

# The Using of Media Games to Improve SMCP (Standard Marine Communication Phrases) Vocabulary in Maritime English

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## ABSTRACT

**Purpose:** Shipping is the world's largest trade and also one of the most dangerous. Safety of life at sea, the environment at sea, and 80% of world trade depend on professional and competent seafarers. Ziarati (2006) identified that poor communication as one of the most significant factors in accidents at sea and ports. SMCP is a collection of words or phrases in English which is supported by the international community means of communication at sea then developed and adapted to IMO (International Maritime Organization) standards. SMCP aims to explain external communication phrases such as communication between ships, between ships and land parties such as ports. The main goal is to reduce language problems in communicating at sea and also to avoid misunderstandings that can lead to accidents. So, it is possible to learn vocabulary in SMCP to achieve maximum results if it is done in a pleasant atmosphere.

**Design/methodology/approach:** This study uses a quantitative approach using a quasi-experimental method.

**Findings:** In this study, the result in question was the use of games to support the learning of maritime English SMCP vocabulary.

**Research limitations/implications:** The population in this study was the cadets of the diploma program majoring in Nautica in the second semester of The Surabaya Shipping Polytechnic (2015-2016) academic year, amounting to 110 people. The sample of this study was 20 cadets in class C.

**Paper type:** A case study

**Keywords:** Games, Maritime English, SMCP, Vocabulary,

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## I. INTRODUCTION

Shipping is perhaps the most international of the entire world's great industries and one of the most dangerous. Safety of life at sea, the marine environment and over 80% of the world's trade depends on the professionalism and competence of seafarers. It has been reported that over 80% of accidents and incidents are due to human error (Ziarati & Maritime, 2006). IMO (2005) also reports that 80% of accidents are caused by human negligence and one of the influential factors is the low level of capability to speak maritime English. The language of the sea is Maritime English and many ships related parties such as ports, loading and unloading staff, etc are generally handled by people of different nationalities. In a situation like this, good communication in maritime English is very important to create good working conditions. effectively and support the safety of its workers.

The low ability to communicate maritime English which caused sea and ports accidents was also identified by Ziarati & Maritime (2006) that, poor communication as one of the most significant factors in accidents at sea and ports. In addition, land and sea officers on land must be master English as stated in the Marine Communication Phrase Standard (SMCP). SMCP is a collection of English phrases to communicate at sea which is then developed and adapted to IMO (International Maritime Organization) standards.

SCMP aims to explain external communication phrases such as communication between ships and land parties such as port. One of the results is the use of SMCP by all those associated with the shipping industry, including shipping educational institutions SMCP (2002). SMCP was adopted at the twenty-second IMO meeting in November 2011, one of the results is the use of SMCP by all those associated with the shipping industry, including shipping educational institutions. The main goal is to reduce communication problems at sea that cause misunderstandings which can lead to accidents.

To be able to speak English, especially SMCP in maritime English, prospective of Indonesian sailors at The Surabaya Shipping Polytechnic are expected to improve their vocabulary. Vocabulary acquisition activities are the core activities of foreign language learning with general or specific goals because communication is impossible without words. Students or in this case cadets who have a large vocabulary can learn the language easily. Someone who has a broad vocabulary will be able to understand the message of the text and write it even though he doesn't know the grammatical structure of the text (Nunan, 1999).

Vocabulary can be interpreted as a compilation of words (Poerwadarminta, 2007: 524). While Richards & Schmidt (2002: 580) define vocabulary as a set of lexemes, including single words, compound words and idioms, then for words they (ibid) define the word as the smallest of the linguistic units which can occur on its own in speech or writing. So, it can be concluded that vocabulary has a broader meaning than words because words are used in meanings in the form of units that can be counted while vocabulary refers to a single unit of words that become vocabulary.

At the time of learning vocabulary is expected to be done in a fun way. Rasinski & Padak (2004) explain that vocabulary learning should be enjoyable. Thornbury (2002) made games in vocabulary learning such as Word clap, word snap, coffeepot, and Nought and Classes. Other games were also introduced by Nation (1994) such as Vocabulary exchange Game, Word Building, Prefixes: A Word Game, and others. These Examples mentioned earlier are the proves that games are indeed the right form to use in vocabulary learning.

Parkinson et al. (2012) explained that students who study English often say that they like "Games" as a fun learning activity, but teachers are also still wondering what kind of "games" can be done. There are so many games that can be obtained from applications and the internet, but in general, these games are not "games" but only fun activities.

So, in this study, we will use 3 games out of 101 games that are already categorized as competitive or learning activities." The list of games here are all true games in the sense of the first definition of a game being a form of competitive activity or sport played according to the rules" (Oxford English Dictionary, 2012). The three games or "games" that will be played are "catch! Play Ball!", "scavenger Hunt" and "Quiz show" in part a of the SMCP (Standard Marine Communication Phrases) lesson, namely External Communication.

