# The Attitudes of Students and Teachers, Future and Former Seafarers, Towards the Importance of Maritime English

# Stavovi studenata i nastavnika, budućih i bivših pomoraca, o važnosti pomorskog engleskog jezika

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#### **Abstract**

Maritime English is an important factor in education of seafarers and acquisition of their highest powers and competencies. The aim of this research was to look into the attitudes of the students of Nautical Studies at the Maritime Departments of the University of Dubrovnik and the University of Zadar towards the importance of Maritime English with regard to their education and future profession. The study also included teachers at MET institutions in Dubrovnik, Zadar, Rijeka and Kotor. Two online questionnaires were created in Google forms and distributed during March/April 2021. The data were analysed by means of Fisher's Exact Test and Spearman's correlation. Both students and teachers set forth a positive attitude towards the importance of being fluent in English.

### **KEY WORDS**

maritime education and training **General English Maritime English English language proficiency** 

#### Sažetak

Pomorski engleski predstavlja važan čimbenik u obrazovanju pomoraca i stjecanju najviših ovlaštenja i kompetencija. Cilj ovog istraživanja bio je istražiti stavove studenata Nautike na pomorskim odjelima Sveučilišta u Dubrovniku i Sveučilišta u Zadru o važnosti pomorskog engleskog jezika u njihovom obrazovanju i budućoj profesiji. U istraživanju su sudjelovali i nastavnici zaposleni u MET institucijama u Dubrovniku, Zadru, Rijeci i Kotoru. Dva upitnika izrađena su u Google forms formatu i distribuirana su tijekom ožujka i travnja 2021. Podaci su analizirani pomoću Fisherovog egzaktnog testa i Spearmanove korelacije. I studenti i nastavnici su iznijeli pozitivan stav o važnosti dobrog poznavanja engleskog jezika.

#### 1. INTRODUCTION / Uvod

With a total number of 14,291 masters and officers holding valid certificates of competency, Croatia is ranked 5th among EU member states according to the statistical review provided by EMSA [11]. Evidently, Croatian seafarers occupy highranking positions. Hence, their level of responsibility and accountability entails the mastery of competencies required by the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW). To meet these standards IMO has produced model courses that could be helpful to Maritime education and training (MET) institutions. As for the English language, IMO Model Course 3.17 Maritime English sets forth guidelines that could be the framework for courses provided by MET institutions.

The Chapter II of the Manila Amendments to the Seafarers' Training, Certification and Watchkeeping (STCW) Code that pertains to the standards regarding the master and deck department puts the knowledge of English on an equal footing with other requirements [14]. Under SOLAS regulation V/14. 4 "English shall be used on the bridge as the working language for bridge-to-bridge and bridge-to-shore safety communications as well as for communications on board between the pilot and bridge watchkeeping personnel\*1, unless those directly involved in the communication speak a common language other than English" [13]. The verb shall indicates compulsion and demonstrates the

pomorsko obrazovanje i osposobljavanje opći engleski pomorski engleski STCW jezična sposobnost za engleski jezik

value assigned to Maritime English. Trenkner and Cole point out that "the modal verb "shall" as used in the regulation mentioned above postulates the highest degree of commitment in legal contexts, e.g. conventions, laws, decrees, regulations, provisions, etc., indicating orders or instructions" [15]. Furthermore, Maritime English means a restricted and economical use of language, both in its oral and written form. As for written communication, the content has to be clear and concise, without redundant and ambiguous phrases. The message should convey the sender's intention. Shen and Zhao state that complex, uncommon and flowery words can bring trouble to the reader and cause misunderstanding [12]. Therefore, apart from their technical knowledge and experience, seafarers are obliged to have a good command of English to be successful and efficient in this multicultural working environment.

The knowledge of English has a significant impact on seafaring industry. Lack of English language knowledge has detrimental effects on the professional and social life of seafarers on board ships. English serves as a means of connecting people and improving the seafarers' professional competence. Thus, this research investigated the opinions of the students at the Maritime Departments of the University of Dubrovnik and the University of Zadar and of the teachers from several MET institutions regarding the importance of English. The study displays the importance of knowing General and Maritime English in seafaring industry.

