

Maritime English: Teaching English for Maritime Sciences or Teaching Maritime Sciences in English?

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Abstract

Maritime English is a “scourge” for maritime science students at universities engaged in maritime science. English is a foreign language in Indonesia may cause the students cannot understand Maritime English well. A phenomenon occurs that Maritime English teachers do not have basic knowledge about the maritime sciences. This has an impact on the teaching and learning process of Maritime English. This study seeks to reveal whether Maritime English is English teaching intended for maritime science or Maritime English is actually maritime science materials taught using English. The researcher uses a qualitative descriptive method by using a learning module adopted from the IMO Model Course 3.17 to conduct research. The results of the study found that the teachers never obtained many materials related to the maritime world. However, there are also materials that these teachers obtained during their undergraduate and master’s degree courses, such as grammar, reading comprehension, and listening comprehension. This means that Maritime English is indeed English intended for maritime science students (English for Special Purposes) and maritime sciences delivered using English.

Keywords: maritime english, english for special purposes, IMO Model Course 3.17

Abstrak

Bahasa Inggris Maritim merupakan ”momok” tersendiri bagi para pembelajar ilmu maritim pada perguruan tinggi yang bergerak di bidang keilmuan maritim. Hal tersebut juga dikarenakan Bahasa Inggris merupakan bahasa asing di Indonesia. Ada fenomena yang terjadi bahwa pengajar Bahasa Inggris Maritim ternyata tidak memiliki keilmuan dasar tentang dunia maritim. Hal tersebut sangat berdampak bagi proses belajar mengajar Bahasa Inggris Maritim. Penelitian ini berusaha mengungkap apakah Bahasa Inggris Maritim merupakan pengajaran Bahasa Inggris yang diperuntukan bagi keilmuan maritim atukah Bahasa Inggris Maritim sebenarnya materi-materi ilmu maritim yang diajarkan dengan media Bahasa Inggris. Peneliti menggunakan metode deskriptif kualitatif dengan menggunakan modul pembelajaran yang diadopsi dari IMO Model Course 3.17 sebagai bahan rujukan dalam melakukan penelitian. Hasil penelitian ditemukan bahwa banyak materi-materi yang memang berkaitan dengan dunia maritim yang tidak pernah didapatkan oleh para pengajar. Namun demikian, ada juga ditemukan materi-materi yang didapatkan oleh para pengajar tersebut semasa kuliah Sarjana maupun Magister seperti *grammar*, *reading comprehension*, dan *listening comprehension*. Hal tersebut bermakna bahwa Bahasa Inggris Maritim memang merupakan Bahasa Inggris yang diperuntukkan bagi para pembelajar ilmu maritim (*English for Special Purposes*) namun juga ilmu-ilmu maritim yang disampaikan dengan menggunakan Bahasa Inggris.

Kata kunci: bahasa inggris maritim, english for special purposes, IMO Model Course 3.17

Introduction

English as a foreign language in Indonesia is a “burden” that is highly recommended to be learned and even mastered by the Indonesian

people. Although there is no specific obligation that regulates this, for students and even workers who are in direct contact with globalization, it is very important to master English. However, the positioning of English as a foreign language

certainly has a significant impact on the mastery of English.

The policy on the use of Indonesian and regional languages as contained in the Constitution, the Act, and their derivatives must be highly appreciated. Indonesian language is designated as the State Language as stated in the 1945 Constitution of the Republic of Indonesia Article 36 [1]. Further provisions regarding the use of the Indonesian language are also stated in the Law of the Republic of Indonesia Number 24 of 2009 concerning the Flag, Language and State Emblem and National Anthem [2]. In addition, the protection of regional languages is also regulated in the 1945 Constitution of the Republic of Indonesia Article 32 paragraph 2 [1].

Teaching English for special purposes or English for Specific Purposes (ESP) usually begins to be taught at the Vocational High School level and even up to the Doctoral level. Vocational colleges engaged in maritime science education cannot be separated from the implementation of ESP. One of the courses is Maritime English, especially in the Nautical Science and Engineering study programs. The Nautical Science and Marine Engineering Study Program curriculum is a derivative of the IMO Model Course 7.03 for Nautical Science and 7.04 for Marine Engineering [3], [4]. Specifically for the Maritime English course, the basic material is taken from the IMO Model Course 3.17 [5].

