

# Students' Needs on Maritime English Learning Material: A Case at Vocational High Schools

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## Abstract

Maritime English is very important for maritime industry communication. However, it has some unique features that make it difficult to understand so that the learning material should be designed well. This study investigates the need analysis of the students who are learning Maritime English. It was conducted using survey method where the data collected through questionnaires distributed to 110 students of Maritime Vocational High Schools Padang, Indonesia. The data were analyzed by using statistical analysis. As the result, it found some learning needs including 1) language skills 2) learning activities 3) learning material 4) setting of time on learning Maritime English 5) Topics 6) Linguistic Features. The results of this study provide recommendations for the development of English for Nautical Merchant Vessel learning materials.

**Keywords:** *Maritime English, needs analysis, English skills, learning material*

## Introduction

It is important to have an effective communication in workplace to ensure the goals. An effective communication is also important at sea life. It will be good to build the relationship among the crews. As it is known that in a ship, there will be some differences among the crews. It is including differences on the background, cultural and language. Therefore, International Maritime Organization (IMO) in Standard of Training Certification Watchkeeping (STCW) established English as official language used in Maritime industry.

Maritime English is very important for maritime industry communication. Maritime English takes a role as navigational and safety communication. It uses not only among the crew, but it also use from ship to shore and vice versa, ship to ship and on board ship. The uses of Maritime English must be simple to avoid ambiguous that will lead to misunderstanding (Nomaizura, Blakey and Pritcard in Dirgeyasa, 2018). According Winbow, Verbek in Ahmmed (2018) maritime accidents happened 80% is caused by human error. In this case, it happened because the crews did not use a common language in communication then it is impacted to the ineffective of communication. Hence, the seafarers should be able to understand even master in using the language both spoken and written form.

However, maritime English, as a part of ESP, is different with general English even from any other branches of ESP English such as English for Journalism (EJ) or English for Business (EB), English for Medical (EM), etc (Dirgeyasa, 2018). Furthermore, based on IMO, maritime English has its own standard which is known as SMCP (Standard Maritime Communication Phrases). Naturally, the differences are included in some parts including vocabulary usages, grammatical pattern and spelling systems. It is almost different with general English.

Dirgeyasa (2018) states that Indonesian seafarers still have low competence in using Maritime English as a language for communication. In addition Risuandi in Dirgeyasa (2018) adds that the phenomenon does not only happen to the students of Maritime training school but it also happens to the Alumni of Maritime Training School. The use of code switching even code mixing is becoming their choice. However, it is not always effective because it sometimes can raise misunderstanding between the speaker and listener so that the condition at the ship will be uncondusive. Moreover, it will be a big problem if the instruction is also given in English that is affected to the on board process

In Indonesia, this problem has gotten attention from the government. It can be seen by the implementation of examination of language competence at the end of the seafarer training. However, at Vocational High School, it seems like the government do not try to do some improvement. Azizah (2015) mentions that the curriculum which is designed for vocational High School is not based on what the stakeholders need. It is known that Vocational High School students is prepared to have work after they graduated. Necessarily, they do not only need the knowledge at all, but they also need to practice it. In this case, government takes a role to design an appropriate curriculum related stakeholder need since they will be the part of students career in the future. Beside, it will be useful for their environment.

In other hand, the successful of a learner in their language is not always about the result that they get in any examination. It is as stated by Dirgeyasa (2018) in his research that learning is successful is determining by some factors which one of the main factor is learning materials. It is supported by Samuel (2009, p.63) learning material is an important component in learning process. He states that the important of learning materials including of some functions as a facilitator, a guidance, an attention getter, and a developing continuity of thought. It can be said that appropriate learning materials are needed in order to maximize its functions.