KLJUČNE RIJEČI

<sup>1\*</sup> The IMO Standard Marine Communications Phrases (resolution A.918(22)) as amended, may be used in this respect

## 2. LITERATURE REVIEW / Pregled literature

Professional needs dictated the development of the language for specific purposes (LSP). In the context of maritime affairs, English for specific purposes is Maritime English. LSP teachers have to provide students with language knowledge covering all other technical subjects. LSP teachers teach English while at the same time studying the content they teach. Dudley-Evans and St John replaced the term teacher with the term practitioner to direct attention to a comprehensive English for specific purposes (ESP) work that does not come down to pure teaching but incorporates a myriad of other aspects. They set forth the following five key roles of ESP practitioners: teacher, course designer and material provider, collaborator, researcher, evaluator [6]. In terms of the role a practitioner has as a teacher, the aim is to teach students the content that is concerned with clearly specified topics. When engaged in such a venture the key focus of teachers is not on general English (although this aspect of language is not neglected), but are engaged in teaching the content specific for a particular profession. Bojović explains that ESP focuses on needs analysis and effective communication in the job assignments [2].

According to Dudley-Evans and St John, the role of ESP practitioner as collaborator implies close cooperation with subject specialists [6]. Bojović points out that "ESP teachers are not specialists in the field, but in teaching English, their subject is English for the profession but not the profession in English" [2]. In the context of Maritime English (ME), this process encompasses consulting colleagues who are not only teachers but experienced seafarers as well. Cole, Pritchard, Trenkner introduced the term twinning that implies teamwork between the ESP and technical-subject teachers [4]. English teachers at Maritime departments have a very demanding task to cover the content offered within technical subjects. According to the guidelines provided in IMO Model Course 3.17 which pertain to trainer's experience "the instructor will be a qualified teacher of English language who has been trained in the Communicative Approach to English language teaching and who has a broad understanding of maritime subjects" [8]. Although ESP teachers are not seafarers, they have to be very well acquainted with the topics in this field. Before transferring their knowledge to learners, practitioners have to acquaint themselves with the subject-matter they teach. As for the terminology, it is quite common that certain terms mean something completely different in maritime affairs, as opposed to their meaning in everyday English. Thus, students have to understand the terminology of a topic they are involved in prior to acquiring the content. It is not uncommon that students ask their English teacher to thoroughly explain some aspects of the subject-matter that pertains to their future profession and not to the language. Therefore, ESP teachers constantly improve their knowledge in disciplines other than language teaching. Since LSP teaching is needs-related it is utterly important to establish cooperation with colleagues that teach technical subjects. Thus, ESP teachers get a better insight into the subject-matter from their peers who apply their working knowledge and experience to teaching. In this highly demanding profession it is important to always keep up with the trend because human lives are at stake. According to Bojović, the provided content should be authentic, relevant, and up-to-date [2]. When students acquire this basic knowledge within tertiary education, then they gain a knowledge level that facilitates adaptation to the working conditions. Mönnigmann and Čulić Viskota state that the onset of a marine accident requires specific communication competences. They

further point out that ship management must be able to use clear communication in any challenging situation. Very serious accidents occurred as a result of linguistic incompetence of crewmembers [9].

The Final Report produced under the MARCOM (MARitime COMmunication) research project ascertained that "If there are also problems of communication contributing to a lack of mutual confidences, suspicions and misunderstandings, then the opportunities for human errors leading to dangers to the ship, the people on board and the environment, are greatly increased". Lack of clear communication in the following categories may lead to catastrophic incidents: ship to shore communication, under pilotage, in areas of traffic congestion, and when giving and carrying out orders under normal and emergency situations. The accidents presented in the Report were caused by the human factor (96%), while a high percentage of them (40%) occurred due to failure in communication [7]. Thus, English is an essential tool in the maritime sector with multinational crews. According to Chirea-Ungureanu and Georgescu, the development of global economy made us all a part of an interdependent international network which demands a clear and accurate communication. Unfortunately, it often happens that sent and received messages do not match. This causes a communication breakdown that becomes a safety risk [3].

Most ships have multinational crews and it is difficult to interact and socialize without the use of one common language. Bocanegra-Valle states that seafarers need to be *internationally-oriented*, and hence their knowledge of English is a prerequisite for successful communication, both at the personal and occupational level. Furthermore, the author points out that English is an indispensable tool at sea in a *multinational*, *multicultural and multilingual environment* [1]. This is substantiated by the Section B-VI/1 of the STCW convention: "Although not universal, by common practice English is rapidly becoming the standard language of communication for maritime safety purposes, partly as a result of the use of the IMO Standard Marine Communication Phrases" [14].

Čulić-Viskota states that without multicultural awareness one cannot accomplish the required tasks. By familiarizing themselves with different cultures, crewmembers can bridge the differences. The behaviour of crewmembers should be guided by consideration and respect. Thus, communication is important in linguistic and social aspects [5]. This is emphasised in the Section B-VI/1 Guidance regarding mandatory requirements for safety familiarization and basic training and instruction for all seafarers of the STCW convention:

"Given the international character of the maritime industry, the reliance on voice communications from ship to ship and from ship-to-shore, the increasing use of multinational crews, and the concern that crew members should be able to communicate with passengers in an emergency, adoption of a common language for maritime communications would promote safe practice by reducing the risk of human error in communicating essential information" [14].