Sea transport is considered one of the most vital and dangerous sectors of the world economy; therefore, the safety of seafarers, cargo and ships is a top priority for the shipping industry. Seafarers are expected to go through a Maritime English learning phase. For this purpose, English for Special Purposes (ESP) is a recognized approach in meeting the needs of the global industry. In contrast, English is accepted as a common language of communication in the maritime industry [6].

ESP is an English teaching approach where the things taught and the teaching methods are based on why the learner wants to learn English [7]. ESP is divided into EAP (English for Academic Purposes) and EOP (English for Occupational Purposes). If the purpose of EAP is learning English for academic purposes and needs, then EOP is learning English for work and training purposes or needs. ESP is built based on EGP (English for General Purposes) and is designed to prepare English language learners who are used in

certain disciplines and occupations to achieve certain goals [8].

The positioning of English in the IMO Model Course 7.03 is very clear that English, both spoken and written, is needed as a means of communication about safety at sea. It was also explained that the IMO Model Course 7.03 is the minimum standard in general English mastery, which includes maritime terminology and English in terms of the use of maps and publications related to other nautical sciences. In addition, English is also used to understand meteorological information and communicate between ships, ships and ports, regarding ship safety and operation. In Maritime English and special phrases used in communication, Standard Marine Communication Phrase (SMCP).

When viewed from the position and relationship between SMCP and general English, the two disciplines have a significant difference. Maritime English is indeed a variation of English used in maritime science. However, with a fairly basic difference, the author wants to determine whether Maritime English is a variety of English used for maritime scientific learning or maritime English is all maritime science theories conveyed in English.

SMCP as regulated in the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW) 1978 amendment 1995 is an ability that must be possessed by every maritime scholar who has an output as a guard officer on a ship with a Gross Tonnage (GT) at least 500 [9]. It is also explained that the position of SMCP in maritime learning is as follows:

1. To assist the safety of navigation and manoeuvring of ships;
2. To standardize the use of language in communication when navigating at sea, approaching ports, in shipping lanes, and communication between ships and crews who have multiple languages; and
3. To help educational institutions engaged in maritime science fulfil the required curriculum and outcomes.

The SMCP material is divided into 2 (two) parts, namely External Communication Phrases and On-board Communication Phrases. SMCP should be taught and studied selectively, according to the user's specific needs rather than completely. Each instruction must be based on practice in the

maritime environment and implemented through appropriate modern language teaching methods.

SMCP is made based on English in general. However, the difference is that Maritime English especially SMCP is simplified to reduce grammatical, lexical and idiomatic variations to a minimum tolerable level, using a standard structure for the sake of its function, i.e. reducing misunderstandings in safety-related verbal communication. Use of maritime English on ships and in ship-to-shore/ship-to-ship communications.

This means, in phrases offered for use in emergencies and other situations that develop under considerable time or psychological stress and in navigational warnings, block language is applied that uses little, or often omits, the function words the, a/an, is/are as is done in shipping practice.

Research on Maritime English has been done quite a lot. Maritime English is English language learning for special educational purposes in the maritime world [10]. Furthermore, it is said that Maritime English also has four basic skills needed, namely speaking, writing, reading, and listening. Rahmawati researched Maritime English Learning which was “forced” to use digital technology due to the COVID-19 problem.

Kudryavtseva’s research talks about basic strategies related to Maritime English teaching and learning activities [11]. She argues that the main instructional technique in the teaching of Maritime English is a communicative approach as suggested by the appropriate course model approved by the International Maritime Organization (IMO). Knowledge, understanding, and proficiency are indicated as assessment criteria, although the challenges of our time encourage newer strategies to develop students’ critical thinking, problem-solving, and collaboration.

Pritchard categorizes and divides English used in maritime-related business and operations into several sections in his studies [12]. The study determined the technical terms that seafarers should know at least in Maritime English. He also defines the framework of important terms in maritime English teaching. Trenkner and Cole categorize the English language skills that seafarers must possess according to the current IMO International Convention on Standards for Training, Certification and Supervision (STCW)

and classify them according to seafarers’ competence [13].

