IMPROVING NAUTICAL STUDENTS’ ENGLISH MASTERY THROUGH NEED ANALYSIS-BASED MATERIALS DEVELOPMENT

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ABSTRACT

Effective communication among seafarer on board between ship to ship/ship to shore are very important in maritime industry concerning the safety at sea. Then, International Maritime Industry (IMO) adopted English as the sea language which make it become very important in this industry. Since the students of Akademi Maritim Yogyakarta are preparing to work in maritime industry they must have adequate English competence both in oral and in written form. This study aimed at developing English instructional materials for Nautical Department of Akademi Maritim Yogyakarta based on need analysis. The methodology of this study was the combination between desk and survey study which involved IMO curriculum and 26 respondents (20 cadets for questionnaires and test; 2 ex-seafarers and 4 English instructors for their evaluation on the set of English materials). The survey showed the lack of cadets’ English competency that was caused by their dislikeness of learning English. They assumed that maritime English was boring and too difficult to learn as the materials were taken from old books and publication that discusses only on reading and tenses. The result of this study shows that a set of English instructional materials which was designed based on need analysis could increase the cadets’ interest and motivation to study maritime English which then gave significant progress on the improvement of their English competence.

Keywords: nautical, instructional materials, maritime English, English competency.

BACKGROUND

In seafaring, communication at sea is essential for the efficient and safe running of a ship. They take place within the ship herself –known as on board communication, and between the ship and other ships, between the ship and shore stations and sometimes between the ship and aircraft – known as external communication. Yakusheckina (2002:1) states “International Maritime Organization (IMO) requires every mariner to have adequate knowledge of English. The requirement emphasizes the importance of the English language proficiency in relation to safety at sea”.

Since seafaring deals with international world and regulation, the use of English becomes much more crucial. People who involve in this field – in this case the seafarers—will need English for oral and/or for written communication. They use English for sending or receiving message when they are on voyage. Subandi states that people who work in maritime
companies will be dealing with people from many countries all over the world and sometimes none of the mariners is a native speaker of English. Consequently, all the mariners must be able to communicate in English fluently (1998: vii). Furthermore, English skill is necessary as they also have to read and understand books, journals, publications about navigation which are commonly published in English Language.

Akademi Maritim Yogyakarta which then would be mentioned as AMY, is one of the formal education institutions in Yogyakarta that offers a diploma three degrees in ship navigation is an example. It is a company under Yayasan Institut Pendidikan Maritim which was established on 23 September 1964 with Akte Yayasan No. 2 Th 1965. The education program at AMY has an objective to prepare the students, usually addressed as cadets, who are skillful to meet the needs of ship navigation, marine engineering and shipping management world.

As an international standard maritime institution, AMY, in this case Nautical Department adopted IMO Model Course 7.04 and 7.03 but they are adjusted by the needs of the institution.

AMY has Maritime English in its curriculum as a compulsory subject. For Nautical Department, where the research is conducted, English itself is given in four semesters. In the first semester, the cadets have General English as an introduction to Maritime English whereas at the second, third and fourth semesters they study Maritime English I, II and III. However, AMY does not have suitable and up-to-date handout for the cadets for this subject even though it already has the syllabus. The teaching learning materials are only taken from old books and publications which do not fit the progress of the maritime field. Furthermore, the time and the materials given for learning English are not enough to prepare the cadets to survive in maritime world. The materials are dealing only with reading and tenses which may cause boredom for both the cadets and the lecturer. In fact, the cadets are required to master active English. To overcome this problems AMY needs a handbook which can help cadets and the lecturers in teaching learning process.

Thus, the writer tries to find a way to solve this problem by designing a set of English instructional materials which can encourage the cadets to play an active role in learning English
based on the syllabus available. The set of materials covers four language skills that are Listening, Speaking, Reading and Writing which will be very useful for them when they involve in maritime world. It is completed with discussion on tenses, reading comprehension, tasks on word power, role-play, writing assignments and games. The activities are samples of future real-life activities when they have to work in the maritime world so that the students will enjoy in learning English.

Research Objective and Contribution

This research is limited to designing a set of English instructional materials for the first semester cadets of Nautical Department of Akademi Maritim Yogyakarta.

