine Communication Phrases (SMCP) was adopted at the International Maritime Organization (IMO) conference in 2001 and has been used ever since. It is the international standard for all maritime communication (Trenkner and Cole, 2010). SMCP was to be studied first as a set of structural patterns in the language, and then for language teaching and practical work (Zhang and Cole, 2018). It aims at reducing language-and communication-related accidents (Ziarati et al., 2009). In a study of the most common causes of accidents at sea, it has been found that more than 50% of incidents were due to some form of miscommunication, and of these incidents, just under half were due to improper use of SMCP and IMO-approved phrases (Sanches et al., 2021). It is therefore important to equip all seafarers with sufficient knowledge of how to communicate effectively at sea (Žanić Mikuličić, 2016). Thus, the IMO Maritime English (ME) Model Course 3.17 is the International Maritime Organisation's guide for the systematic education and training of the various English language skills as specified in the Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW) (Vodopija et al., 2017; Pritchard 2011). The first model course was developed in 1999 with the involvement of the company Marlins and a British maritime publishing house. The International Maritime Organisation updated the Maritime English (ME) Model Course 3.17 in 2015, with certain guidelines on two categories: General Maritime English (GME) and Specialized Maritime English (SME) (Martes, 2015). However, the standard English relating to marine engineering officers in the SMCP only covers a small part of specific terminology. It does not cover a large part of general English as proposed in other IMO model courses (Jeon et al., 2022; Vidhiasi and Syihabuddin, 2022). Since English is considered the common language at sea, Maritime English (ME) builds on the basic vocabulary of English and adds unique phrases and terms to eliminate possible ambiguities. It primarily serves three main functions: ship-to-ship communication, ship-to-shore communication, and internal communication on board a ship (Maftei and Popescu, 2005).

Knowing these facts, it is correct to state that Maritime English (ME) definitely belongs to English for Specific Purposes (ESP), but learning specific and predetermined phrases without learning grammar is not the right way to acquire a language (Gatehouse, 2001; Pašalić and Plančić, 2018). Moreover, authors Dudley-Evans and St. John (1998) suggested certain features that describe English for Specific Purposes, such as adherence to the methodology, grammar, lexis, etc. of the disciplines it serves. Depending on the specific situations, a different methodology is used from that for general English. Teaching methods and techniques depend primarily on the linguistic and communicative needs of the students and on the specificity of the discourse (Demydenko, 2012). Maritime English for marine technology is the use of English in its sublanguage based on the descriptions of the developments of propulsion engines, the development of the diesel engine and other innovative devices (Dževerdanović-Pejović, 2017). In addition, ship's manuals and instruction books for marine engineers have a very sophisticated vocabulary and are an indispensable tool for familiarising with the ship's systems (Đurović, 2022).

Bearing all this in mind, the author has tried to conclude whether experience is the one of the factors that affects attitudes regarding the necessity of English language learning. The purpose of this paper is to find out whether first-year students of Marine Engineering at the Faculty of Maritime Studies have the same understanding of the importance of learning English as students in the *Special Training Programme* of Marine Engineering who already have extensive experience on board.

Similar research has been conducted in several publications showing significant regional differences in English proficiency based on prior learning experiences, type of language acquisition and strategies used (Chuqiao, 2016). In their work, the authors (Jalaluddin et al., 2008) emphasised that, in addition to language barriers, the social environment, known as the "language environment", can also influence students' attitudes towards the need for language learning. The results of their research show that the absence of a social component has worsened language acquisition efforts.

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#### 2. METHODOLOGY

This chapter explains the methodology of the research, i.e. describes the sample size, limitations, sample of variables, data collection, and data processing methods. The paper will try to identify the significance of the difference between two independent groups of respondents on a continuous scale in order to determine whether experience on board is a significant predictor of a positive perception towards English language learning. If the observed variables should deviate significantly from the normal distribution, the Mann–Whitney U test with Lillieforce correction will be used as a statistical method. To do so, a number of assumptions must be fulfilled. The most important are: (a) randomness of the sample, and (b) independence of observations (Gravertter and Wallnau, 2004). The methodological workflow will be shown in four steps.