Maritime English, especially in the Nautical Science study program, has quite a large portion, with 2 (two) theory credits and 3 (three) practical credits for 3 (three) semesters. During 3 (three) semesters, the cadets are expected to understand 7 (seven) things, namely: (1) Ship structure in English, (2) Advanced maritime science learning and maritime law in English, (3) mastery and use of terminology related to machinery ships and operating systems in English, (4) Standard Marine Communication Phrases (SMCP), (5) maritime management and ship inspections in English, (6) terminology regarding deck and ship maneuvering in English, and (7) electrical ship and communication in English.

Research Method

The author uses qualitative research based on descriptive data, which does not use statistical techniques. Statistics are not used to analyze qualitative research information, instead the investigator examines words or pictures [14]. Qualitative researchers analyze terms to understand better codes, groups, or topics, rather than relying on statistical techniques. This research focuses on learning materials for Akademi Maritim Nusantara Cilacap, especially the Nautical Science study program.

The author uses the Maritime English learning module, which summarizes several reading references required by the IMO Model Course 3.17. With this module, the author tries to reveal specific terminology and materials that can provide an overview of the relationship between Maritime English and General English.

Findings and Discussion

As already explained, Maritime English learners must understand 7 (seven) things in mastering Maritime English.

1. Ship Structures in English

In a book entitled English for Mariners by Tony Grice (2019) [15], many lecture materials are specifically designed for learning Maritime English.

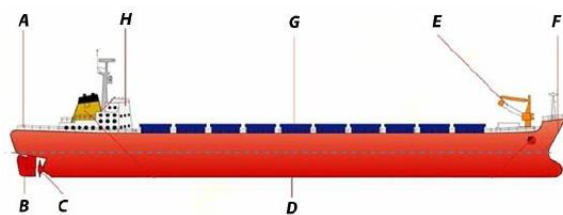


Figure 1. Part of *Bulk Cargo Carrier*

Figure 1 is an example of learning material about ship structure in English. The following is the order of the names of the parts shown in the picture, namely: (a) stern, (b) rudder, (c) propeller, (d) keel, (e) davit, (f) bows, (g) container, and (h) bridge.

When looking at the terminology of stern, rudder, propeller, and davit, these terms are rarely used in everyday English conversation. The term will appear when talking about Maritime English. Stern is the back of the ship. The rudder is a device to change the direction of the ship by changing the direction of the fluid flow, which changes the ship's direction. Propeller is a rotating engine element to run the ship. Davits are tools for launching lifeboats from ships into the water.

Although there are terms specifically used in the maritime world, there are also terms that are sometimes encountered in English in general. Keel, if in general English can be interpreted as chicken breast. However, in Maritime English terminology, the keel is the part of the construction that extends from the ship's base from the bow to the stern. The same distinction is found in terms of bows. If ordinary people understand that a bow is a device to shoot arrows, in Maritime English it is interpreted as the front of the ship or bow. Container interpreted in Maritime English is also different from the understanding of ordinary people's containers in general. A container, also known as a container, is a container used to store goods and is usually used to ship goods via ships. The standard container size is 12.2 X 2.4 X 2.6 meters.

Maritime English teachers must be very careful in understanding and explaining the terminology contained in the ship's structure. Understanding the bridge, also known as the ship's bridge in Maritime English, is the ship's command room where the ship's steering wheel is placed, navigation equipment to determine the ship's position, and usually, there is a captain's room and radio room. This is very different from the layman's understanding of "bridge (a media to

cross)". If the bridge is still interpreted as a bridge, it will have a bad impact on Maritime English learners.

2. Learning Advanced Maritime Science and Maritime Law in English

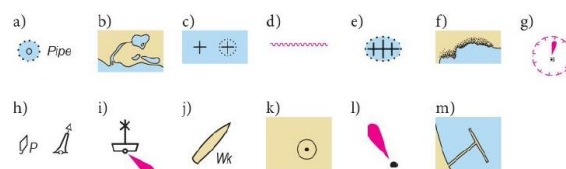


Figure 2. *Nautical Charts*

Figure 2 is an example of nautical symbols usually found in a shipping map. The letter (c) in Figure 2 is referred to as "dangerous rock – depth not certain (submerged dangers). This means that there are rocks that are dangerous for safe navigation in the area, and the depth cannot be measured. The letter (g) is a sign that there is an oil rig with a safety zone (visible obstruction).

