



**THE EFFECT OF USING GROUP INVESTIGATION IN TEACHING
ENGLISH MARITIME VOCABULARY ON WRITING BUSINESS
LETTER**

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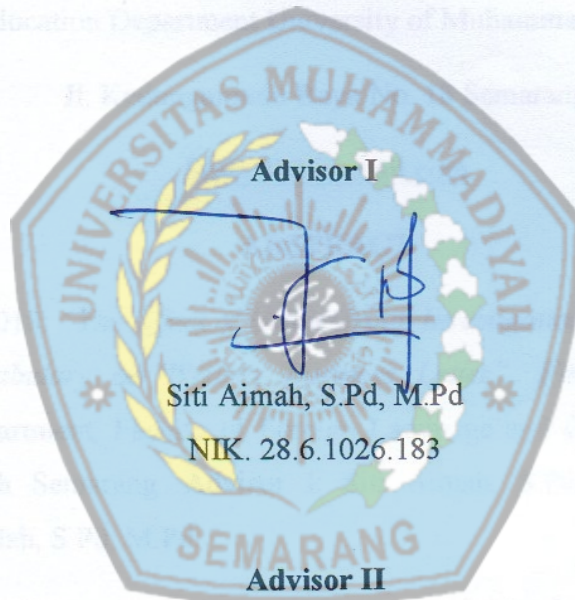
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APPROVAL

A manuscript of final project entitled "The Effect of Using Group Investigation in Teaching English Maritime Vocabulary on Writing Business Letter" has been approved by the both advisors in March 2018.

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THE EFFECT OF USING GROUP INVESTIGATION IN TEACHING ENGLISH MARITIME VOCABULARY ON WRITING BUSINESS LETTER

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ABSTRACT

Indarto, A. E 2018: "*The Effect of Using Group Investigation in Teaching English Maritime Vocabulary on Writing Business Letter*". *Final Project*. English Education Department, Faculty of Foreign Language and Culture, University of Muhammadiyah Semarang. Advisor I: Siti Aimah, S.Pd, M.Pd. Advisor II: Muhimatul Ifadah, S.Pd, M.Pd.

Keywords: *maritime vocabulary, maritime students, business letter, group investigation.*

This study was conducted to find out the effectiveness of using group investigation to improve the student's vocabulary of maritime English in writing business letter.

This research used quantitative approach with the experimental method. The research design used true experimental with pre-test and post-test control groups. The population of this study was the students of XI grade of SMK Pelayaran Semarang. The samples were the students' class XI Nautical and Technical with the amount 32 students of XI Nautical and 31 students of Technical. I used a purposive sampling, first nautical grade XI as the experimental group and first technical grade XI as the control group. I also conducted try out to get the validity, reliability, normality, and homogeneity. The research instruments used were test and questionnaire. The purpose of the research was to find out the effects of using group investigation for English maritime students in writing business letter. I applied t-test statistic to compare the result of pre-test and post-test. The result of this research was the value of post-test in experimental class increases more than control class. The higher increasing class amounted 18.26 from 67.03 to 85.29

while the control class is 15.03 from 64.26 to 79.29. The conclusion is that there is a tendency to increase the value of pre-test and post-test with significance value of 0.0 ($p < 0.05$). So it can be concluded that group investigation method can be effectively done in experimental class or correlation with correlation value 0.49.



INTRODUCTION

1.1 Background of the Study

Language is used as a means of communication among human beings in order to establish social life. By using language, they are able to convey their communication, to express idea in oral, written, and signal language, so they can cooperate and get along with another. Language is human communication of ideas, opinions, knowledge, etc.

Indonesia has curriculum in English at almost all stages of the educational system. In higher education with the various fields of study use discipline specific curricula to teach English. For example the maritime students, based on the maritime Engineering Curriculum (2011:2) cited in Aeni et al. (2017:1) in the curriculum in maritime studies, English communication is added because the graduates will be entering the international industry and English will be used in the work area. It is called Maritime English.

For mariners, communication plays important role in the sea or land to make sure that the ship operation is safe, efficient and profitable. The International Maritime Organization (IMO, 2010) cited in Aeni (2017:1) also identified a problem with the English proficiency of many Asian graduates. Mariners may lose job opportunities in the global maritime labor market due to their poor English communication ability.