Phrases: Distress Traffic which discusses communication using standard SMCP vocabulary when the ship experiences an emergency. These emergencies include fires and ships exploding (fire/explosion), large les (flooding), collisions, grounding, ships tilting, overturning (list, danger of capsizing), sinking (sinking), drifting (disabled and adrift), piracy (armed attack/piracy), unspecified distress (undesignated distress), leaving the ship (abandoning vessel), people falling into the sea (person overboard) along with safety equipment on board.

## II. METHODS

To find out if the application of this study was either successful or not, there were 20 cadets in the Class II Nautica used as samples. The study used a quantitative approach with experimental quasi-experiments. Data retrieval by comparing initial ability with after taking the initial test (pre-test) and final test (post-test). This study took on The Surabaya Voyagers Second Class. In this study there are two variables of free or variable x (independent variable) and variable bound or variable y (variable). The free variable was the study of vocabulary using games. This variable can be manipulated and controlled by researchers. Whereas the fixed variable was the ability of the SMCP of the English maritime language of the cadets.

1. The methods of data collection used in the study are those of tests and the questionnaire. Test method testing methods are used for data retrieval, (pre-test) for treatment before treatment and post-test, after treatment is administered.
2. Method of observation (observation) Observation methods are used to identify any or no obstacles to the implementation of the game games "catch, play ball," "scavenger hunt," and "quiz show" at vocabulary class.

### III. RESULTS AND DISCUSSION

In this chapter will be discussed some matters related to the processing of data for research, starting with: Presentation of data, analysis presentation, hypothetical testing, and research results. As for more details, as follows: Starting and final tests are analysed with the following steps:

1. Determining assessment criteria given to cadets and tabulating frequencies according to assessment category
2. Based on the data tabulations, the percentage of each according to the margin.
3. The sum deduction of each data is derived from the small percentage.
4. In this data analysis, it's searched for a percentage of the extent of SMCP Maritime English vocabulary proficiency on initial and final tests to find out the improvement in vocabulary proficiency. Pre-test value data from 20 cadets were obtained and shown with the following descriptive statistics:

*Table 1. Maritime English Pretest Scores*

<i>N Valid</i>	20
<i>Missing</i>	0
<i>Mean</i>	62.1000
<i>Median</i>	68.0000
<i>Mode</i>	60.00
<i>Std. Deviation</i>	4.37547
<i>Minimum</i>	38.00
<i>Maximum</i>	92.00
<i>Sum</i>	1242.00

Based on the table 1 above, the value of the average (mean) is 62.10, the minimum on which the cadet gets is 38 and the maximum value of 92 and The Frequent mode or score of 60.

*Table 2. Distribution of The Frequency of Maritime English Achievement Value*

<i>Valid</i>	<i>Frequency</i>	<i>Precent</i>	<i>Valid Precent</i>	<i>Cumulative Precent</i>
<i>38.00</i>	<i>1</i>	<i>5.0</i>	<i>5.0</i>	<i>5.0</i>
<i>48.00</i>	<i>3</i>	<i>15.0</i>	<i>15.0</i>	<i>20.0</i>
<i>50.00</i>	<i>1</i>	<i>5.0</i>	<i>5.0</i>	<i>25.0</i>
<i>54.00</i>	<i>1</i>	<i>5.0</i>	<i>5.0</i>	<i>30.0</i>
<i>60.00</i>	<i>4</i>	<i>20.00</i>	<i>20.00</i>	<i>50.0</i>
<i>62.00</i>	<i>3</i>	<i>15.0</i>	<i>15.0</i>	<i>65.0</i>
<i>68.00</i>	<i>1</i>	<i>5.0</i>	<i>5.0</i>	<i>70.0</i>
<i>70.00</i>	<i>1</i>	<i>5.0</i>	<i>5.0</i>	<i>75.0</i>
<i>72.00</i>	<i>1</i>	<i>5.0</i>	<i>5.0</i>	<i>80.0</i>
<i>74.00</i>	<i>1</i>	<i>5.0</i>	<i>5.0</i>	<i>85.0</i>
<i>76.00</i>	<i>1</i>	<i>5.0</i>	<i>5.0</i>	<i>90.0</i>
<i>78.00</i>	<i>1</i>	<i>5.0</i>	<i>5.0</i>	<i>95.0</i>
<i>92.00</i>	<i>1</i>	<i>5.0</i>	<i>5.0</i>	<i>100.0</i>
<i>Total</i>	<i>20</i>	<i>100.0</i>	<i>100.0</i>	

Based on the table, it shows that the most common value is 60 with the number of cadets as many as 4 or 20% of the number. Whereas the least of which appears is 38.50,54.68,70,72,74,778 and 90 of the remaining 30.