Figure 1. Methodological workflow in four steps

The four steps that are shown in Figure 1 can be identified in the paper: (1) a detailed structure of the participants; (2) sample of variables; (3) description of data collection; and (4) data processing methods.

As seen in Figure 1, the first step of the methodology is the sample of participants. Since any qualitative research must follow a sampling plan that describes the sampling parameters (Dörnyei, 2007), the author will briefly introduce it in order to harmonise it with the objectives of the study. The sample has been formed of two groups of students. The first group of participants (Group 1) consists of students in the Special Training Programme of Marine Engineering at the Faculty of Maritime Studies who have at least three years of professional experience in the maritime field (N<sub>1</sub>=38), while the second group of participants (Group 2) are firstyear students of the undergraduate programme in Marine Engineering ( $N_2$ =65). They do not have experience and are acquiring skills that will prepare them to work in the maritime sector. All the participants were fully informed about the purpose of the study, as well as the fact that they could stop the study at any time without any penalty. The study has been conducted in accordance with the Declaration of Helsinki. Since there is always a limit to how many participants to reach, the point is that a well-designed qualitative study requires a relatively small number of participants to obtain the necessary data. Furthermore, at least 30 participants are required per group for correlational research. In quantitative research, a sample of 30 to 500 units is recommended, while in experimental research conducted in a controlled environment, successful research can be conducted with a sample of only 10 to 20 units (Dörnyei, 2007; Đurović and Bauk, 2022). In this study, three students were excluded from the final count and analysis, since they already had some experience on board. In the end, the sample yielded a total number of 103 students, 38 students in the first group and 65 in the second group. Considering the very limited sample, the author has carefully considered the statistical method that could be used.

In the next step, a newly constructed questionnaire was introduced. It was created exclusively for the purposes of this research, so its psychometric properties, i.e. its validity and reliability, had to be tested. The

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validity was assessed in a prior in-depth interview with several experts in the field of English (having more than 30 years of professional experience), who helped with suggestions on how to construct and redesign some of the questions. The experts provided several details to be clarified. The questionnaire consists of six statements that the participants assess their agreement with on a Likert-type scale from 1 to 5. The responses are: 1 - I strongly disagree, 2 - I disagree, 3 - I neither agree nor disagree, 4 - I agree, and 5 - I strongly agree.

The statements are: "Knowledge of Maritime English is important in the maritime profession" (KNOWME); "Inadequate knowledge of Maritime English can lead to major misunderstandings and accidents on board and at sea" (INADEQME); "Rate your knowledge of English" (KNOWEL); "Knowledge of English terminology is important in the maritime profession" (PROFTERM); "Knowledge of English grammar is important in the maritime profession" (KNOWGR); "Learning grammar in English classes is important" (LEARGR).

In the third step the description of data collection follows. The data has been collected in paper form after lectures finished in June 2023 at the Faculty of Maritime Studies. The structure of the questions and the way to fill in the questionnaire were explained in detail to the participants and no one had any additional questions or doubts. The participants were informed about the aim of the study and the questionnaire was completed anonymously. Because a test-retest had to be done, 22 randomly selected students from both groups were asked to fill out the questionnaire again after fourteen days.

In the last step of the workflow, the type of statistical method was introduced. The author chose descriptive statistics, Pearson correlation, the Mann–Whitney U test, and the Kolmogorov–Smirnov test. The parameters of descriptive statistics – the mean  $\pm$  standard deviation, minimum and maximum – were calculated for all items. Since the reliability was investigated using the test-retest method, the Pearson correlation coefficient between the test and retest and the within-subjects t-test were used to measure reliability. The Kolmogorov–Smirnov test was used to test the normality of the distribution of the variables. Consequently, a non-parametric Mann–Whitney U test was used together with a continuity correction to examine the differences between the groups. All calculations were performed using the statistical analysis system Statistica 14.0.1.25 (TIBCO Software Inc. (2020). Data Science Workbench, version 14, http://tibco.com). The first error type was set to  $\alpha = 5\%$ .