Based on the pre observation at SMK Pelayaran Semarang, unfortunately students have still lack of ability to understand or gain the maritime vocabulary. The students ignore the four competence of English because they thought English is not really important. Besides that, the way the teacher taught the students also influenced the interest of students in mastering English especially vocabulary.

Based on the situation above, applying the appropriate method for maritime students is important to create their motivation and interest in studying English especially vocabulary. In this paper, I applied cooperative learning with the group investigation as the methodology in the subject of business letter.

Business letter is a formal way of communicating between two or more parties. Business letters can be informational, persuasive, motivational, or promotional. Based on the maritime English curriculum of SMK Pelayaran Semarang from Ministry of Transportation, business letter is added as one of the material in the vocational school curriculum specifically for grade XI both of nautic and technic.

Based on the situation above, the use of group investigation makes them share their ideas together, communicate one and another and provide investigation form that makes the study more detail and the students can investigate what is business letter, purpose, form and encourage them in mastering of maritime vocabulary.

1.2 Reason for Choosing the Topic

- a. Mastering English for maritime students is very important for their future career, with the fact that the maritime students still lack of motivation to learn English and also there is no specific material between English subject and Maritime English subject in learning process, different treatment and method should be applying for the students. By using the group investigation, the students will share their ideas in the form of business letter, try to communicate as a group what they know so it can improve their master in English vocabulary.
- b. The group investigation can help the teacher to teach the maritime student in the material of business letter easier. This method will be more interesting to the student because they do not need to listen the teacher all the time but create the interesting discussion among of them.

b.3 Statement of the Problem

- a. What are the effect of using group investigation to students' mastery English vocabulary?
- b. What are the effect of students' motivation and students' capability to write business letter?

b.4 Objective of the Study

- a. To investigate the significant effect of using group investigation on students' mastery English vocabulary.
- b. To find out the effects of using group investigation on the students' capability to write business letter.

b.5 Significance of the Study

- a. Theoretically
 - 1) For the teacher the result of the research can be consideration to widen their skill in teaching by using group investigation, especially for teacher who teaches maritime students who need special and different treatment.
 - 2) For another researcher the result of the research could be reference to do the research using group investigation in writing business letter.
- b. Practically
 - 1) The teacher especially a teacher teaching maritime students is suggested to apply group investigation to increase students' ability in mastering English vocabulary.
 - 2) The group investigation can make maritime students enjoy to learn English related to gained their vocabulary and improve their ability to write business letter.

2).6 The Scope of the Study

The scope of the study is limited to the group investigation method in mastering English vocabulary and business letter. The subject of the study was nautical and technical students of XI grade in SMK Pelayaran Semarang.

In this study, I focus on how the students share and communicate with other in one team to cooperate discuss about business letter, and in the end, the result of their ability to write business letter.

2).7 Outline of the Study

The study is divided into three chapters. Those are introduction, research findings and discussion, and the last is conclusion and suggestion.

In chapter I, introduction contains of background of the study, reason for choosing the topic, statement of the problem, the objective of the study, significance of the study, the scope of the study, and outline of the study.

In chapter II, research finding and discussion contains of research result, the analysis of normality and homogeneity, the results data analysis of test tryout, the result of questionnaire.

The last, In chapter III, conclusions and suggestions.

RESEARCH FINDING AND DISCUSSION

2).1 Research Finding

I had studied to know the effect of using group investigation in teaching English maritime vocabulary on first nautical students grade XI of SMK Pelayaran Semarang on August 14th 2017.

I was applied two classes on experimental study. He took first nautical grade XI as experimental class and first technical grade XI as control class and applied speech method. I wanted to know whether group investigation gave effect to the students' ability in mastery the English of maritime English vocabulary.

I applied pre-test, treatment, post-test and questionnaire that were conducted in the experimental class and control class. The pretest was applied to know the students' maritime English vocabulary mastery in business letter before being given the treatment. Meanwhile, post-test was applied to know the students' competence in mastery of maritime English vocabulary on writing business letter after getting a treatment.

I chose the experimental class and control class applying random sampling, the researcher chose first nautical grade XI as an experiment class and first technical grade XI as a control class.

2).1.1 The Results Data Analysis of Test Try Out.