Pyne and Koester define the ship as a "working environment, learning environment and social environment". Safety in coastal navigation, confined areas, or emergency situations depends on clear communication between crew members, between crew and passengers on cruise ships, and between crew and pilots. Apart from Maritime English, crew members must be fluent in everyday language to express themselves and interact in normal and emergency situations [10].

### 3. METHODOLOGY / Metodologija

This survey was designed to gain insight into the students' and teachers' attitudes towards the importance of Maritime English for the seafaring profession. Two online questionnaires were created in Google forms and distributed during March/April 2021 to students in Croatia (Dubrovnik and Zadar) and teachers in Croatia and Montenegro (Dubrovnik, Zadar, Rijeka, and Kotor). A total of 133 students and 20 teachers took part in this study. Anonymity was guaranteed to avoid response bias.

One questionnaire was distributed to students of Nautical Studies at the Maritime Departments of the University of Dubrovnik and the University of Zadar, with 83 students from Dubrovnik and 50 from Zadar. This survey consisted of 7 questions aimed at getting insight into students' attitudes that were measured on a 5-point Likert scale (1 – strongly agree, 2 – agree, 3 – neither agree nor disagree, 4 – disagree, 5 – strongly disagree). Respondents were asked to rate the following: their knowledge of general English, if Maritime English they learned encompassed the terminology they would use when working on ships, if the knowledge of general English was important for their profession, if Maritime English was as important as other technical subjects, if Maritime English terminology appeared in other technical subjects, if being fluent in English meant improved efficiency on board, and if their knowledge of English meant reducing the risk of maritime accidents.

The second questionnaire was filled out by 20 lecturers at maritime higher education institutions in Dubrovnik, Zadar, Rijeka, and Kotor. In the first question the respondents had to specify the position they were appointed to at university. The second and the third questions referred to the length of their work experience on board ships and to the Certificate of Competence they held. In the fourth question they specified the type of ship they worked on. The other seven questions related to their attitudes towards General and Maritime English and were measured on a 5-point Likert scale (1 - strongly agree, 2 - agree, 3 - neither agree nor disagree, 4 - disagree, 5 - strongly disagree). Respondents were asked to rate the following: their knowledge of General and Maritime English, the presence of Maritime English terminology in their lectures, if they encouraged students to use Maritime English, if Maritime English was as important as other technical subjects, if the fluency in English meant improved efficiency on board ships, if the knowledge of English meant reducing the risk of maritime accidents. Finally, respondents were asked to elaborate on their experience in relation to the importance of English in maritime industry.

The data were analysed by means of Fisher's Exact Test and Spearman's correlation. Fisher's Exact Test was used to show associations between the two observed groups of students studying in Dubrovnik and Zadar. Spearman's correlation test was used to measure the degree of association between various variables.

### 4. RESULTS AND DISCUSSION / Rezultati i rasprava 4.1. Results – Students / Rezultati - Studenti

This research looked into the attitudes of the students of Nautical Studies in Dubrovnik and Zadar regarding the importance of English in seafaring industry. In addition to the students, the teachers at MET institutions who are former seafarers were asked to provide their opinion on this topic but were not included in the statistical analysis.

In the two observed groups of students, 37.6% respondents studied in Zadar and 62.4% in Dubrovnik.

Table 1 *Tablica 1*.

		N	%
Group	Zadar	50	37,6%
	Dubrovnik	83	62,4%
	Total	133	100,0%

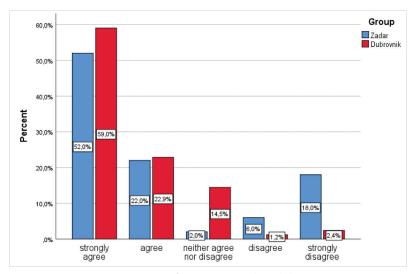
Source: Author

In the first question the students were asked to give opinion whether they considered themselves fluent in General English (Table 2). The majority of the students studying at the University of Dubrovnik considered themselves fluent in English (59% strongly agree, 22.9% agree). Students from Zadar responded in a similar way, 52% of them strongly agreed, and 22% agreed. However, in the category strongly disagree we can see that the value of Fisher's exact test was p <0.05, which means that a statistically significant difference was observed between these two groups, with a much higher share of respondents from Zadar stating they strongly disagreed (18.0%).