The forms of signs in Nautical Charts cannot be understood by everyone, especially English teachers who do not have a maritime scientific basis. In addition to explaining the meaning of the existing sign, the teacher must also teach the ship's manoeuvring actions that must be done when seeing or passing the sign.



Figure 3. *Severe Gale*

Figure 3 is an example of the weather conditions that sailors often encounter when they sail. When ordinary people see, the weather conditions will be sunny and cloudy. But this is very different from what the sailors feel. Severe Gale is a weather scale written on the Beaufort Scale.

The Beaufort scale is an empirical measure related to wind speed for observing conditions on land or at sea. Francis Beaufort invented this scale in 1805. Beaufort measures wind speed by describing its effect on ship speed and ocean waves..

Severe Gale is characterized by wind speeds reaching 41-47 knots and wave heights of 7-10 m. Weather conditions seen at sea are high waves; dense foam stripes along the wind direction; the sea begins to roll; splashing waves affect visibility.

3. Mastery of Ship Machinery Terminology and Ship Operation System in English

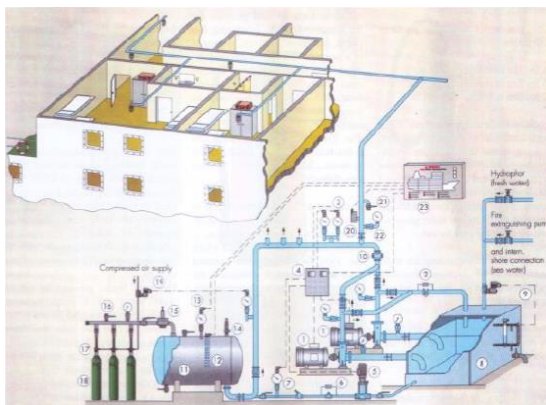


Figure 4. Sprinkler System

Sprinkles are used to extinguish fires when there is a fire. In the sprinkling system, there is a pump called the jockey pump. A jockey pump is a pump in a fire hydrant system. Its job is to stabilize the water pressure that enters the hydrant network from the water reservoir.

4. Standard Marine Communication Phrase (SMCP)

In SMCP, there are terms called mayday and pan-pan. The two terms are not interpreted as “May day” and “a collection of frying pans”. However, both terms are call signs indicating an emergency on board. The mayday call is a signal used when there is a life-threatening situation for the crew. The difference with pan-pan calls only lies in life-threatening situations. Pan-pan calls are made when there is an emergency but does not threaten the lives of others.

Letter	Code	Letter	Code
A	Alfa	N	November
B	Bravo	O	Oscar
C	Charlie	P	Papa
D	Delta	Q	Quebec
E	Echo	R	Romeo
F	Foxtrot	S	Sierra
G	Golf	T	Tango
H	Hotel	U	Uniform
I	India	V	Victor
J	Juliet	W	Whisky
K	Kilo	X	X-ray
L	Lima	Y	Yankee
M	Mike	Z	Zulu

Figure 5. Letter Spelling in Maritime English

In communicating using SMCP, every ship or port can spell to reduce misunderstandings in communication. For example, Amazon boss Jeff Bezos bought a ship and named it after his mother, **JACKLYN**. When the name JACKLYN is pronounced, it can sound like JEKLIN, JACKILIN, or JACQUILINE. Therefore, when the ship sails, the captain must spell the name of the ship correctly, namely **Juliet Alfa Charlie Kilo Lima Yankee November**.

5. Maritime Management and Ship Inspection in English

Ship management and inspections can be related to one of the ways to regulate ship cargo. Talking about the administration of shipload regulation, every deck officer, especially First Officer must understand the signs listed for each cargo, especially regarding dangerous cargo.



Figure 6. Dangerous Goods Signs

Looking at the sign of a dangerous cargo shown in Figure 6, a First Officer should not mix Explosive (explosive) cargo with Flammable Gas (flammable gas). Ignorance of knowledge about this cargo sign will be very dangerous for the crew’s safety.

6. Deck Terminology and Ship Maneuvering in English

Ship movement is always related to Collision Regulations 1977, which regulates ship manoeuvres to avoid sea collisions.