In order to design a fit material with students' needs, need analysis is needed to be done. Some researchers have conducted in this topic. Then, it categorized into some topics such as: a research about need analysis in developing of curriculum (Bocanegra-Valle, 2016; Mallillin and Mallillin (2019)) need analysis in developing syllabus (Al-Naimi, 2013; Huang, 2019). In addition, Duddley-Evans and St Jhon (1998) state that needs analysis should be undertaken by stakeholder including teacher, students, alumnus, and user. Some researchers have done their research related to the need analysis with stakeholders such as: Employee (Rajan, 2018; Zainal & Ramadhanti, 2019), teachers (Chatzikyriakov & Zafiri, 2019; Fellhofer, 2019). In addition, there are a lot of researches have done to analyze students' needs that divided into their field such as accountant students (Azizan and Harun, 2017), information and technology students (Diana and Mansur, 2018; Briana and Briana, Lynn and Mutia, 2019), nursing students (Yansyah, Rafidiah & Nadia, 2019; Nam & Park, 2019), Tourism students (Perpisa, 2018; Al-Hafizh & Ratmanida, 2008), engineers' students (Alsamadani, 2018; Yudistira, Zaim & Hamzah, 2018), business students (Putrilani, 2018; Mognhode, 2018), economic students (Capkova and Kroupova, 2019), Medical (Nezakatgoo & Alibakhsi, 2014; Vahdany & Gerivani, 2016; Lodhi, Shamim, Robab, Shahzad & Ashraf, 2018).

From the previous research above, during this decade, there are so much efforts that have been done by researchers to find a well-designed of ESP course for the learners. It can be seen that almost all fields of education were done need analysis. It has been a requirement to face the challenging of global changing including technology, social, economic, industry, etc.

Over the past two decades, Maritime industry has increased. It is impacted the seafarers' competence. They should have good skills and there is no exception for language skills. In order to reach the goal, need analysis also should be done. This case was arising a topic for researchers. Hence, some researches have conducted such as a research by Zi-hua (2015) and Lumban Batu (2018) conducted a research about Maritime English teachers' needs analysis and Dirgeyasa (2018), Arini (2010), Aeni (2018), Jabu (2018), Rahman and Ismail (2018) did need analysis related to develop English material based on students' needs at some universities in Indonesia.

Referring to the previous researches above, it can be seen that need analysis is important in designing an ESP course. However, in Maritime context, there is still limited research that was done about Maritime English. Besides, mostly the research was conducted in university level. Therefore, this research investigated the students' needs of English Learning Materials especially for Maritime English course at Vocational High School. It was done by assessing students' needs of Nautical Merchant Vessel students. It is hoped that this research will be information source in developing learning material.

## Method

This research aims to identify the students' needs of Maritime English. This research is designed in survey research which investigators administer a survey to a sample or to the entire population of people in order to describe the attitudes, opinions, behaviors, or characteristics of the population (Cresswell, p.215). Sources of data in this research consisted of some kinds of the sample. It consists of third year students of Nautical Merchant Vessel study program at SMKN 10 Padang and SMK Pelayaran in academic Year 2019/2020. The number of students of each class is 30 and 27 students. Since there are only two class of Nautical Merchant Vessel study program, this research involved all the students from both classes which the total is 110 students. They were chosen by using purposive sampling technique because they have learned about Maritime English and have experience in their training.

In collecting the data, questionnaires which develop based on Hutchinson and Water theory. It is related to learning needs. This questionnaire is designed by using *likert scale* in which including five options for each items. They are Strongly needed, needed, Fairly needed, Less needed and Not needed. In order to make the questionnaire be valid, it was done content validity by asking experts' judgment. The questionnaire were distributed and collected in the same day.

Since this research used questionnaires in collecting the data so that it analyzed quantitatively. To make easier in classifying the result of the questionnaires, the researcher calculates of sample answer and categorized into the level of needs. The data displayed as follow:

Table 1. category of needs levels

No	Score	Level of needs
1	0 - 0.5	Not needed
2	0.6 - 1.5	Less needed
3	1.6 - 2.5	Fairly needed
4	2.6 - 3.5	Needed
5	3.6 - 4.0	Strongly needed

(Hatim in Dirgayasa (2018))

## Results and Discussion

### a) Results

After analyzing the data that has been collected, the data were classified into some categories including 1) learning activities 2) learning material 3) time of learning 4) nautical contents 5) linguistic features