Table 2 I am fluent in General English and Group *Tablica 2. Tečno govorim opći engleski* 

			Gro	up	Total	<b>~</b> *
			Zadar	Dubrovnik	IOtal	p*
I am fluent in General English	strongly gree	Ν	26	49	75	0,001
		%	52,0%	59,0%	56,4%	
	agree	Ν	11	19	30	
		%	22,0%	22,9%	22,6%	
	neither agree nor	Ν	1	12	13	
	disagree	%	2,0%	14,5%	9,8%	
	disagree	Ν	3	1	4	
		%	6,0%	1,2%	3,0%	
	strongly disagree	Ν	9	2	11	
		%	18,0%	2,4%	8,3%	
Total		Ν	50	83	133	
		%	100,0%	100,0%	100,0%	

\*Fisher's Exact Test Source: Author



Graph 1 l am fluent in General English Grafikon 1. Tečno govorim opći engleski

Source: Author

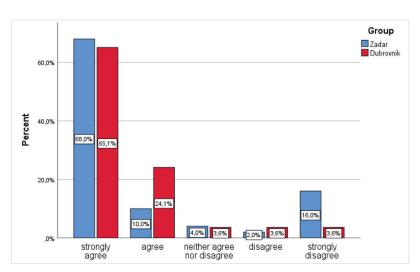
In the second question that refers to maritime terminology (Table 3) most of the students from Dubrovnik (65.1% strongly agreed and 24.1% agreed) indicated that it was covered in classes. This opinion was confirmed by the students studying in Zadar

(68% strongly agreed and 10% agreed). The value of Fisher's exact test showed a statistically significant difference with a much higher share of respondents from Zadar who stated they strongly disagreed (16.0%) as compared to Dubrovnik (3.6% strongly disagreed).

Table 3 Maritime English taught at the Maritime Department covers the maritime terminology I will need in my future profession and Group *Tablica 3. Pomorski engleski koji se predaje na Pomorskom odjelu pokriva pomorsku terminologiju koja će mi trebati u struci* 

			Grou	ıp	Total	<b>~</b> *	
			Zadar	Dubrovnik	iotai	p*	
Maritime English taught at the Mari-	strongly agree	N	34	54	88	0,042	
time Department covers the maritime	agree	agree	%	68,0%	65,1%	66,2%	
terminology I will need in my future profession			Ν	5	20	25	
p.o.ession		%	10,0%	24,1%	18,8%		
	neither agree nor	N	2	3	5		
	disagree	%	4,0%	3,6%	3,8%		
	disagree	N	1	3	4		
		%	2,0%	3,6%	3,0%		
	strongly disagree	Ν	8	3	11		
		%	16,0%	3,6%	8,3%		
Total		N	50	83	133		
		%	100,0%	100,0%	100,0%		

\*Fisher's Exact Test Source: Author



Graph 2 Maritime English taught at the Maritime Department covers the maritime terminology I will need in my future profession and Group Graph 2. *Pomorski engleski koji se predaje na Pomorskom odjelu pokriva pomorsku terminologiju koja će mi trebati u struci*Source: Author

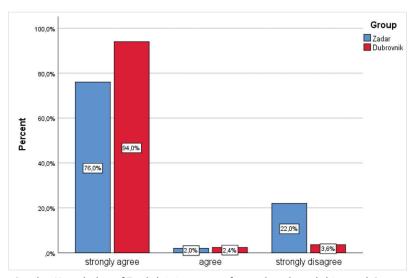
As presented in Table 4, a total of 94% of students from Dubrovnik and 76% of students from Zadar expressed their opinion that English was important for working on board ships. The value of Fisher's exact test showed a statistically significant difference with a much higher share of respondents from Zadar who stated they strongly disagreed (22.0%).

The majority of the participants strongly agreed (75.9% from Dubrovnik and 50% from Zadar) that Maritime English was as important as other technical subjects (Table 5). A much higher share of respondents from Zadar (18.0%) responded they strongly disagreed.

Table 4 Knowledge of English is important for work on board ships and Group Tablica 4. Znanje engleskog jezika važno je za rad na brodu

			Grou	ıp	Tatal	*
			Zadar	Dubrovnik	Total	p*
Knowledge of English is important for	strongly	Ν	38	78	116	0,002
work on board ships	agree	%	76,0%	94,0%	87,2%	
	agree	Ν	1	2	3	
		%	2,0%	2,4%	2,3%	
	strongly	Ν	11	3	14	
	disagree	%	22,0%	3,6%	10,5%	
Total		Ν	50	83	133	
		%	100,0%	100,0%	100,0%	

