

THE EFFECT OF STANDARD MARINE COMMUNICATION PHRASES APPLICATION THROUGH ENGLISH FOR MARITIME ABILITY

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Abstract: *This research was conducted to investigate the significant differences of SMCP Application through English for Maritime and to know whether SMCP Application is effective in helping maritime students in learning English for specific purposes. This research was quasi experimental research. The sample was taken by purposive sampling. There were 27 students from Nautical Study program and 26 students from Port and Management study program. The data of this research were the results of students' English test. After conducting pre-test and post-test, the average of gained score was 17.66. The students who taught by SMCP Application have higher score in post-test than pre-test. Since t -observed = 8.33 was higher than t -table = 1.645, it means that H_a was accepted. The result of this research was students who are taught by SMCP have better English proficiency than those who are taught by conventional teaching method. In conclusion, SMCP can be used as a teaching technique in teaching English for Maritime.*

Keywords: *SMCP Application, English for maritime*

INTRODUCTION

Bengkalis Regency is a place where there is both land and sea. Many small islands are connected by sea make most people work as seafarer and fishermen. There are traditional and modern seafarers who dominated in this Regency. The route of seafarer's job is still very low because

of communication problem. They are less of English ability especially in Maritime English terminology. That is why most of seafarers in Bengkalis still work in their area only. They very seldom work abroad.

Politeknik Negeri Bengkalis as a place for students to study prepares a program which has relates to a

maritime subject and it is very suitable to people who want their children to be seafarers. This program supports them to change their future. They will be trained and learn so many kinds of Maritime program. They can also develop their ability in English communication. They need to communicate well. English consists of General English and Specific purposes. One of English for specific purposes (ESP) is English for maritime.

This ESP focuses attention of the learner on the language and communication requirements in a particular professional field. Maritime English is to satisfy the need of seafarers. Therefore it has its own characteristics.

1. SMCP It specifies the form of words and expressions utilized by seafarers in various working situations. It is characterized by concise language.
2. Written English in maritime English. It includes scientific English which can be seen in weather report, manuals, operations' guide, rule and regulations at seaport and legal English which can be found in

accident reports, claims, contracts, conventions etc.

3. Like scientific English and legal English, maritime English has its all characteristics, too. Maritime English has its own technological jargon or expression.

The terms make no sense out of maritime English or they are incomprehensible or weird. For example, the phrase "hard a port" cannot be understood according to literal meanings, however, in maritime English it denotes certain meaning. (Zhongliang Cui in Aprizawati).

Based on preliminary observation, the ability of communication in English of Maritime students both at Senior High School and College students are still in low level. It can be seen from the evaluation of their subject in English and National examination of Seafarers Certification. They always failed in English for Maritime. Based on the situation, it needs an effective and efficient method to increase their ability in English especially Maritime program. One of the media is SMCP (Standard marine Communication Phrases) application. It can be a measurement of speaking English

especially in terminology of maritime English. SMCP will make users be easy to understand the phrases which relates to Maritime.

REVIEW OF RELATED LITERATURE THEORY

1. *SMCP*

To be an International seafarer who works on board like in Europe, America or Australia, they must understand Standard Marine Communication Phrases or SMCP. Based on International Convention of STCW 1978 (revision 1995) SMCP is a required of a cadet even though he/she works at national board and do the navigation on over 500GT board. The first draft of SMCP is started since June 10th, 1997. Before SMCP, most of seafarers use SMNV or Standard Marine Navigational Vocabulary. SMNV was agreed by IMO in 1985. SMCP is a developing of SMNV. Both SMNV and SMCP have same purposes, they are helping in safety navigation and direction, being a verbal language of communication at sea, port national and international. SMCP also has specific purposes which is different with SMNV is help maritime training institutions.

Fires on ships ' Scandinavian star' with the dead and 158 sank empress' ' tanker sea to sea environment and coastal around Milford haven in Wales (England) because a knowledge of English -- inadequate technical maritime that produces 2: many tragic events the victims and damage to the ecosystem .The investigation in the case of Scandinavian ' star' concluded that the main cause of the casualties pricing is a bad communication between the crew and passengers due to a knowledge of English bad of the crew of a ship .This makes it difficult for the evacuation process passengers .Cases ' sea empress' initially only shed 2500 tons of crude petroleum and can actually be minimized .Due to wrong communication done by cook canton working on a tugboat china actual ' de yue' empress' ' wanted to help the sea will lead to oil spills 71.800 tons more up to seafarers requirements.