This research is intended to give benefit to all parties dealing with the learning of English in maritime academy; they are 1) the Maritime English teacher, 2) Nautical students as the design itself is made by analyzing their needs and 3) the other parts who are interested in maritime industry.

THEORETICAL REVIEW

English for Specific Purposes

English for Specific Purposes (ESP) is an approach and it is applied in the designing of a set of English instructional materials for the second semester cadets of Nautical department of AMY. As proposed by Hutchinson and Waters (1994: 19), ESP is an approach of language teaching in which all decisions as to content and methods are based on the learner’s reasons for learning. It can be said that the basic of the teaching learning process in ESP is the learners’ needs. In designing a set of instructional materials for the basic level students of Akademi Maritim Yogyakarta, ESP is also applied to improve the result of the work.

The Criteria of ESP

There are a number of features that are often thought as the criteria of the ESP course as suggested by Robinson (1991: 2). First, ESP is goal directed. Students learn English because they need English for certain purposes such as study or work purpose. Second, an ESP course is based on needs analysis. The aim of the analysis is to specify the things that the students have to do through the medium of English. It emphasizes the course requirements or targets. Third, the students that learn an ESP course are likely adults rather than children. It focuses on the continuation of their English learning. Besides,
although there are some differences in the learners’ educational background, ESP course should be identical. This means that the students are involved in the same kind of work or specialized studies.

A need analysis must be done because it offers an awareness of the target needs. Target needs distinguish ESP learners because it has definable needs to communicate in English. Hutchinson and Waters (1994: 55) state that getting the target needs from the learners will be helpful as a means to obtain complete data about the learners’ necessities, lacks, and wants which are presented below.

1. **Necessities** are determined by the demands of the target situation. Target situation means what the learners have to know in order to function effectively in the target situation.

2. **Lacks**: what the learners know already.

3. **Wants**: to know what motivate the learners because of the apparent relevance to their course of study.

After finding the three elements, it is necessary to analyze the target needs. It is done by asking questions about the target situation and the attitudes toward the situation of the various participants in the learning process.

The analysis of target needs can be gathered by having a framework of the target situation analysis below.

- **Why** is the language needed?
- **How** will the language be used?
- **What** will the content areas be?
- **Who** will the learners use the language with?
- **Where** will the language be used?

**English for Academic Purposes**

Pauline Robinson (1991: 1) divides ESP into two major categories. The first one is English for Occupational Purposes (EOP), involving work-related needs and training. The second is English for Academic Purposes (EAP), involving academy students’ needs. Usually, the types of learners differentiate EAP from EOP. EAP itself is very general. The courses and materials should be adjusted based on the variety of the academic discipline. English for maritime academy students is included in EAP since the maritime academy students learn English for their academy study needs.

**English for Maritime Academy Students**

It can be said that English for the maritime academy is a part of
EAP. The students there learn English as they need English for study and for their future jobs. Therefore, the objective of this program is to raise the student’s competence in acquiring the four skills with the emphasis on four language skills (listening, speaking, reading and writing) and the language block (grammar, vocabulary, phonology). The designed materials are based on the students’ needs and their area of study, maritime. The materials are meant to train them to be able to communicate in English both in oral and written form.

Language Program Development

In a language program development, may approaches are used in teaching the target language. The further study discusses about several consideration related to communicative approach that become the basis of this research. The discussion is divided into several section as follows:

Communicative Language Teaching

Littlewood states that one of the most characteristic features of communicative language teaching (CLT) is that it pays systematic attention to functional as well as structural aspects of language, combining these into more fully communicative view (1981:1)

According to Brown (1994: 245) the characteristics of CLT are stated as follow:

a. communicative competence
b. the design of language techniques involves learners in the pragmatic, authentic, and functional use of language for meaningful purpose.
c. Fluency and accuracy
d. Productively and respectively to use the language in spontaneous way

Further, Candlin (1981:20) states that basic principles that should be learnt for those who are designing programs applying CLT approach are:

a. Learners recognize and know the aims and objectives of all exercises and activities in which they are involved.
b. Classroom work is aim at the situational and contextualized use of particular language
c. The active involvement of all learners according to their knowledge, ability and skill implies breaking down and differentiating activities
d. Teaching and learning is observable and transparent
e. Content and methodology depend on the previous age-determined and socially-determined knowledge of the learner.

f. Learners acquire techniques for learning, making certain, practicing, and working.

g. Teaching and learning is marked by variety and differentiated modes and means of learning.

h. The communicative teaching of English is marked by an atmosphere of using and working with the target language and the target culture.