2).1.1.1 The Analysis of Validity

The researcher investigated the validity to find out valid or not a question of pre-test and post-test which was given. I applied formula product moment correlation to calculate the results validity of question.

The criteria of a question were valid when $r_{\text{arithmetic}} > r_{\text{table}}$ at level of significance was $\alpha = 5\%$. Here were the results:

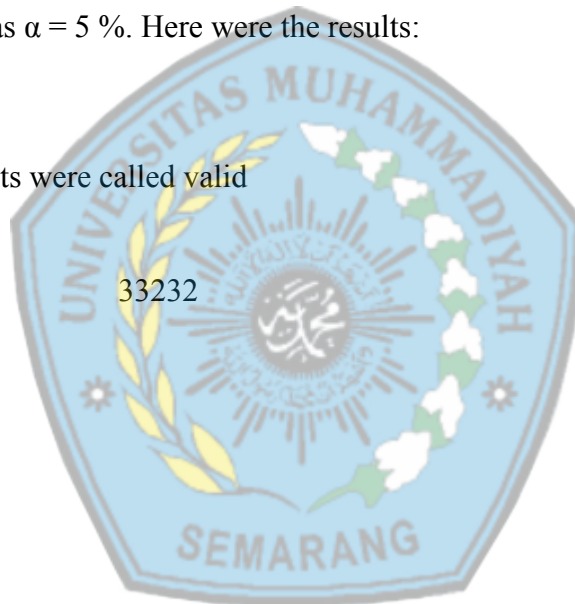
Criteria:

If so the tests were called valid

98

3332 04

33232



With significant standard 5% and $N = 32$ was acquired $r_{\text{table}} = 0.349$, because so the test was called valid. It meant that the test could be used in the research.

2).1.1.2 The Analysis of Reliability

The analysis of reliability result used this alpha formula:

Explanation:

= Reliability

= the number of item

= total variant score of each item

= total variant

With the variant formula (

Criteria: the tests were called reliable if .

Based on the analysis of the reliability of the formula above. It was acquired . Then this number was compared with with $N = 32$ in standard significant got. So, and the test which was valid was used in the research. It meant that the test was reliable and it could be used in the research.

2).1.1.3 The Analysis of Difficulty Level

Every questions had levels of difficulty in completing it, then it was needed the criteria as a measure of the level of difficulty in the question, a scale from 0.00 - 0.30 was hard, 0.31 - 0.70 was medium, and 0.71 - 1.00 was easy.

Here was the result of difficulty level:

$P =$

$=$

$= 0.90$

Based on the result of difficulty level above, the score got 0.90. It meant that the level of difficulty was in the interval 0.71- 1.00. Then the question of try out included the criteria difficulty level was easy.

Table 2.1
Difficulty Level Criteria

Scale	Explanation
0.00 – 0.30	Hard
0.31 – 0.70	Medium
0.71 – 1.00	Easy
Arikunto (2012:225)	

2).1.1.4 The Analysis of Distinguishing Capacity

Every question had scale capacity, it was needed the criteria as a measure the distinguishing capacity in the question. There were the necessary criteria as a measure the distinguishing capacity of a question, a scale from 0.00 – 0.20 was bad, 0.21 – 0.40 was enough, 0.41 – 0.70 was good and 0.71 – 1.00 was very good.

Table 2.2
Criteria of Distinguishing Capacity

Scale	Criteria
0.00-0.20	Bad
0.21-0.40	Enough
0.41-0.70	Good
0.71-1.00	Very Good

Here was the result of distinguishing capacity:

$$DC = \frac{PA - PB_{\text{max}}}{\text{Max Score}}$$

Max Score

$$= 60 - 40$$

$$60$$

$$= 0.333$$

Based on the calculation above, it was obtained scale capacity (DC) DC=0.333, because DC was in the interval 0.21 – 0.40 then distinguishing capacity of the test included in the category that was enough.

2).1.1 The Analysis of The Try Out Questionnaire

2).1.1.1 The Analysis Validity of the Questionnaire

In the analysis, I used the formula of correlation product moment, this analysis using Microsoft excel, to measure the validity of the questionnaire that was given, because the formula to measure the validity of the questionnaire according to Arikunto was very effective when using Microsoft excel. Criteria of the questionnaire were valid if in the significant standard after the questionnaire was applied.