(<http://syaratpelaut.blogspot.com/2017/02/smcp-standard-marine-communication.html>)

According to Marine Soft GmbH in SMCP Tools Module, the SMCP Training Tools features the following training parts:

1. Basic Drill Part A,
Covering the revised SMCP textbook 'Basic Drill Part A' is designed to teach and train the basics, which determine the use of the SMCP. The training is focused on the drill of maritime vocabulary and phrases' structure. Learning - forms like multiple choice, fill in or drags & drop questions offer a widespread range of interactions for the user. Each phase can be used independently of each other. Two learning modes are included –training and test. The training mode allows to work through an exercise/lesson as often as needed by a trainee. Immediate feedback is given within the training mode. Additionally each text phrase has a sound version using a natural voice in part a and a computer generated voice in part B. A maritime glossary describing and explaining most of the technical terms in English are always usable. Each lesson finishes with a brief test. In compliance with the mandatory part A of the SMCP these courses are available:

- a. General Procedures
- b. External Communication Phrases
- c. A1 Distress Traffic
- d. A2 Urgency Traffic
- e. A3 Safety Communications

- f. A4 Pilot age
 - g. A5 Specials
 - h. A6 Vessel Traffic Service
 - i. A7 Standard GMDSS Messages
 - j. A8 on- Board Communication Phrases
2. Basic Drill Part B,
3. In addition to the mandatory part A the following courses are available to:
- a. On- board Communication Phrases
 - b. B1 Operative Ship Handling
 - c. B2 Safety on Board
 - d. B3 Cargo and Cargo Handling
 - e. B4 Passenger Care

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2. *Content Training,*

This training part is dedicated mainly to the training of selected single topics. Basically the underlying principles of the SMCP and their specialties compared with general English should be explored and trained with the help of these modules.

Topics, which can be trained, are:

- a. Principle 1 □ KISS = Keep It Short and Simple,
- b. Principle 2 □ Avoid synonyms and give preference to words with Latin roots,
- c. Principle 3 □ Avoid contracted forms,
- d. Principle 4 □ fully worded answers,
- e. Message Marker for applying Message Markers in the right way, for building correct instructions,
- f. Vocabulary trainer for maritime nouns, verbs and adjectives

3. *Application Training,*

The Vessel Traffic Service (VTS) Module is suitable for the training of persons such as VTS operators and navigators in the Standard Marine Communication Phrases (SMCP). Based on standard situations in ship -to- shore, ship -to- ship and on - board communication

various situations have been created to train listening and speaking abilities in particular. Aiming to foster the ability to apply the phrases in the right context, real communication behavior is trained. Comparable to the basic training design every application training scenario covers a listening test to assess trainees' understanding of the situation.

4. *Multimedia Training,*

The Vessel Traffic Service (VTS) Module is suitable for the training of persons such as VTS operators and navigators in the Standard Marine Communication Phrases (SMCP). Based on standard situations in ship -to- shore, ship -to- ship and on - board communication various situations have been created to train listening and speaking abilities in particular. Aiming to foster the ability to apply the phrases in the right context, real communication behavior is trained. Comparable to the basic training design every application training scenario covers a listening test to assess trainees' understanding of the situation.

5. *SMCP Assessment.*

In SMCP assessment there are some kinds of test such as:

- a. Global Assessment,
- b. Distress Communication,
- c. Routine Communication,
- d. Standard Orders