\*Fisher's Exact Test Source: Author



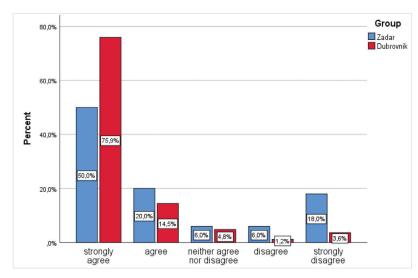
Graph 3 Knowledge of English is important for work on board ships and Group Grafikon 3. Znanje engleskog jezika važno je za rad na brodu

Source: Author

Table 5 Maritime English is as important as other technical subjects and Group Tablica 5. Pomorski engleski je važan koliko i ostali stručni predmeti

			Grou	ap qu	Total	<b>~</b> *
			Zadar	Dubrovnik	IOtal	p*
Maritime English is as important as	strongly agree	Ν	25	63	88	0,007
other technical subjects		%	50,0%	75,9%	66,2%	
	agree	Ν	10	12	22	
		%	20,0%	14,5%	16,5%	
	neither agree nor	Ν	3	4	7	
	disagree	%	6,0%	4,8%	5,3%	
	disagree	Ν	3	1	4	
		%	6,0%	1,2%	3,0%	
	strongly disagree	Ν	9	3	12	
		%	18,0%	3,6%	9,0%	
Total		Ν	50	83	133	
		%	100,0%	100,0%	100,0%	

\*Fisher's Exact Test Source: Author



Graph 4 Maritime English is as important as other technical subjects and Group Grafikon 4. Pomorski engleski je važan koliko i ostali stručni predmeti

Source: Author

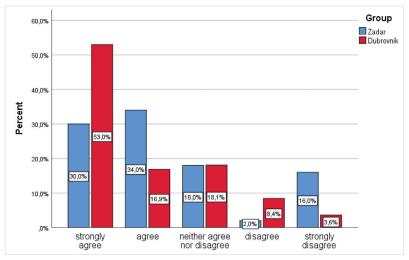
When asked whether they encountered English while learning other technical subjects, 53% of the students in Dubrovnik strongly agreed, 16.9% agreed, while 18.1% neither agreed nor disagreed (Table 6). The students from Zadar

strongly agreed (30%) and agreed (34%). This shows that the presence of English is more pronounced in technical subjects at the Maritime Department in Dubrovnik than in Zadar.

Table 6 I encountered Maritime English terminology while learning other technical subjects and Group Tablica 6. Terminologiju pomorskog engleskog jezika susreo sam dok sam učio ostale stručne predmete

			Grou	qı	Total	n*
			Zadar	Dubrovnik	IOlai	p*
I encountered Maritime English terminol-	strongly agree	Ν	15	44	59	0,004
ogy while learning other technical subjects		%	30,0%	53,0%	44,4%	
	neither agree nor	Ν	17	14	31	
		%	34,0%	16,9%	23,3%	
		Ν	9	15	24	
		%	18,0%	18,1%	18,0%	
	disagree	Ν	1	7	8	
		%	2,0%	8,4%	6,0%	
	strongly disagree	Ν	8	3	11	
		%	16,0%	3,6%	8,3%	
Total		Ν	50	83	133	
		%	100,0%	100,0%	100,0%	

\*Fisher's Exact Test Source: Author



Graph 5 I encountered Maritime English terminology while learning other technical subjects and Group Grafikon 5. Terminologiju pomorskog engleskog jezika susreo sam dok sam učio ostale stručne predmete Source: Author

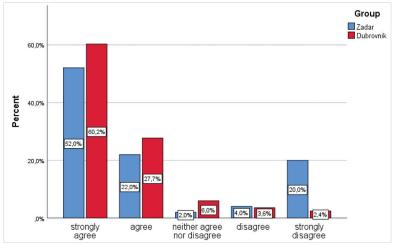
Most of the students, of which 60.2% from Dubrovnik and 52% from Zadar agreed with the following statements: The knowledge of English means efficient performance of duties on board ships, and Good knowledge of English means less chance of causing maritime accidents (72.3% of the students studying in Dubrovnik, and 58% of the students studying in Zadar strongly agreed), as shown in Table 7 and Table 8. However, in terms of efficient performance, the share

of respondents from Zadar (20.0%) strongly disagreed to a much greater extent as compared to the respondents from Dubrovnik (2.4%). The same applies to the results regarding less chance of causing maritime accidents due to good knowledge of English. A much higher share of respondents from Zadar (20.0%) responded they strongly disagreed.