All efforts and activities in communicative English language teaching serve the purpose of enabling learners to develop their communicative abilities, respectively, interpretively, reconstructively, and reproductively (Nunan, 1989: 13).

Based on the revolution in language teaching in 1970s, Savignon (1983:23) lists summaries of communicative approach guidance to language teaching as below:

1. Language use is creative.

2. Language use consists of many abilities in a broad communicative framework.

3. Language learning begins with the needs and interests of the learner.

4. An analysis of learner needs and interests provide the most effective basis for materials development.

5. The basic unit of practice should always be a text or a chunk of discourse.

6. The teacher assumes a variety of roles to permit learner participation in a wide range of communication situation.

Communicative Competence

To support the theory of CLT, many principles underlying the theory has been taken in both second and foreign language teaching methodology (Savignon, 1983: 9). One of them which is the first and foremost is communicative competence. The term communicative competence itself has been defined in numerous way.

According to the anthropologist and linguist Dell Hymes as quoted by Richard and Rodgers (1986: 70), defines communicative competence as "what a speaker needs to know in order to be communicatively competence in community". Whereas Brown (1994: 27) states that communicative competence as the aspect of our competence that enables us to convey and interpret message and to negotiate meanings interpersonally within specific context.
Meanwhile, Canale and Swain (1980: 1-47) propose four components of communicative competence that can suggest a model of communicative competence as a basis for curriculum design and classroom practice. These components have, in fact, brought together the various views of communicative competence and placed linguistic competence into an appropriate perspective within the larger construct of communicative competence. These components are grammatical competence, discourse competence, strategic competence and sociolinguistic competence.

Types of Classroom Activities

CLT uses almost any activity that engages learners in authentic communication. Littlewood (in Richard and Rodgers, 2001: 171) offers a sequence of activities inside the CLT classroom. The first step is pre-communicative activities. This step consists of structural activities and quasi-communicative activities and aims to help pupils learn the language forms, without actually requiring them to perform communicative acts. The second is communicative activities. It aims at the communication of meaning and focus on fluency. Moreover, Littlewood (in Richard and Rodgers, 2001: 166), explains these two communicative activities as follow:

1. Functional communication activities which aims at developing certain language functions, which involve communication.

2. Social interaction activities, which emphasizes on giving learners an opportunity to use the language in an appropriate social context, to create variety of social situations and relationships

Teacher's and Learner's Role in Communicative Classroom

In a communicative classroom, the roles of the teachers and learners are complementary. When learners are given different roles, the teacher are also required to adopt different roles. According to Bren and Candlin in Richard and Rodgers (2001: 167), teachers have two main roles in a communicative classroom. They are to act as a facilitator of the communicative process and to act as a participant. Other are as observers or researchers, learners, counselors, need analysts and group process managers.

Instructional Design

Banathy suggested “instruction is the process rather than the purpose of education. In the system view, instruction denotes process and
functions that are introduced into the environment of the learner in order to facilitate the mastering of specific learning task’ (I/76: 16). According to Briggs (1978: 3) instruction is a set of event which affects learners in such a way that learning is facilitated. It means that employed by teachers, designers of materials, curriculum specialists, and other whose purpose it is to develop an organized plan to promote learning (1978: 19). By instruction, we shall mean a goal-directed teaching process, which is more or less pre-planned. Instructional design therefore, a three phase process of establishing precise and useful objectives, planning viable routes and testing them out (Romiszowski, 1981). Therefore, instructional design in general can be defined as:

“The entire process of analysis of learning needs and goals, and the development of a delivery system to meet the needs; includes development of instructional materials and activities; and revision of all instruction and learner assessment activities” (Briggs, 1979: 20).

There are a lot of instructional design models that can be employed in developing materials, the writer only refers to three instructional design models suggested by Kemp, Yalden, and PPSI. In order to design simpler and applicable instructional materials for the second semester cadets of nautical department of Akademi Maritim Yogyakarta, the researcher adopted and adapted some stages of each instructional design model because they complete each other.