#### 3. RESULTS AND DISCUSSION

The results have shown a very satisfactory reliability, with the correlation coefficient being significant and ranging from 0.83 to 0.95, and the within-subjects t-test pointed to the non-existence of significant differences (t<0.73 with p>0.67). Due to the non-parametric nature of the data, the Mann–Whitney U test, together with continuity correction, has been used for the identification of differences between groups. Table 1 shows the identification of students' attitudes regarding the necessity of English language learning. Furthermore, to check the internal consistency of the questionnaire, a Cronbach alpha coefficient ( $\alpha$ ) calculation has been performed. The value of  $\alpha$ =0.75 indicates an acceptable questionnaire structure.

A chi-squared statistical test ( $\chi^2$ ) has been performed to test the relationship between the variables:

$$\chi^{2}(df,N) = \sum_{i,j \in \mathbb{N}} \frac{(o_{ij} - e_{ij})^{2}}{e_{ij}}$$
(1)

where df represents the degree of freedom, N is the number of observed data,  $o_{ij}$  is the observed data, and  $e_{ij}$  is the expected data (Pearson, 1900). For the variable KNOWME df is 4, the calculated  $\chi^2$ =72.22, the critical value (CV) is 7.80 and p<0.01; for the variable INADEQME df is 3, the calculated  $\chi^2$ =44.47, the critical value (CV) is 7.81 and p<0.01; for the variable KNOWEL, df is 4, the calculated  $\chi^2$ =3.25, the critical value (CV) is 9.48 and p<0.01; for the variable PROFTERM, df is 4, the calculated  $\chi^2$ (4.103)=32.13, the critical value (CV) is 0.99 and p<0.01; for the variable KNOWGR, df is 4, the calculated  $\chi^2$ =59.46, the critical value (CV) is 9.48 and p<0.01. Finally, for the variable LEARGR, df is 4, the calculated  $\chi^2$ =73.24, the critical value (CV) is 9.48, and p<0.01. Based on the results, it can be noted that all the statements have a significant p-value, which can be interpreted



as there being no hidden correlations between the two observed groups. Also, the chi-squared test indicates that the questionnaire is well structured.

Given the importance of this research, an analysis of the distribution of all variables has also been undertaken. Therefore, frequency histograms with an approximate normal distribution curve are presented for each of the six variables. The Kolmogorov–Smirnov test has been applied to examine whether the used variables have a distribution that can be claimed not to deviate with any statistical significance from the normal. In the histograms below (Figure 2 to Figure 7), there is an overview of the distributed data of all variables used.



Figure 2. Histogram of the data with approximate normal distribution of the data for variable KNOWME



Figure 3. Histogram of the data with approximate normal distribution of the data for variable INADEQME

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Figure 4. Histogram of the data with approximate normal distribution of the data for variable KNOWEL



Figure 5. Histogram of the data with approximate normal distribution of the data for variable PROFTERM



Figure 6. Histogram of the data with approximate normal distribution of the data for variable KNOWGR





Considering the broken normality of the distribution of the results, non-parametric techniques have been used. The Kolmogorov–Smirnov test shows to have been violated in all six histograms. As seen from Figures 2, 3, 4, 5, 6, and 7, the curves are not symmetrical, therefore it is obvious that the normality of the distribution is broken.