#### 1. Language skills

The first indicator that was analyzed by the writer was the language skills. It analyzed in order to know what skill they need for their field. The result shows in the table below:

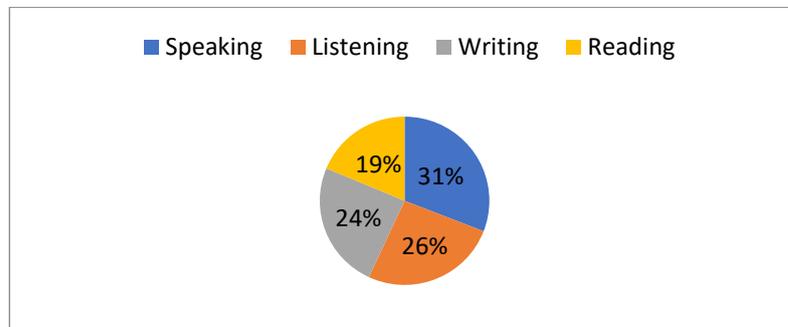


Figure 1. Language skills

The table above showed that the most needed skill in Nautical Merchant Vessel program is speaking (31%) and followed by listening skill (26%). Meanwhile, writing (24%) and reading (19%) are also needed but they are not the priority in this program.

#### 2. Learning Activities

The second indicator that assessed is about learning activities. They are several learning activities are mentioned in the questionnaire as mention in diagram below:

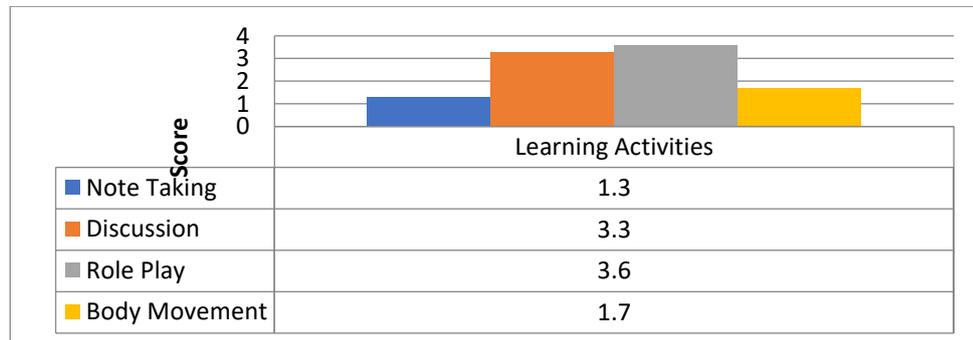


Figure 2. Learning Activities

The figure. 2 described that students like to have various activities in learning. However, the most activities they like the most are the activities that engage them to practice their knowledge. It can be seen that is role play activity with score 3.6 is strongly needed activity and discussion is classified into needed category (3.3). Meanwhile, body movement is classified into fairly needed (1.7) and note taking is classified into less needed (1.3)

### 3. Learning Material

The next indicator was assessed is about learning material. They are some learning materials are presented. The learning materials are classified based on the skill. The result are showed in the table below

Table 2. Learning Material

	score	Levels of need
<b>Speaking</b>		
Relaying messages using standard marine vocabulary	3.7	Strongly Needed
Relaying messages through VHF radio	3.6	Strongly Needed
Briefing crew and passengers	2.6	Needed
Giving instructions	3.6	Strongly Needed
Reporting emergency situations on board	3.6	Strongly Needed
Giving orders in routine operations	3.6	Strongly Needed
Responding to orders in routine operations	3.6	Strongly Needed
<b>Listening</b>		
To orders in routine operations	3.7	Strongly Needed
To instructions	3.6	Strongly Needed
To oral presentations/reports	2.4	Fairly Needed
To natural speech	2.4	Needed
To native speakers of English	3.8	Strongly Needed
To nonnative speakers of English	3.2	Needed
To people coming from non-English speaking countries	3.6	Strongly Needed
<b>Reading</b>		
Reports	3.6	Strongly Needed
Correspondence	2.3	Fairly Needed
Articles, abstracts, etc.	1.2	Less Needed
Instructions/procedures manuals	3.7	Strongly Needed
<b>Writing</b>		
Reports	3.7	Strongly Needed
Memos/messages	3.6	Strongly Needed
Emails	3.6	Strongly Needed
Cover letters	3.2	Needed
Forms	3.3	Needed

From the table.3 above, it is shown that there is a little materials that is less needed by the students. It can be seen that the students only have 'less needed' in material of reading. Meanwhile, in speaking, listening and writing the materials are classified into needed and strongly needed.