Thus, the researcher chose a new model of instructional design proposed by Yalden, Kemp, PPSI. The model is determined under the sense of making the design simpler, suitable and applicable. Then the combination of the model design is stated as follows:

1. Conducting Needs Survey (Yalden’s) in order to find out the learner’s purpose related to their backgrounds, purposes, and motivation on learning English. It also to characteristics of the learners and also their behaviour.
2. Identifying the competency standard (Kemp’s) which is aimed at determining goals of the entire course that is what the students will be able to do after they have completed the entire instruction.
3. Listing the topics (Kemp’s)
4. Stating the basic competency (Kemp’s)
5. Listing the indicators (Kemp’s)
6. Designing Instructional Materials (PPSI's)
7. Evaluating Instructional Materials

RESEARCH METHODOLOGY

This research used library study and survey study. It involved some observation on the Curriculum and lesson plan of Maritime Education Training required by International Maritime Organization (IMO), English literature related to the English materials and books about maritime.

In the survey study, the writer observed the learners to obtain data to know their necessities, wants and lacks and information about the learners' background which focused on their English competence level of, their opinion and personal information, topics related to maritime issue, content of materials which was appropriate with maritime issue, kind of objectives for maritime, language elements (vocabulary and structure) and which language skills mostly needed to be mastered by maritime students. In order to get the information above, the researcher used questionnaires and diagnostic test.

This research involved two groups of respondents. They were the cadets and the lecturers they are English lecturers of Akademi Maritim Yogyakarta, some English instructors of English course in Yogyakarta and practitioners who were seafarers but now works as lecturers in AMY. They were asked to give suggestions, comments, and opinions to improve the study. They were also asked to give judgment whether the proposed instructional materials for the students of AMY were acceptable or not.

Research Instrumentation

The data was gathered through three different ways. The first two ways were applied to the data as it was related to the students needs. The data was obtained in the form of written questionnaires and diagnostic test. The research also needed the data gathered from teacher who are available and qualified in syllabus design.

The second was the questionnaire for obtaining the feedback from some lecturers on the designed materials. The questionnaires were distributed to Some English lecturers of Akademi Maritim Yogyakarta, some English instructors of English Course in Yogyakarta and practitioners.

Data Analysis

The study was descriptive and consequently the writer did not use statistical data computation. After obtaining the data the writer directly analyzed and identified the needs of
learners. Those data were organized and developed to instruct the designed materials comprising syllabus, objective, topic and activities. The proposed materials afterwards were consulted to the teachers as the respondents mentioned before. The evaluation of the proposed materials from the respondents served as the feedback for reconstructing the final version of the designed materials.

RESULT AND DISCUSSIONS

The writer has used a select choice of theories as the basis in designing the instructional materials. Communicative Language Teaching (CLT) is chosen as the first theory in accordance to the materials designing. In the communicative classroom the students are encouraged to use the language productively in spontaneous ways. Basically, most activities designed in each topic of the materials encourages the students to be both active in oral and written production. The students are frequently given a chance to produce their own dialogues related to the topics in the role play activities and individual presentation.

Other characteristics that support the designed materials are primarily units of language. The language units are not merely grammatical and structural features, but categories of functional and communicative meaning as exemplified in the discourse. In fact, analyzing the designed materials, the students are not only focused to learn grammar or structure, but they are stimulated to understand and learn the language function and communicative meaning. However, it is difficult for the writer not to give the grammatical expression, since it is helpful to form the sentences that are produced in the communication practice.

The writer also employed English for Specific Purpose which are crucial in designing the materials. Theoretically, English for maritime academy is considered as the branch of English for Specific Purpose. The students may or may not consider language as an important feature in their future occupations; therefore, this category is occupational. Thus, the designed materials are different from general English which is to meet specific needs and characteristics of maritime academy.

The last theory is a combination of instructional models that has guided the researcher precisely to design the materials using accumulative steps. The theories that have been stated in Chapter II, were essential in the development of the models of Yalden, Kemps and PPSI. The researcher has produced a new
model which is suitable English Instructional Material for maritime academy.

**Conducting Needs Survey**

To obtain the data of the learners’ needs, the writer designed an interview in the form of questionnaires, which were distributed to the cadets who are taking maritime English as a subject. Meanwhile, a diagnostic test was conducted in order to know the learners’ English competence level. The total number respondents were 20. The following table is the result of the need survey.