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	Variable	M±SD	Med	Min	Max	KS-p
Group 1	KNOWME	3.27±0.81	3.00	1.00	5.00	<0.01
	INADEQME	3.37±0.95	3.00	2.00	5.00	<0.01
	KNOWEL	3.58±0.72	4.00	2.00	5.00	<0.01
	PROFTERM	3.31±0.96	3.00	1.00	5.00	<0.01
	KNOWGR	2.24±0.89	2.00	1.00	5.00	<0.01
	LEARGR	2.58±0.70	3.00	1.00	4.00	<0.01
Group 2	KNOWME	4.87±0.34	5.00	4.00	5.00	<0.01
	INADEQME	4.71±0.46	5.00	4.00	5.00	<0.01
	KNOWEL	3.47±0.89	3.50	1.00	5.00	<0.01
	PROFTERM	4.42±0.64	4.50	3.00	5.00	<0.01
	KNOWGR	4.08±0.78	4.00	3.00	5.00	<0.01
	LEARGR	4.32±0.72	4.00	3.00	5.00	<0.01

 Table 1. Descriptive statistics parameters for both groups of participants – means and standard deviations

 (M±SD) and median (Me)

Legend: "Knowledge of maritime English is important in the maritime profession" (KNOWME); "Inadequate knowledge of Maritime English can lead to major misunderstandings and accidents on board and at sea" (INADEQME); "Rate your knowledge of English" (KNOWEL); "Knowledge of English terminology is important in the maritime profession" (PROFTERM); "Knowledge of English grammar is important in the maritime profession" (KNOWGR); "Learning grammar in English classes is important" (LEARGR) (source: Author)

Table 1 shows the descriptive statistics for the variables included in the study. As is clearly shown in Table 1, the data collected are not normally distributed and consequently are not appropriate for parametric statistical methods. The Kolmogorov–Smirnov test suggests that all the variables show a statistically significant deviation from the normal distribution. Furthermore, it can be noted that the maximum value of all variables is 5,



with the exception of LEARGR in Group 1, which is 4. The minimum value of the variables KNOWME and INADEQME in Group 2 is 4. This can be interpreted as a result of the students' practice and of the fact that the *Special Training Programme* students understand the real, everyday situation on board, i.e. the importance of English on board. They have more experience than the first-year students and therefore their opinion on English as such should be relevant.

	Rank sum	Rank sum					
	Group 1	Group 2	U	z	р	Z adjusted	p adjusted
KNOWME	3151.00	2414.00	136.0	7.5784	<0.01	7.95	<0.01
INADEQME	2948.50	2616.50	338.5	6.2281	<0.01	6.50	<0.01
KNOWEL	1958.00	3607.00	1217.0	-0.3701	0.71	-0.40	0.69
PROFTERM	2816.00	2749.00	471.0	5.3446	<0.01	5.58	<0.01
KNOWGR	3095.50	2469.50	191.5	7.2083	<0.01	7.41	<0.01
LEARGR	3165.50	2399.50	121.5	7.6751	<0.01	7.96	<0.01

Table 2. Results of Mann–Whitney U rank sum: Groups 1 and 2

Legend: "Knowledge of maritime English is important in the maritime profession" (KNOWME); "Inadequate knowledge of Maritime English can lead to major misunderstandings and accidents on board and at sea" (INADEQME); "Rate your knowledge of English" (KNOWEL); "Knowledge of English terminology is important in the maritime profession" (PROFTERM); "Knowledge of English grammar is important in the maritime profession" (KNOWGR); "Learning grammar in English classes is important" (LEARGR) (source: Author)

As shown in Table 2, there is a statistically significant difference between the groups on five out of the six variables: KNOWME, INADEQME, PROFTERM, KNOWGR and LEARGR. There is no observed difference in the variable knowledge of English (KNOWEL). The results of the research indicate that there is a difference in attitudes for five out of the six variables, which can be interpreted as a significant predictor of maritime students' attitudes towards the necessity of English language learning. The participants with experience showed that learning English at university is important. In other words, the results show a clear distinction pointing to the better awareness of seafarers in terms of the necessity of English language. Although the results of the other mentioned research differ from ours, the conclusions are quite similar. All in all, language is sometimes a crucial factor in the study of many maritime accidents caused by human error. Misunderstandings in language can lead to serious accidents on the ship.