### 4. Setting of time on Learning Maritime English

Based on students responses, it found that students are not comfortable with the condition at the classroom. They are getting upset to practice so that they need an environment that is supported them to practice their skill. In addition, the limited time in learning Maritime English makes them did not have a lot of times to understand the material even to practice it. The diagram below shows students responses about the time of implementation Maritime English as a subject in their school:

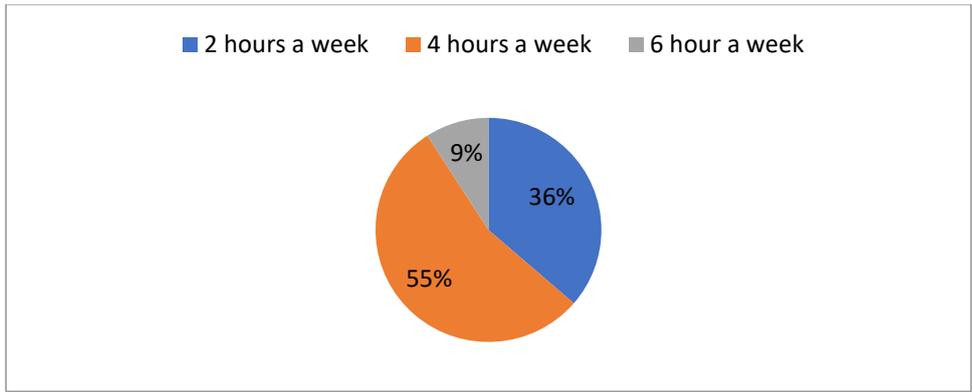


Figure 3. Times for learning Maritime English

The diagram above shows that 55% of students wanted Maritime English is taught by 4 hours in week. It is known that Maritime English is being taught for 2 hours in a week. 2 hours means 2 x 45 minutes in a week. Based on these responses, it can be said that students are realized that they need this subject a lot.

5. Topics

The next indicator is the topic that students’ need for supporting their future career. The topics presented based on STCW Curriculum in 2010. The table below describes the distribution of topics related to Nautical Contents:

Table 3. Topics

No	Topics	Score	Level of needs
1	Ship familiarization	3.7	Strongly Needed
2	Weather	3.6	Strongly Needed
3	Safety equipment on board	3.6	Strongly Needed
4	Incident and accident	3.6	Strongly Needed
5	Firefighting	3.8	Strongly Needed
6	Emergency on board	3.8	Strongly Needed
7	Navigation	3.8	Strongly Needed
8	Main Engines	0.7	Less Needed
9	Auxiliary Machinery	0.7	Less Needed
10	Maintenance	2.6	Needed
11	Communication at sea	3.6	Strongly Needed
12	Radio communication at sea	3.6	Strongly Needed
13	Shipboard Electronics	2.8	Needed
14	Cargo handling, qualities and Supplies	2.1	Fairly Needed
15	Vessel Particulars and Specification	3.8	Strongly Needed
16	Work activities on board	2.8	Needed
17	Seafarer document	3.1	Needed
18	Ship Construction	2.6	Needed
19	Ship system and stability	3.6	Strongly Needed
20	Distress Communication	3.7	Strongly Needed
21	Urgency Communication	3.6	Strongly Needed
22	Safety Signals	3.8	Strongly Needed
23	Number, Position and Bearing	3.2	Needed
24	Message Marker and responses	3.6	Strongly Needed
25	Standard Wheel Orders	2.3	Fairly Needed
26	Standard Engine Orders	0.8	Less Needed

The table above shows that there are some topics that are not related to the nautical contents so that the distribution of students’ response had different percentage among the topics. There are 26 topics are presented. It can be seen that ship familiarization, weather, emergency on board, communication at sea have students attention because they are needed this topic. Meanwhile, the topics about standard engineer orders,

main engines, auxiliary machinery are in low percentage where means that they do not need this topics because it is more related to technical students.