<table>
<thead>
<tr>
<th>No</th>
<th>Questions</th>
<th>Responses</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Since when did you know English?</td>
<td>a. Elementary</td>
<td>45</td>
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<tr>
<td></td>
<td></td>
<td>b. Junior School</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td></td>
<td>c. High School</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>d. University</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>What kind of difficulties do you find in learning English?</td>
<td>a. Grammar</td>
<td>75</td>
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<td></td>
<td></td>
<td>b. Lack of Vocabulary</td>
<td>75</td>
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<tr>
<td></td>
<td></td>
<td>c. Not understand oral</td>
<td>30</td>
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<td></td>
<td></td>
<td>d. Afraid of being laughed</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td></td>
<td>e. Not confident</td>
<td>35</td>
</tr>
<tr>
<td>3</td>
<td>Is English important for you career life</td>
<td>a. Yes</td>
<td>20</td>
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<tr>
<td></td>
<td></td>
<td>b. No</td>
<td>0</td>
</tr>
<tr>
<td>4</td>
<td>Have you ever joined an English Course</td>
<td>a. Yes</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b. No</td>
<td>50</td>
</tr>
<tr>
<td>5</td>
<td>If “yes”, what program in the course did you take?</td>
<td>a. General English</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b. Conversation</td>
<td>25</td>
</tr>
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<td></td>
<td></td>
<td>c. TOEFL preparation</td>
<td>15</td>
</tr>
<tr>
<td>6</td>
<td>What skills do you need to master now?</td>
<td>a. Speaking</td>
<td>90</td>
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<tr>
<td></td>
<td></td>
<td>b. Listening</td>
<td>35</td>
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<td></td>
<td></td>
<td>c. Reading</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>d. Writing</td>
<td>40</td>
</tr>
<tr>
<td>7</td>
<td>In what situation do you use English?</td>
<td>a. Lecture</td>
<td>85</td>
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<td></td>
<td></td>
<td>b. Communication with friends</td>
<td>10</td>
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<td></td>
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<td>c. Work</td>
<td>10</td>
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<td></td>
<td></td>
<td>d. Hanging out</td>
<td>20</td>
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<tr>
<td>8</td>
<td>What is your reason in taking ME 1?</td>
<td>a. It's a must</td>
<td>15</td>
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<tr>
<td></td>
<td></td>
<td>b. It’s important for me</td>
<td>95</td>
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<tr>
<td></td>
<td></td>
<td>c. It’s cool</td>
<td>0</td>
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<tr>
<td>9</td>
<td>What kind of teaching method do you think suitable for the ME 1?</td>
<td>a. Discussion</td>
<td>65</td>
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<td></td>
<td></td>
<td>b. Assignment</td>
<td>35</td>
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<td></td>
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<td>c. Portfolio</td>
<td>11</td>
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<td></td>
<td></td>
<td>d. Lecture</td>
<td>30</td>
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<tr>
<td></td>
<td></td>
<td>e. Practice</td>
<td>75</td>
</tr>
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<td></td>
<td></td>
<td>f. Presentation</td>
<td>55</td>
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<tr>
<td>10</td>
<td>What kind of teaching aids that can support the lecturing process?</td>
<td>a. Language Laboratory</td>
<td>100</td>
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<td></td>
<td></td>
<td>b. Audio visual</td>
<td>75</td>
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<td>c. Games</td>
<td>50</td>
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<td></td>
<td></td>
<td>d. Pictures</td>
<td>45</td>
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<tr>
<td></td>
<td></td>
<td>e. Modules</td>
<td>40</td>
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</tbody>
</table>

*Table 1: The result of the need surveys*
From the questionnaire, it was found out that most of the cadets have known English for quite long time that was since in Elementary and Junior School. As the consequence, they are supposed to have adequate English background before they enter the higher level of education.

Further, 75% cadets assumed that grammar and the vocabulary were the most difficult problem they faced during their study. 30% found great difficulty when they have to face an oral conversation in which they must catch what the English speaker say to them. 50% cadets had problems with confidence. They felt anxious and afraid of being laughed by their classmates when they speak in front of the class.