Maritime English Post-Test value data presentation of 20 cadets is obtained with descriptive statistics as follows:

*Table 3. Maritime English post-tests scores*

<i>N</i>	<i>Valid</i>
	20
	<i>Missing</i>
<i>Mean</i>	0
<i>Median</i>	80.2000
<i>Mode</i>	80.2000
<i>Std. Deviation</i>	82.00
<i>Minimum</i>	8.0786842
<i>Maximum</i>	60.00
<i>Sum</i>	94.00
	1604.00

Based on the table 2 above, the average value (mean) for a 80.20 minimum value cadets get is 60 and the maximum value they reach is as high as 94. Frequent score of 82.

*Table 4. Distribution of English Post-Test Value Frequency Maritime*

<i>Valid</i>	<i>Frequency</i>	<i>Percent</i>	<i>Valid Percent</i>	<i>Cumulative Percent</i>
60.00	1	5.0	5.0	5.0
70.00	1	5.0	5.0	10.0
72.00	2	10.0	10.0	20.0
74.00	2	10.0	10.0	30.0
78.00	1	5.00	5.00	35.0
80.00	2	10.0	10.0	45.0
82.00	4	20.0	20.0	65.0
84.00	1	5.0	5.0	70.0
86.00	2	10.0	10.0	80.0
88.00	2	10.0	10.0	90.0
90.00	1	5.0	5.0	95.0
94.00	1	5.0	5.0	
	20	100.0	100.0	100.0

Based on the table above, it appears that the frequently appear value is 82 with a total of 4 or 20% of the number of cadets. While at least 60, 70, 78, 84, 90 and 94 in the number of 1 person.

In the maritime English vocabulary test instrument, given a value of 1 for the correct answer and vice versa given the number 0, then the processing is carried out using validated analysis of the Pearson Correlation Method obtained the following calculations:

*Table 5. Pearson Correlation's calculations for the validity test*

<i>No</i>	<i>The Points</i>	<i>Conclusions</i>
1.	.691**	Valid
2.	.642**	Valid
3.	.826**	Valid
4.	.848**	Valid
5.	.738**	Valid
6.	.681**	Valid
7.	.426**	Valid
8.	.756**	Valid
9.	.384**	Valid
10.	.419**	Valid
11.	.443**	Valid
12.	.515**	Valid
13.	.632**	Valid
14.	.496**	Valid
15.	.361**	Valid
16.	.657**	Valid
17.	.427**	Valid
18.	.350*	Valid
19.	.509**	Valid
20.	.661*	Valid

Based on the data, that maritime English test instruments have 20 problems with different things. By comparison with table 5% (n =20) by 0356, it is decided that the English assessment is valid because t calculating > table. As to know the reliability of the English maritime test, it can be calculated using a version of the SPSS program 17.0 and obtained the following results.

*Table 6. Table of calculating Reliability Test*

<i>Case Processing Summary</i>		
	<i>N</i>	<i>%</i>
<i>Cases Valid</i>	20 0	100.0
<i>Excluded Total</i>	20	.0
		100.0

*Table 7. Listwise deletion based on all variables in the procedure Reliability Statistics*

<i>Cronbach's</i>		
<i>Cronbach's</i>	<i>Alpha Based On</i>	
<i>Alpha</i>	<i>Standardized</i>	
	<i>Items</i>	<i>N of items</i>
.755	.743	20

Based on the tables, they obtained a host of technical analyses with the value of Cronbach alpha 0.755, which is more than an alpha religious requirement of the amount, 0.6, so that the test instrument was restated reliable or when re-examined the latter at later time, it obtained no different results.

The usage of the independent test 1 sample is to find out if there's a difference between pre-test and post-test scores. The meaning of the word independent is free, which means no relation between two samples or two values will be tested. To perform the test, it requires a preliminary hypothesis as follows.

1. H0: there is no difference in result
2. H1: there's a difference in result

*Table 8. As for the following accounting results.*

	<i>Average</i>	<i>result</i>	<i>Df</i>
<i>Pre-test</i>	62,10	3,186	55
<i>Post-test</i>	80,20		

Alternative hypotheses posed in this study claimed that the medical study of games could improve the skills of the naval English vocabulary (SMCP) of the cadets. For the sake of testing, alternative hypotheses were changed to 0 hypotheses and thus read: media games could not improve the ability of the maritime English vocabulary (SMCP) cadets. If a thing costs more than t table with a degree of blame used 5% then h0 is rejected and h1 is accepted. While the inspectors for hypotheses 2 alternative hypotheses read no obstacles that arise during vocabulary study using the game model "catch! Play ball, "scavenger hunt" and "quizzes show." For the sake of testing, alternative hypotheses were changed to zero (h 0) hypotheses and thus read: obstacle that emerged during vocabulary study using the game model "catch! Play ball! ". "Scavenger hunt" and "quizzes show." Based on the observation, there is no sign of any interference at the time Vocabulary study using media games "catch! Playing Ball! ", scavenger hunt "and quizzes show.