#### 6. Linguistic Features

It is generally known that that Maritime English is a codified English. it presented in unique way. The results of the research show that the linguistics features of Maritime English needed by the students. It classified into three main categories that are a) grammar, b) applied terminology, and c) Standard Marine Communication Phrases (SMCPs) and the result is presented in the table below:

Table 4. Linguistics Features

No	Linguistic Features	Score	Level of need
1	Grammar	3.0	Needed
2	Applied Terminology	3.1	Needed
3	Standard Marine Communication Phrases (SMCPs)	3.7	Strongly Needed

It can be seen that grammar is needed. It is related to tenses (present continues, present, present perfect, past tense, past perfect, and future tense), passive voice, quantity, change verb, etc. Meanwhile, applied terminologies cover type of ropes, names of ship, parts of ships, names weather, names of fire extinguishers, etc. Last, the SMCPs are a standard of maritime communication used by seafarers. It is in line with students' needs that they really needs this SMCPs.

#### b) Discussion

Referring to the learning needs analysis above it can be seen that there are some problems faced by students in Maritime English learning process. The first is about language skill. The most needed skill of Nautical Merchant Vessel students in learning Maritime English is speaking. Then, it is followed by listening, writing and reading. This is supported by Azizah (2015) who stated VHS curriculum is needed to be design well in order to help students be able to reach their goal in having a job that related to their focus. According to Dirgayasa (2018) nautical merchant students will have job aboard, they will have communication with others foreign crews so that speaking is the most needed for them in Maritime English in supporting their job (STCW 2010 and IMO (1995)).

The next is about learning activities, the students mostly like to do role play in their learning. According to Liu and Ding (2009) in their research, it found that implementation of role play in classroom is given some advantages. Some advantages are including the students' applying the vocabulary and the students avoided using formal speech so that their communication skill is also increased. Then, related to learning material, students mostly like to have a learning material that can improve all of the skills. The materials must be related to their context.

After that, the limitation of time in Maritime English course has a role in not successful students in learning. Based on the result, students wanted to have more time for increasing their knowledge and be comprehend in using Maritime English. In this case, teacher should be able to manage the time in designing the material and activities to maximize the result.

The last is about the topics and linguistics feature of Maritime English course. Some topics that is not related to the student context can be eliminated so that the material will be focused on their context in order to reach the goal easily. Pritchard (2019) adds that a modern Maritime Syllabus is expected to take into account the needs of modern seafarer i.e deck officers, engineers officer etc and needed to make various maritime register and genre to be more specific i.e the level of education.

Moreover, in the learning Maritime English, the grammar and applied terminology is needed because Maritime English unique especially in grammar pattern (Dirgayasa, 2018) and applied terminology is needed to avoid misunderstanding in communication. Then, The Standard Marine Communication Phrases (SMCPs) have already officially designed and codified to despite all differences of background, language competence and culture working in maritime industry. Hence, it is needed to be understood by all seafarers

### Conclusion & Recommendation

The learning needs analysis found some of the important things that should be applied in designing ESP courses, especially in Maritime English course. The result of the analysis showed that the English skills which are mostly needed for Nautical Merchant Vessel students is speaking skill. Therefore, the learning activities and materials should be designed to make students communicative such as role play and group discussion by using topic that is based on the STCW curriculum, related and close to students. However,

these learning material and activities will need much time. It is recommended to use e-learning as a supporting material. Besides, it will help students to learn independently. Then, these findings, learning needs can be used as a reference in developing learning materials. The learning needs found in learning Maritime English subject at Nautical Merchant Vessel Department can be a reference for the curriculum development.

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