Some issues could affect the procedure and reproducibility of this type of research. Namely, the study has potential limitations. These could be found in the small sample of participants and variables and in the use of non-parametric methods. It is therefore subject to bias and may have affected the model estimates. Although valid conclusions can only be drawn with a sufficient sample size and sufficient variables, it was possible to recognise significant relationships between the groups in the data.

#### 4. CONCLUSION

Today seafarers need to be fluent in English to communicate successfully on board and ashore for personal and professional purposes. Ship crews are multinational, so shipping accidents can be fatal if there are communication problems between crew members on board. Standard Maritime English (SMCP) applies to navigation officers and efforts are being made to reduce the number of accidents caused by human factors. The use of English at sea is considered very important as it serves social, technical, and everyday purposes. Its



primary goal is to ensure the safe functioning of a ship with enhanced internal and external communication. The results of this survey indicate the importance of a good knowledge of English on board. The participants agree that poor English language skills of professionals at sea can endanger the lives of crew and passengers. Nevertheless, English language skills are considered one of the critical factors in the direct assessment of seafarers' competencies, especially on international voyages. To meet the demands of the global shipping industry, it is essential to thoroughly review the domestic Maritime English language training system and compare it with the results of this research. Students differ in age and experience, and certainly have different views when it comes to the importance of learning English for Specific Purposes. It is only in real life and practice that seafarers realise how necessary the English language is. Fortunately, during their first sea voyages, marine engineers have the opportunity to make real-life contacts through professional activities. In this context, the idea of early specialisation can be helpful. Early specialisation in Maritime English education means that the introductory course is already conducted in the first semester of the Maritime English curriculum. Priority is given to General English competence, which includes communicative work at the level of sentences/phrases and for texts/descriptions, narratives, etc. The results, i.e. certain differences in the variables, show that experience plays a key role in the importance student attach to English language learning. This research confirms the growing role and importance of General English within the Maritime English curriculum. In the future, similar research could be conducted in another language with students from different universities and countries.

#### **CONFLICT OF INTEREST**

The author declares no conflict of interest.



#### REFERENCES

Ahmed, H.J., 2013. The Impact of Maritime English Communication Training for Non-native English Language Speakers Concerning the Competency of Seafarers: Iraqi maritime sector case study-dissertation. World Maritime University, Malmö, Sweden.

Astratinei, C., 2016. Communication Problems in a Mixed Crew Environment. Scientific Bulletin of Naval Academy, 19(1), pp.13–16. Available at: https://doi.org/10.21279/1454-864X-16-I1-002

Berg, N., Storgård, J., and Lappalainen, J., 2013. The Impact of Ship Crews on Maritime Safety. Publications of the Centre for Maritime Studies, University of Turku A, 64, pp.1–48.

Chuqiao Z., 2016. Motivational effects of standardized language assessment on Chinese young learners. Cogent Education, 3:1. Available at: https://doi.org/10.1080/2331186X.2016.1227020

Demydenko, N., 2012. Teaching Maritime English: A linguistic approach. Journal of Shipping and Ocean Engineering, 2(4), p.249.

Dörnyei, Z., 2007. Research Methods in Applied Linguistics. Oxford: Oxford University Press.

Dudley-Evans, T. and St. John, M.J., 1998. Developments in English for Specific purposes: A multi-disciplinary approach. Cambridge: Cambridge University Press.

Đurović, Z. and Bauk, S., 2022. Testing Corpus Linguistics Methods in ESP Vocabulary Teaching. Journal of Teaching English for Specific and Academic Purposes, pp.319-337. Available at: https://doi.org/10.22190/JTESAP2202319D

Đurović, Z., 2022. Key ESP Words and Phrases. In: 9th International scientific conference Technics and Informatics in Education – TIE 2022, 16-18 September 2022. Available at: https://doi.org/10.46793/TIE22.379Q

Dževerdanović-Pejović, M., 2017. Verbs in the Standard Marine Communication Phrases as a Sublanguage of Maritime English. Logos & Littera: Journal of Interdisciplinary Approaches to Text, 1(4)

Gatehouse, K., 2001. Key Issues in English for Specific Purposes (ESP) curriculum development. The Internet TESL Journal, 7(10), pp.1–10. Available at: https://api.semanticscholar.org/CorpusID:59897782

Gravetter, F.J. & Wallnau, L.B., 2004. Statistics for the Behavioral Sciences (6th edn.). Belmont: Wadsworth.