Table 7 Good knowledge of English means efficient performance of duties on board ships and Group Tablica 7. Dobro znanje engleskog jezika znači učinkovito obavljanje dužnosti na brodu

-	2 27					
			Group		Total	*
			Zadar	Dubrovnik	iotai	p*
Good knowledge of English means efficient	strongly agree	N	26	50	76	0,012
performance of duties on board ships		%	52,0%	60,2%	57,1%	
	agree	Ν	11	23	34	
		%	22,0%	27,7%	25,6%	
	neither agree nor disagree	Ν	1	5	6	
		%	2,0%	6,0%	4,5%	
	disagree	Ν	2	3	5	
		%	4,0%	3,6%	3,8%	
	strongly disagree	Ν	10	2	12	
		%	20,0%	2,4%	9,0%	
Total		Ν	50	83	133	
		%	100,0%	100,0%	100,0%	

\*Fisher's Exact Test Source: Author



Graph 6 Good knowledge of English means efficient performance of duties on board ships and Group Grafikon 6. Dobro znanje engleskog jezika znači učinkovito obavljanje dužnosti na brodu

Source: Author

Table 8 Good knowledge of English means less chance of causing maritime accidents and Group *Tablica 8. Dobro znanje engleskog jezika smanjuje mogućnost izazivanja pomorskih nesreća* 

	, , , , , , , , , , , , , , , , , , , ,		,	•		
			Gro	up	Total	<b>^</b> *
			Zadar	Dubrovnik	IOlai	p*
Good knowledge of English means	strongly agree	Ν	29	60	89	p<0,001
less chance of causing maritime		%	58,0%	72,3%	66,9%	
accidents	agree	Ν	6	14	20	
		%	12,0%	16,9%	15,0%	
	neither agree nor disagree	Ν	1	7	8	
		%	2,0%	8,4%	6,0%	
	disagree	Ν	4	0	4	
		%	8,0%	0,0%	3,0%	
	strongly disagree	Ν	10	2	12	
		%	20,0%	2,4%	9,0%	
Total		N	50	83	133	
		%	100,0%	100,0%	100,0%	

\*Fisher's Exact Test Source: Author

# Spearman's correlation coefficient / Spearmanov koeficijent korelacije

The Spearman's correlation coefficient (Table 9) revealed a positive correlation between all observed variables in case of the students

studying at the Maritime Department in Zadar. The highest degree of positive correlation was recorded between questions 2 and 3 (r = 0.944; p <0.01), then 1 and 3 (r = 0.918; p <0.01), and finally 6 and 7 (r = 0.911; p <0.01). These are strong positive correlations.

Table 9 Correlations (Spearman) – Zadar *Tablica 9. Korelacije – Zadar* 

		1	2	3	4	5	6	7
1. I am fluent in General English	r	1	,870**	,918**	,862**	,802**	,847**	,867**
	р		,000	,000	,000	,000	,000	,000
	Ν	50	50	50	50	50	50	50
2. Maritime English taught at the	r	,870**	1	,944**	,891**	,814**	,846**	,829**
Maritime Department covers the maritime terminology I will need in my future profession	р	,000		,000	,000	,000	,000	,000
	N	50	50	50	50	50	50	50
3. Knowledge of English is important	r	,918**	,944**	1	,897**	,830**	,855**	,872**
for work on board ships	р	,000	,000		,000	,000	,000	,000
	Ν	50	50	50	50	50	50	50
4. Maritime English is as important as	r	,862**	,891**	,897**	1	,800**	,852**	,831**
other technical subjects	р	,000	,000	,000		,000	,000	,000
	Ν	50	50	50	50	50	50	50
5. I encountered Maritime English	r	,802**	,814**	,830**	,800**	1	,802**	,820**
terminology while learning other	р	,000	,000	,000	,000		,000	,000
technical subjects	Ν	50	50	50	50	50	50	50
6. Good knowledge of English means	r	,847**	,846**	,855**	,852**	,802**	1	,911**
efficient performance of duties on	р	,000	,000	,000	,000	,000		,000
board ships	Ν	50	50	50	50	50	50	50
7. Good knowledge of English means	r	,867**	,829**	,872**	,831**	,820**	,911**	1
less chance of causing maritime	р	,000	,000	,000	,000	,000	,000	
accidents	Ν	50	50	50	50	50	50	50

<sup>\*\*</sup> Correlation is significant at the 0.01 level (2-tailed) Source: Author