The SMCP Training Tools are mainly self-study tools, which are user-friendly and motivating. All applications can be used independently from each other. But they are also useful in preparation for a taught course. For an effective use of the SMCP Training Tools it is highly recommended for a taught course. For an effective use of the SMCP Training Tools it is highly recommended to work first through the basic drill followed by working through the single applications to make familiar with the different scenarios and the special vocabulary and then to listen to the communication. (IMO & Rijeka College of Maritime Studies)

a. Definition MARITIME ENGLISH

In Maritime, English is indispensable by sailors in Indonesia to communicate with others foreign sailors in international work on ships. As a means of communication, English is the language used in the world as international language. One is English for maritime taught and learned at the Maritime field or

voyage. English maritime studies maritime terminologies where the language learned can be found in learning use. Maritime English is a type of specialized language used by seafarers both in the sea and in port and by individual working in the shipping and shipbuilding industry. Tenkner in Daniele (2014) defines it as “The entirety of all those means of the English language which, being used as a device for communication within the International maritime community, contribute to the safety navigation and the facilitation of the seaborne trade. The focus of research on Maritime English has so far been mostly confined to various aspects of language pedagogy. (Daniele: 2014). Since communication in the maritime sector typically involves exchanges between speakers of different mother tongues sharing English as a common language, it is understandable that a lot of attention has to be given to language instruction, so as to train seafarers and the maritime community at large towards proficiency in English. This need has become particularly pressing after the decision of the International Maritime Organization (IMO) in 1995 to adopt

English as the official language of the sea, which has led to the publication of IMO's Standard Maritime Communication Phrases (SMCP). It only stands to reason, then, that a number of ELT textbooks, course books and other materials had to be developed to meet the demands of learners in the maritime field. (Fauzi, et al: 2016)

SMCP test and Marlin test are application that are used a computer containing material appraisal directly more practical and modern. By studying english maritime ease sailors in practice directly vocabulary and frasa-frasa. to be told

Aprizawati (2017) said that there are many aspects can be explained in English for Maritime. They are about shipping, ship types, ship construction, manning, seamanship, cargo work, navigation, main engines, auxiliary machinery, maintenance, safety abroad, communications at sea, etc. In this research, the writer needs to explain about Spelling Letters, Ship organization, types of ship, and main parts of a ship. Each topic contains of many glossaries and pictures.

METHODOLOGY

The research design was Quasi-Experimental research. It is aimed to test an idea (or practice or procedure) to determine whether it was influence an outcome or dependent variable. (Jhon.w.cresswell, 2008: 299)

In addition, an experiment is the quantitative approach that provides the greatest degree of control over the research procedures.(Airasian & L.R Gay, 2000: 15). This research will use quasi-experimental design with nonequivalent control group which was an appropriate one to this research in order to find out the significant effect of using SMCP Application in learning English for Maritime for Maritime students.

In this research, there are two classes; one class is an experimental group which will be treated by SMCP Application and another one is as a control group will be taught by using non SMCP Application. For both experimental and control groups, pre-test and post-test will administer to the students. Pre-test will be given at the beginning of the teaching learning in order to identify the students' English for Maritime ability. Then, the experimental group will be given a

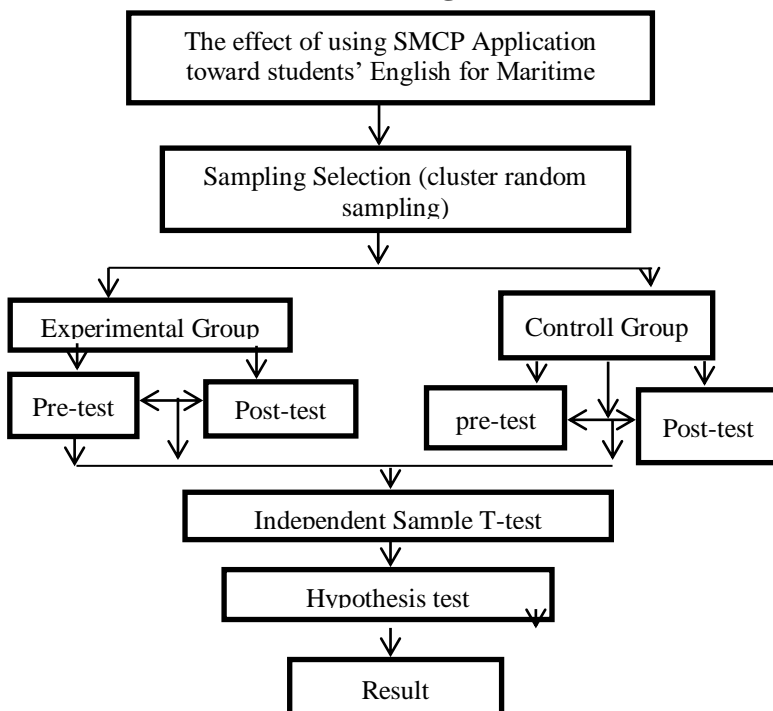
treatment by using SMCP Application and the control group using non SMCP Application. During the treatment, the writer will be accompanied by an observer, and at last, both groups will be given post-test at the end of the teaching learning processes in order to determine the effect of using SMCP Application toward students' English for Maritime ability. The model of the research design is illustrated as follows:

Table I
The Research Design

Group	Pre-test	Treatment	Post-test
Experimental group	Test 1	X	Test 2
Control Group	Test 1	-	Test 2

John W. Creswell (2008)

Figure .1 The Scheme of Research Design



Population and Sample

1. Population

According to Gay and Arisian (2009), “population as a general term for the larger group from which a sample is selected or the group to which the researcher would like to generalize the results of the study”. This research was done at State Polytechnic of Bengkalis. The Population of this research was the Maritime department students that consist of Nautica study program and Port and Management study program. There were 54 students in those study programs. There were 27 students from Nautica Study program and 27 students from Port and Management study program.

2. Sample

The sample was taken by purposive sampling. Nautica students and port and management students were the sampling class. The classes were determined based on the subject that they learned. As listed before, there were grouped into experimental and control class. Experimental class was

taught by SMCP Application. The other, control group was taught by conventional teaching.

RESULT & DISCUSSION

The data of English ability was taken from posttest. It was different treatment given for Control and experimental class. The experimental class was taught by SMCP Application, and conventional teaching was for control class. There were 27 students taught by SMCP Application. Based on the result of pre-test and post-test from experimental class, it can be showed that the lowest score of pre-test was 56 and the highest score was 76. Besides, the lowest score of post-test was 71 and the highest score was 94. The average score of pre-test was 65.11 while post-test was 82.78. After conducting pre-test and post-test, the average score of gained score was 17.66. So, it can be concluded that the students who taught by SMCP Application have higher score in post-test than pre-test.

Based on the result of pre-test and post-test from control class, it can be showed that the lowest score of pre-test was 50 and the highest score was 75. Besides, the lowest score of

post-test was 57 and the highest score was 82. The average score of pre-test was 63.54 while post-test was 68.58. After conducting pre-test and post-test, the average score of gained score was 5.04.

It can be concluded that both of the students learning output increase, but the experimental class is significantly increased than the control class.

Analysis of data

1. Prerequisite Analysis

a. Normality Testing

Normality testing was analyzed by using Lilliefors test at the level of significance 0.05 in order to know the significant difference between experimental class by using SMCP Application and control class by using conventional technique are normally distributed or not.

$$L_{observed} = 0.05927 ; n = 27;$$

$$L_{table} = 0.15913 ; \alpha = 0.05$$

So, $L_{observed} < L_{table}$, (0.05927 < 0.15913) it means that H_0 accepted and experimental class was normally distributed.

$$L_{observed} = 0.154752 ; n = 26;$$

$$L_{table} = 0.159130 ; \alpha = 0.05$$

So, $L_{observed} < L_{table}$, $(0.154752 < 0.159130)$ it means that H_0 accepted and experimental class was normally distributed.

Table II
The Summary of Normality Testing

Class	N	$L_{observed}$	L_{table}	Note
Experimental	27	0.05927	0.15913	$L_0 < L_t$ Normal
Control	26	0.154752	0.159130	$L_0 < L_t$ Normal

From the table above, both of the groups; experimental and control class is normally distributed because $L_{observed}$ is lower than L_{table} .

b. Homogeneity Testing

The homogeneity testing of this research was tested to know the variance of each groups were same or not. Variance formula was used in this testing. The result summary of homogeneity testing could be seen below

Table 3. 3 The summary of Homogeneity Testing

Technique	$t_{observed}$	t_{table}	Note
SMCP Application	8.33	1.645	$t_{observed} > t_{table}$ Ha: accepted

Variable	$F_{observed}$	F_{table}	Conclusion
Students' English for Maritime Ability	0.6931	1.94	Homogenous

Based on the table above, it can be summarized that F observed of students' English for Maritime ability was lower than F table ratio. It means that the variances of those groups were homogenous.

c. Hypothesis

Based on the result of normality and homogeneity testing above, the hypothesis was analyzed by using one tailed t-test.