Table 2.3

Result of the Try Out Validity Questionnaire

Criteria of Validity	Questionnaire Number
Valid	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
Invalid	-

2).1.1.2 The Analysis of Reliability Questionnaire

The analysis result of the reliability questionnaire was using alpha formula. Criteria of questionnaire was said that reliable if . Based on the calculation of analysis, reliability was obtained $r_{11} = 0.815$.

The result was compared with , and $N = 8$ in the significant standard was obtained . Because the result was so the instrument of questionnaire was included in the reliable category.

2).1.2 The Final Result

2).1.2.1 The Result of the Effect of Using Group Investigation in Learning English Maritime Vocabulary on Experimental Class

2).1.2.1.1 Pre-Test

I had taught experimental class by applying group investigation method. The students were interested in the learning process. They were enthusiastic to the lesson which was given by the teacher. They got more kinds of maritime English vocabulary and understand to arrange business letter on discussion with their friend. This technique belonged to cooperative learning that made the students to more active in teamwork. This method allowed the students to investigate business letter. Before giving the treatment, the researcher gave pre-test on Thursday August 15th 2017. There were 32 students in experimental class.

He applied statistic calculation on SPSS program. He found the mean value of pre-test of on experimental class was 67.03. The researcher also found the pre-test mean value of control class was 64.26. I sized up that pre-test means of experimental class was better than control class.

2).1.2.1.2 Treatment

The treatment was held on August 16th and 18th 2017. The treatment was held in experimental class of first nautical students grade XI. I taught by using group investigation was meant to know the effect of the method for the students' ability in memorizing vocabulary in Maritime English. The students identified the topic and organized the students into same groups. The students found sources, proposed topics, categorized suggestions, and planned the learning tasks. For the next step was for caring out investigation. The students gathered the information, analyzed the data and present the conclusion. They prepared a final report. Group members determined the essential message of their project. They presented the final report. Then, they made presentation to entire class in a variety of forms. The last one was for the evaluation. Students shared feedback about the topic about the work they did and about their influence experiences. After that, they made business letter which related with maritime English vocabulary.

2).1.2.1.3 *Post-Test*

It held on August 19th 2017. I what held to find out the effectiveness of group investigation to improve students' vocabulary of maritime English and writing business letter applied group investigation method in experimental class. The test in post-test was same with pre-test, I was applied SPSS application to found the means value, the result are 85.29.

Based on the statement above, it meant that the score of post-test was increased than pre-test because pre-test means score was 67.03. The means value increased after applying group investigation in learning process. The post-test means value of control class was 79.29. It meant that the score of means value increased than pre-test because the pre-test score was 64.26. The control class was applied by speech method in learning process.

2).1.2.2 The Differences between Pretest and Posttest in the Both of Experimental and Control Class

Based on the analysis, the means value of the pre-test in experimental class was 67.03 and the post-test in experimental class was 85.29. It could be concluded that the use of group investigation in learning process at the experimental class was significant with the students' mastery of maritime English vocabulary in material of writing business letter. The differences were 18.26. There were differences in the students' mastery of maritime English vocabulary between before and after giving the treatment. In the pre-test, students still were not all out in their English vocabulary. That was so different when the students in the post-test. They felt confident through many advantages given by their friend and tried to get total score in learning.

Based on the analysis above, the means value of the pre-test in experimental class was 67.03 and the means value of the post-test in experimental class was 85.29. It could be concluded that the applied of group investigation method in the experimental class increased the students' mastery of maritime English vocabulary writing business letter.

2).1 Discussion

2).1.1 Students' Writing Achievement in Business Letter Taught Using Group Investigation

In this section, the researcher would like to analyze all data from the research. The data would describe the finding of this study generally. In the first treatment was the first meeting between the researcher and the students of XI. When entering the class, the students looked surprised and afraid. In the action of applying the method of group investigation, most of the students took apart in the learning process.

In this treatment, when the researcher showed that they learnt by using group investigation, students looked amazed and interested. Then, the researcher gave the rules learnt by using group investigation method. This method gave them

new atmosphere in the English class. From the first meeting, the researcher analyzed the students' activities as follow;

- a. Group Investigation method was fun method applied to the students of XI.
- b. The students were still comfort with the conventional method.
- c. The students felt afraid and curious when making a group investigation.
- d. The students took a part in the learning process because they were interested in the use of group investigation method.
- e. Most of students were not confident to write business letter.