Table 10 Correlations (Spearman) – Dubrovnik Tablica 10. Korelacije - Dubrovnik

		1	2	3	4	5	6	7		
1.I am fluent in General English	r	1	,450**	,626**	,464**	,340**	,338**	,423**		
	р		,000	,000	,000	,002	,002	,000		
	Ν	83	83	83	83	83	83	83		
2.Maritime English taught at the	r	,450**	1	,615**	,548**	,266*	,391**	,491**		
Maritime Department covers the	р	,000		,000	,000	,015	,000	,000		
maritime terminology I will need in my future profession	N	83	83	83	83	83	83	83		
3.Knowledge of English is important	r	,626**	,615**	1	,780**	,340**	,539**	,700**		
for work on board ships	р	,000	,000		,000	,002	,000	,000		
	Ν	83	83	83	83	83	83	83		
4. Maritime English is as important as	r	,464**	,548**	,780**	1	,521**	,491**	,606**		
other technical subjects	р	,000	,000	,000		,000	,000	,000		
	Ν	83	83	83	83	83	83	83		
5.I encountered Maritime English	r	,340**	,266*	,340**	,521**	1	,394**	,425**		
terminology while learning other	р	,002	,015	,002	,000		,000	,000		
technical subjects	Ν	83	83	83	83	83	83	83		
6.Good knowledge of English means	r	,338**	,391**	,539**	,491**	,394**	1	,684**		
efficient performance of duties on	р	,002	,000	,000	,000	,000		,000		
board ships	Ν	83	83	83	83	83	83	83		
7. Good knowledge of English means	r	,423**	,491**	,700**	,606**	,425**	,684**	1		
less chance of causing maritime	р	,000	,000	,000	,000	,000	,000			
accidents	N	83	83	83	83	83	83	83		

<sup>\*\*</sup>Correlation is significant at the 0.01 level (2-tailed)

Source: Author

<sup>\*</sup>Correlation is significant at the 0.05 level (2-tailed)

As for the students studying Nautical Studies in Dubrovnik, Table 10 illustrates a positive correlation between all the observed variables, with the highest degree of positive correlation recorded between questions: 3 and 4 (r = 0.780; p < 0.01), then 3 and 7 (r = 0.700); p < 0.01), and 6 and 7 (r = 0.684; p < 0.01). These are medium-intensity correlations.

#### 4.2. Results - Teachers / Rezultati - Nastavnici

A total of 20 university teachers participated in this research. The academic titles of respondents who teach at the Maritime Department in Dubrovnik, the Department of Maritime Sciences in Zadar, the Faculty of Maritime Studies in Rijeka and the Faculty of Maritime Studies in Kotor are as follows: 30% of them are Assistants, 25% are Assistant Professors, 15% are Associate Professors, 10% are Senior Lecturers, and 1 respondent is a Postdoctoral student.

Most technical subject teachers at MET institutions have years of experience working on ships, whereupon 47.4% were seafarers for more than 10 years, 21.1% between 5 and 10 years, 21.1% less than 5 years, while 10.5% have no seafaring experience.

More than half of the teachers hold a Master's certificate STCW II/2 (52.9%), 17.6% hold a Chief engineer certificate STCW III/2, while 11.8% hold an Officer in Charge of a Navigational Watch certificate.

Most respondents (77.8%) worked on merchant ships, while a smaller number of respondents worked on board cruisers (11.1%) or other types of vessels (11.1%).

Table 11 gives an overview of the teachers' responses. The majority of the teachers considered themselves fluent both in General (40% strongly agree, 35% agree) and Maritime English (25% strongly agree, 45% agree). They use Maritime English terminology in their lectures (45% strongly agree, 50% agree). Most of them (70%) encourage students to use maritime terminology. They think that Maritime English is as important as the subject-matter they teach (70% strongly agree). Their opinion is that risks can be reduced and accidents avoided with language proficiency.

The questionnaire distributed to the teachers included one open-ended question where respondents could provide their comments on the importance of English in maritime industry. Their answers are the following:

 It would be ideal to teach and to hold exams in English because of the multinational and multilingual aspect of this industry. Cooperation with Maritime English teachers is

- desirable as we can learn from each other.
- Knowledge of English is very important but only in combination with technical knowledge.
- Without adequate knowledge of English, it is difficult to communicate with other people on board and do your job, since on a large number of ships English is the official language, the crew is multinational, and the lack of language knowledge can lead to dangerous situations.
- English is the most important of all courses in maritime profession. It takes a lot of time and effort to learn it, and it is difficult to compensate for the lack of knowledge, which is not the case with other technical subjects.
- Very important. If the knowledge of English is inadequate, then it presents a/the key limiting factor in the application of technical knowledge.
- Good knowledge of English is indispensable for effective and safe work on ships.
- English is extremely important and it is necessary to focus on maritime terminology.
- Today, the only way to communicate on board ships. If there is communication noise, no job is well done.
- Since English is the official language used by the ship's crew of most shipping companies, the importance of a good knowledge of English and the ability to use it is indisputable.
- Essential and inevitable for job performance on all types of vessels.
- A necessary precondition for performing the duties of seafarers (on board and ashore).
- I consider the English language (General and Maritime) to be extremely important in maritime affairs, especially in terms of ship management and crew organization.
- I think it is necessary to introduce much more English in the education of future seafarers.
- Knowledge of English is as important as knowledge of other technical subjects. Sometimes it is even more important, given that with the knowledge of English you can find answers in the professional literature, which is always available in English on board ships.