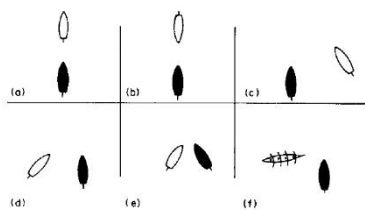


Figure 7. Ship Collision Signal

The Master must understand the basic knowledge of ship collision rules. This is because a ship's physical nature is not like a motorbike or a car quickly dodge a collision. Different conditions require different treatments. It can be seen in Figure 7 (b) that this condition is a condition where there are 2 (two) ships sailing facing each other (head-on situation). This condition is regulated in the Regulations for Preventing Collisions at Sea in Rule 14. It is explained that if there are 2 (two) ships facing each other, each ship must change course to the right of the ship (starboard) to see the port side of each ship as it passes one another.

7. Ship Electrical and Communication in English

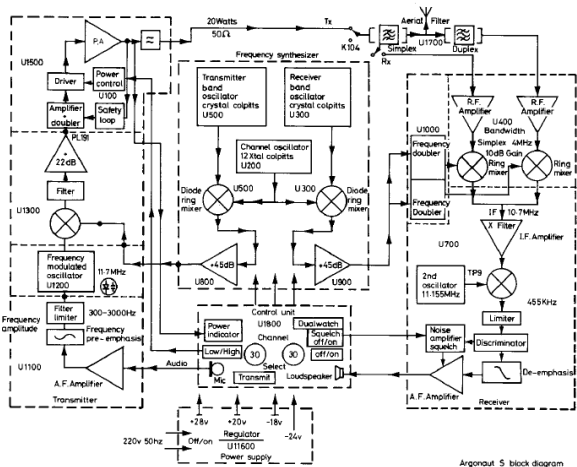


Figure 8. VHF Transceiver

Figure 8 is a diagrammatic image of the VHF Transceiver as it is known that communication is very important to be maintained. When there is a malfunction in the electrical and communication systems onboard the ship, it can affect the safety of sailing.

Knowledge of maritime science is an absolute must for maritime science students. However, Maritime English teachers must also possess the mastery of these materials. If you look at the various types of majors and study programs at the Bachelor's, Master's and Doctoral levels in

Indonesia, English Education, Tarbiyah, English Literature, and Linguistics are the only majors that teach English. Understanding Maritime English material will only be obtained for those involved in the maritime world.

This material discrepancy often makes it difficult for Maritime English teachers. The fact was found that from a sample of 4 (four) universities engaged in teaching maritime science, all Maritime English teachers came from graduates who did not have a maritime scientific background. If you look at the Law of the Republic of Indonesia Number 14 of 2005 concerning Teachers and Lecturers Article 46 paragraph (2) it is stated that the minimum requirement for a lecturer is a graduate of the Master's program for diploma and undergraduate programs [16]. This is different from the requirements for educators in Regulation of the Directorate General of Sea Transportation No. Hk.103/1/18/Djpl 16 Regarding Technical Instructions for Issuing Approval of Special Skills and Skills Training Programs for Seafarers and Marine Certification-Based Training Programs which states that the educator requirements for Level III Nautical Science or Marine Engineering Experts must have a minimum marine competency background have a certificate of Deck Officer or Marine Engineer Level II and also have a TOT 6.09 certificate [17].

Seeing the Maritime English material which raises a lot of practical terminology in the field of maritime science, it does seem difficult if the material must be taught by teachers who do not have a maritime scientific background. However, Maritime English also teaches materials that are obtained in learning English in general, such as grammar, reading comprehension, conversation, and listening comprehension..

Conclusion

Differences in regulations, especially related to the standards of teaching staff at maritime science universities, are often a problem because not many seafarers have the passion as educators as regulated in Law Number 14 of 2005. Teaching of Maritime English by teachers who do not have a maritime science background can indeed cause problems because the maritime scientific material presented is practical material that should be experienced directly by the teacher.

Looking at the material presented, Maritime English is not fully worthy of being called English

for Special Purposes, but rather maritime sciences taught using English. However, if viewed from the material on grammar, reading comprehension, and listening comprehension, Maritime English can also be categorized as English for Special Purposes.

The lack of understanding felt by the Maritime English teacher certainly significantly impacted the students. This is very good if it is brought to the attention of 2 (two) related Ministries, namely the Ministry of Education, Culture, Research, and Technology and the Ministry of Transportation, to harmonize the standards of educators that must be possessed.

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