Hanzu-Pazara, R. and Arsenie, P., 2010. New challenges in the Maritime Academics, Latest trends on Engineering Education. In: Proceedings of the 7th WSEAS International Conference on Education and Educational Technologies, Corfu Island, Greece, 22–24 July 2010, pp. 299–304.

IMO Standard Marine Communication Phrases. Available at: https://wwwcdn.imo.org/localresources/en/OurWork/Safety/Documents/A.918(22).pdf

Jalaluddin, N.H., Norsimah, M.A., and Kesumawati, A.B., 2008. The Mastery of English Language among Lower Secondary School Students in Malaysia: A linguistic analysis. European Journal of Social Sciences, 7(2), pp.106–119

Jeon, T.Y. et al., 2022. Have Non-Native English-Speaking Marine Cadet Engineers Been Educated Appropriately? Journal of Marine Science and Engineering, 10(8), p.1018. Available at: https://doi.org/10.3390/jmse10081018

Maftei, C. and Popescu, F., 2005. A Linguistic Description of Shipbuilding and Maritime English. Annals of the "Dunărea de Jos" University of GALAŢI Fascicle XIII, New Series. Issue 24, XXIII, 2005 pp. 96 - 105

Martes, L., 2015. Revision of IMO model course 3.17 Maritime English. Focus on Maritime English to Auxiliary Personnel. TransNav: International Journal on Marine Navigation and Safety of Sea Transportation, 9(3). Available at: https://doi.org/10.12716/1001.09.03.02



Pašalić, M. and Plančić, B., 2018. Issues Affecting Selection and Evaluation of ESP Teaching Materials. Transactions on Maritime Science, 7(02), pp.210–218. Available at: https://doi.org/10.7225/toms.v07.n02.011

Pritchard, B.P.P., 2011. On some Aspects of Mobility in Teaching Maritime English. PROCEEDINGS OF IMEC 23, p.5

Sánchez-Beaskoetxea, J. et al., 2021. Human Error in Marine Accidents: Is the crew normally to blame? Maritime Transport Research, 2, p.100016. Available at: https://doi.org/10.1016/j.martra.2021.100016

Shen, J. and Zhao, Z., 2011. Language Characteristics and Written Requirements of the Maritime English Correspondence. English Language Teaching, 4(1), pp.185–189. Available at: https://dx.doi.org/10.5539/elt.v4n1p185

Trenkner, P. and Cole, C., 2010. Raising the Maritime English Bar: The STCW Manila amendments and their impact on Maritime English. In: Proceedings of the 22nd International Maritime English Conference, pp. 3–16

Vidhiasi, D.M. and Syihabuddin, S., 2022. Maritime English: Teaching English for Maritime Sciences or Teaching Maritime Sciences in English? Saintara: Jurnal Ilmiah Ilmu-Ilmu Maritim, 6(1), pp.71–77. Available at: https://doi.org/10.52475/saintara.v6i1.152

Vodopija, D., Skračić, T. and Žanić-Mikuličić, J., 2017. Marine Engineers' Views on ESP Teachers. Book of Proceedings, p.141.

Žanić Mikuličić, J., 2016. Effective Learning of Language Functions in Maritime English. [Online] Available at: https://doi.org/10.2507/daaam.scibook.2016.15

Zhang, Y. and Cole, C., 2018. Maritime English as a Code-tailored ESP. Ibérica, (35), pp.145–170.

Ziarati, R., Ziarati, M., and Çalbaş, B., 2009. Improving Safety at Sea and Ports by Developing Standards for Maritime English. In: Bridge Conference, Finland.