In the first meeting, the test instrument also showed the student's raising in class. He found the mean value of pre-test of on experimental class was 67.03. He also found the pre-test mean value of control class was 64.26. The researcher sized up that pre-test means of experimental class was better than control class. then when we saw the post test, it showed than the means value increased after applying group investigation in learning process. The post-test means value of control class was 79.29. It meant that the score of means value increased than pre-test because the pre-test score was 64.26. The control class was applied by speech method in learning process. From the calculation, the researcher analyzed that there was a significant difference between pretest and post test. In this case, there was significant improvement of the use group investigation method.

e..12 The Students' Motivation of Using Group Investigation Method

In this part, I would explain the students' interest of group investigation method. Related to the result of the questionnaire in both of the class research, it could be seen that in both of the classes had the different result.

According to the result in the experimental class by using group investigation method, it could be seen that the result of the calculation was 6. The result showed that in the experimental class had a very good motivation because the scale showed that the result was in good catagory. It meant that most of the students in the experimental class supported and agreed on the learning process by

using group investigation method. In this case, the researcher could conclude that the students had a motivation in learning English for increasing their ability, but sometimes they still felt shy to write because they still afraid for making mistakes.

Based on the explanation and seeing the result of the questionnaire of experimental group by using group investigation, it could be concluded that the student's interest of writing and the motivation of the students by using group investigation method was very good.

CONCLUSION AND DISCUSSION

e.1 Conclusion

I held group investigation to know the effect of using group investigation in teaching English maritime vocabulary on first nautical students' of SMK Pelayaran Semarang in academic year 2016//2017. After analyzing the data which were gotten from the pre-test, I found that the students' mastery of maritime English was low. The means value of the pre-test was 67.03. I found that the students did not like the content or topics discussed in the class. They would like to learn something that easy and attractive. In other hand, the teacher still applied the teaching approach or which made the students was not interested in the writing class. In addition, the students showed low motivation in participating in the writing task. They did not participate actively. During the writing class, most of the students kept silent and did not know enough about maritime English vocabulary in writing business letter class.

However the implementation of group investigation was suggested by I to know the effect of students' English maritime vocabulary. After the treatment was given, there were some effect results. Those are:

1. The post-test means value of experimental class was 85.29. It can be said that the score of means value is increased than pre-test because the pre-test

score was 67.03. The experimental class was applied by group investigation method in learning process. From the calculation, I analyzed that there was a significant difference between pretest and post test. In this case, there was significant improvement of the use group investigation method.

2. The difference mean value between pre-test and post-test in experimental class and control suggest applied group investigation in teaching vocabulary of maritime English were more give the influence for the students' memorizing.

Based on the result of the questionnaire obtained that the application of group investigation also encouraged the student to be more confident in memorizing their vocabulary because they could discuss with their friend as teamwork. This method also made the learning process more attractive and the students who work together and sharing with their teammates could understand the material easily with teamwork form.

2.2 Suggestion

This researcher sizes up that the implementation of group investigation in teaching vocabulary of maritime English showed many benefit for students' learning activities. Based on the result of the study, I found out some suggestions that would be helpful make teaching and success in learning vocabulary in Senior High School especially SPM (*Sekolah Pelayaran Menengah*), those are:

1. The teacher should have positive point of view and try to select the teaching technique which is interesting to apply in writing learning. Interesting teaching technique can raise students' comfort to actively engage in the learning activity. On other hand, the teacher should pay attention to the teaching technique which is given to the students should not be very difficult.
2. Teacher is expected apply group investigation method as the way ass the reference about the technique to make the students easy to memorize the

English maritime vocabulary, especially for the nautical students grade XI of Secondary Shipping School (SPM).

3. The nautical students grade XI of Secondary Shipping School (SPM) should change their attitude towards learning English material especially vocabulary. They should be more confident and build the teamwork in learning process, do not feel afraid of making mistakes. They should know that mistakes are parts of learning process.

For the readers, they could find the aspects of this method which are not presented yet in this research. In the future, they could apply it as their reference for their research. This research should give the readers more information about the effect of using group investigation method in teaching English maritime vocabulary.



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