The Result Study of media games could improve maritime English vocabulary skills (SMCP). Based on data analysis, it is known that there are significant differences at the level of maritime English vocabulary (SMCP) capability on cadets in teaching vocabulary using media games. This is presented graphically in Fig. 1.



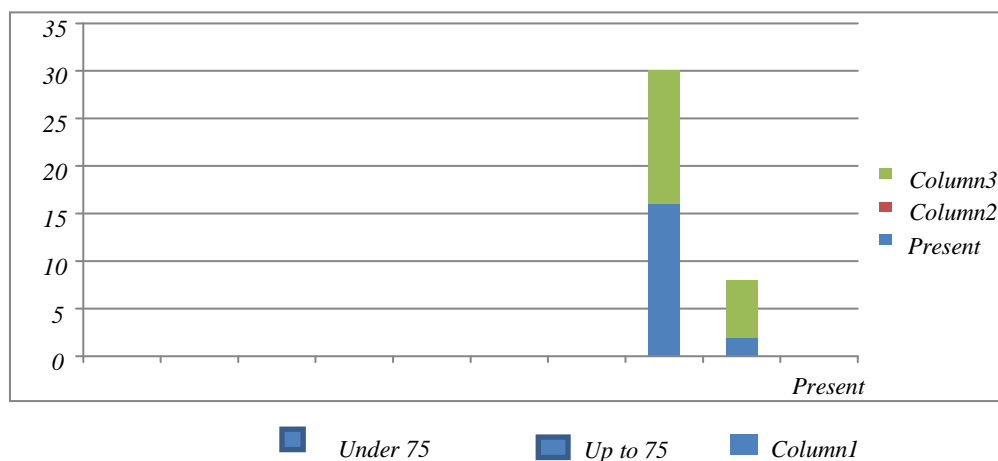


Figure 1. Pretest and posttest scores comparisons

There were no constraints when vocabulary study used media games "catch! Play ball!" Scavenger hunt "and" a quiz show." Under observation during the activities, the use of media games for vocabulary study was not found.

#### IV. CONCLUSION

The conclusions that can be drawn from the research as follows: The result of the study may be stated that learning using media games could improve Maritime English Vocabulary Skills (SMCP) of those cadets. Vocabulary class then used the media games "catch! Play ball" "scavenger hunt" and "quizzes show" have no obstacles to their implementation.

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#### REFERENCES

- IMO. (2005). *Country results • Individual results • Statistics*. International Mathematical Olympiad. [https://www.imo-official.org/year\\_individual\\_r.aspx?year=2005](https://www.imo-official.org/year_individual_r.aspx?year=2005)
- Nation, P. (1994). *New Ways in Teaching Vocabulary*. *New Ways in TESOL Series: Innovative Classroom Techniques*.
- Nunan, D. (1999). *Second Language Teaching and Learning*. Heinle & Heinle.
- Oxford English Dictionary. (2012). *New words: March 2012*. Oxford English Dictionary. <https://public.oed.com/blog/march-2012-update-new-words-notes/>
- Parkinson, S., Longstaff, A. P., Fletcher, S., Crampton, A., & Gregory, P. (2012). Automatic planning for machine tool calibration: A case study. *Elsevier BV*. <https://doi.org/10.1016/j.eswa.2012.03.054>
- Poerwadarminta. (2007). *Kamus Umum Bahasa Indonesia* (Ed 3, Cet). Balai Pustaka.
- Rasinski, T., & Padak, N. (2004). *Beyond consensus—beyond balance: Toward a comprehensive literacy curriculum*. *Reading & Writing Quarterly* 20.1.
- Richards, J. C., & Schmidt, R. (2002). *Longman Dictionary of Language. Teaching and Applied Linguistics* (3rd ed.). Pearson Education.
- SMCP. (2002). *IMO SMCP*. International Maritime Organization.
- Thornbury, S. (2002). *How to Teach Vocabulary*. Longman.
- Ziarati, R., & Maritime, T. (2006). Safety at sea - applying Pareto analysis. *Proceeding of World Maritime Technology Conference*. <https://www.semanticscholar.org/paper/Safety-at-sea-applying-Pareto-analysis-Ziarati-Maritime/e66b4991e6ff1cd28eb453ef797f4e14622c26>