#### 4.3 Discussion / Rasprava

In the maritime sector English is a lingua franca; therefore, it is important to be fluent in it to the extent that formal and informal communication can be established. If crew members lack that fluency then they will feel isolated from the ship

Table 11 Teachers' opinion on the importance of English in the seafaring industry. Source: Author's survey *Tablica 11. Mišljenje nastavnika o važnosti engleskog jezika u pomorstvu. Izvor: Autor. Anketno istraživanje* 

Professors	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
1. I am fluent in General English.	40%	35%	15%	5%	5%
2. Maritime English taught at the Maritime Department covers the maritime terminology I will need in my future profession.	25%	45%	15%	15%	0%
3. Knowledge of English is important for work on board ships.	45%	50%	0%	5%	0%
4. Maritime English is as important as other technical subjects.	70%	25%	0%	5%	0%
5. I encountered Maritime English terminology while learning other technical subjects.	65%	30%	5%	0%	0%
6. Good knowledge of English means efficient performance of duties on board ships.	65%	25%	10%	0%	0%
7. Good knowledge of English means less chance of causing maritime accidents.	65%	25%	10%	0%	0%

Source: Author

community when they are both on and off duty. Most students who participated in this research believed Maritime English they learned encompassed the terminology they would use when working on ships. Likewise, the findings showed they were quite aware they would need English in their work. Most of them considered English important for working on board ships and equally relevant as other technical subjects. They are aware that the language knowledge is a factor affecting both the safety of navigation and the efficient performance of duties on board ships.

Apart from their spoken English fluency, seafarers' reading and writing skills increase their work performance and qualifications. In maritime industry, the source of information is mostly available in English, so without understanding the text they read, seafarers might fail to notice or consider important facts. It has been shown in this survey that technical subject teachers use English in their lectures so that students become acquainted with phrases and terminology they will read in various sources of information. In addition, teachers' comments point to the importance of a mutually beneficial cooperation with Maritime English teachers because they learn from each other and broaden their knowledge.

Technical subject teachers' working knowledge gained over the years spent at sea is a valuable asset in preparing students for work. Their responses show they encourage students to use English and practice it as much as possible so that it would not be a hurdle in their future profession. Experience has taught them that English knowledge is a necessary precondition in the maritime sector and it is much harder to perform duties on board ships without it. This is particularly important because efficient communication means safety at sea. Seafarers can be highly trained for the positions they occupy, but if they cannot articulate their intentions due to the lack of language knowledge the implications can be disastrous.

The survey results showed that respondents considered Maritime English an effective tool that helps seafarers perform their duties more effectively and reduce the risk of collision. Comments made by lecturers show a clear awareness of the importance of Maritime English. They consider it as important as other technical subjects. Moreover, one respondent pointed out that it took a lot of time and effort to learn it, while it would be difficult to compensate for the lack of knowledge. It is an inevitable tool for resourcefulness in a highly demanding maritime industry. According to them, better English means greater efficiency. If crew members cannot express themselves effortlessly then it is a key limiting factor in the application of technical knowledge. Everyday operations cannot be performed without it as ships are a multicultural environment.

#### 5. CONCLUSION / Zaključak

MET institutions have always played a very important role because of the significance of the maritime industry in Croatia. If students choose to be seafarers they enter the world where they need to have a strong desire to learn and grow if they want to succeed. In this process they depend on English as this is a lingua franca of the seafaring industry. Teachers are obliged to provide students with the knowledge on which they will build their skills. Moreover, being a seafarer implies being a good team player, which again depends on good communication skills. This survey has shown that students are quite aware of the importance of having a good command of English. Therefore, Maritime English teachers should always strive to improve their teaching methods and techniques and thus help students in their English language acquisition process. The task of each teacher should be to engage students in class activities

and encourage their participation with the aim to improve their proficiency and help them cope with the challenges this profession brings.

The students studying in Dubrovnik and Zadar think that Maritime English they learn covers the terminology necessary for the seafaring profession. They consider the knowledge of General and Maritime English utterly important. Most students and lecturers believe that Maritime English is as important as other technical subjects. Most students and lecturers think that the knowledge of English means greater efficiency and risk-reduction.

The results of this survey can serve as a means to inform MET institutions of the importance of General and Maritime English. Likewise, they can be used as a reference point to relevant bodies that conduct inspections of MET institutions. These findings emphasize the importance of educating and producing Croatian seafarers who are highly fluent in General and Maritime English. The knowledge acquired during their studies increases their chance of employment in international seafaring industry.

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