$$t = \frac{\bar{x}_1 - \bar{x}_2}{s \sqrt{\frac{1}{n_1} + \frac{1}{n_2}}} \quad \text{and}$$

$$s^2 = \frac{(n_1 - 1)s_1^2 + (n_2 - 1)s_2^2}{n_1 + n_2 - 2}$$

$$S_1^2 = \frac{n \sum x^2 - (\sum x)^2}{n(n-1)}$$

Experimental class

$$= \frac{(27)(185671) - (2235)^2}{(27)(26)}$$

$$= 25.49$$

$$S_2^2 = \frac{n \sum x^2 - (\sum x)^2}{n(n-1)}$$

Control Class

$$= \frac{(26)(123583) - (1783)^2}{(26)(25)}$$

$$= 52.41$$

So:

$$\begin{aligned}
 S^2 &= \frac{(n_1-1)s_1^2+(n_2-1)s_2^2}{n_1+n_2-2} \\
 &= \frac{(27-1)25.49 + (26-1)52.41}{27 + 26 - 2} \\
 &= 38.69 \\
 S &= 6.22
 \end{aligned}$$

Therefore:

$$\begin{aligned}
 t &= \frac{\bar{x}_1 - \bar{x}_2}{s \sqrt{\frac{1}{n_1} + \frac{1}{n_2}}} \\
 &= \frac{82.78 - 68.58}{6.22 \sqrt{\frac{1}{27} + \frac{1}{26}}} \\
 t &= 8.33
 \end{aligned}$$

$$\begin{aligned}
 dk &= n_1 + n_2 - 2 = 27 + \\
 &26 - 2 = 51
 \end{aligned}$$

$$\begin{aligned}
 t_{table} \text{ by } dk = 51 \text{ is } t_{0.05} &= \\
 &1.645
 \end{aligned}$$

Based on the result above, it means that:

Ho: There is no significant differences between the students who taught by SMCP Application than those who are taught by conventional teaching

Ha: There is a significant difference between the students who taught by SMCP Application than those who are taught by conventional teaching. It can be concluded that $t_{observed} > t_{table}$. It means that *Ho* is rejected and *Ha* is accepted.

CONCLUSION

Based on the research finding above that was conducted for Maritime Students of *Politeknik Negeri Bengkalis*, it can be concluded that: the experimental class was taught by SMCP Application, and conventional teaching was for control class. There were 27 students taught by SMCP Application. Based on the result of pre-test and post-test from experimental class, it can be showed that the lowest score of pre-test was 56 and the highest score was 76. Besides, the lowest score of post-test was 71 and the highest score was 94. The average score of pre-test was 65.11 while post test was 82.78. After conducting pre-test and post-test, the average score of gained score was 17.66. So, it can be concluded that the students who taught by SMCP Application have higher score in post test than pre-test. Since t-observed = 8.33 was higher than t-table = 1.645, it means that *Ha* was accepted.

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Franceschi, Daniele. (2014). The Features of Maritime English Discourse. *International Journal of English Linguistics*.

IMO&Rijeka College of maritime Studies.2000. IMO Standard Marine Communication Phrases. NAV 46.INF.4

REFERENCES

Airasian, Peter and L. R. Gay. (2000). *Education Research: Competence for Analysis an Application* (6th ed.). New Jersey: Merrill Prentice Hall

Aprizawati and Zahraa, Safra Apriani. *The Making Of E-Mar Learning Application With Android Based System*. ICTE 2 vol. 2017

B. Saman, Rachmat and Judy Koesprijanto. (2003). *Bahasa Inggris Maritim untuk Program ANT V dan ATT V*. Lembaga Pendidikan Kepelautan (LPK), Semarang.

Blakey, T.N. (1987). *English for Maritime Studies* Second Edition. Pergamon Press.

Creswell, John. W.(2008). *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research* Ed 3rd, (Lincoln: Pearson Education International)

Fauzi, Ahmad, PattaBundu, SurandiTahmir. (2016) the development of Maritime English Learning Model Using Authentic Assessment based Bridge Simulator in Merchant Marine Polythecnic, Makassar. *International Journal of Environmental and Science Education*, Vol. 11 no. 10, 3231-3240.