Almost all cadets considered ME1 as the important subject to learnt. Moreover, they put oral practice (75%) and discussion (65%) as the most suitable methods for teaching ME1. The other method which could support the teaching learning process was presentation. They assumed that presentation gives them great opportunity to improve their speaking skill and vocabulary as they have to prepare to face the audience and the leacturer.

For the teaching aids and media, all cadets chose Language laboratory as the best media to learn English. They added that they could improve their language skills especially listening and speaking which they considered as the most needed skills in the maritime industries especially, sea navigation. Audio visual (75%) was the second choice because the cadets could watch and learn the real condition of their future world.

For the materials development, the cadets suggested that the materials should be easy to understand and should cover the marine condition for the beginner level. The writer did not give them opportunities to suggest the appropriate materials as the basic guidance in designing the materials has already been stated in Maritime Education Training by IMO.

Moreover, most cadets expected to master the speaking skills and its application in marine field. According to them, marine is dealing with foreign people who mostly speak in English, so that they demanded to have the ability of speaking English in such conversation.

Another fact found in the need analysis was the learner’s level of English competence. The learner’s level of English competence was determined from the diagnostic test.
For this importance, the writer adopted Oxford’s diagnostic test. The result showed that 95% cadets were in the very low level of English.

<table>
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<th>No.</th>
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<td>Eko Budi C</td>
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<td>19</td>
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<td>II</td>
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<td>Nur Prasetya</td>
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<td>Iswantoro</td>
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<td>20</td>
<td>Rahma K</td>
<td>IV</td>
<td>37</td>
</tr>
</tbody>
</table>

Table 2: The Result of the Diagnostic Test

Then, the writer used the theory suggested by Hutchinson and Waters (1987: 55-56) which is concerned with a target situation analysis. The framework is as below:

1. **Why** is the language needed?
   - for the study
   - for the future employment

2. **How** will the language be used?
   - medium: *speaking, writing, and listening*
   - channel: *face to face, through radio or telephone*
   - types of text discourse: *lecturer and informal conversation*

3. **What** will the content areas be?
   - subject: *seafaring* (maritime context)
   - level: *academic* (basic level of English)

4. **Whom** will the learner use the language with?
   - *Native, non-native speakers of English*

5. The relation of them can be: students, Lecturers, partner on board, visitors, shore personnel, people from another country, etc
   - level of knowledge of receiver: various (basic, intermediate, expert)

6. **Where** will the language be used?
   - Physical setting: *in classroom, on board and other places*.
human context: person to person, demonstration, on telephone

linguistic context: own country and abroad

7. When will the language be used?

Frequently

Since the academy considers English as an important aspect in the success of the marine field, the academy requires successful completion of English courses throughout the years of study. They have English course from the first semester until the forth semester with 3 credits for each subject. Each semester consists of 22 meetings including mid and the final examinations with 100 minutes time allocation.

Maritime English (ME) itself is divided into three parts they are ME 1 which is given in semester 2, ME2 and Maritime English 3. The last two subjects are given in semester 3 and 4. Since ME1 is a first series of the three ones, therefore the materials deal with the introduction to situation, some equipments and people who work on board. Dealing with this condition, the researcher has conducted 5 chapters which fulfill the needs of study for maritime academy during the semester. Each chapter has been designed as interesting as possible that might stimulate the motivation of the cadets to learn the language. Some ideas that were developed in the material design were:

a. The appearance of the set English instructional materials should illustrate with some pictures to draw cadets' attention.

b. The topic should obviously match the cadets' needs in accordance to marine study.

c. The activities in every unit must involve the cadets as the active learners in the situation communicatively. The dialogues should be conducted for such conditions that are relevant with the situation happen in marine field.

d. Some games and interesting activities should be done communicatively to avoid boredom and tiredness.

Having finished the needs survey, the researcher found any information related to their needs of studying English. From the result of the needs survey, according to the students, the interest of learning English is mostly for their future employment, whereas for some students, in a minor number, they learn English just because of the
academic requirement. But all cadets stated that English, in a communicative function, is definitely useful as a means to work safely and efficiently.

**Stating Competency Standard**

The goal of this study is to design a suitable English instructional materials for the second semester cadets of Akademi Maritim Yogyakarta. Therefore, the designed set of materials is aimed to help the second semester cadets of this academy to improve their English competence both in written and oral. The competency standard of the design set of materials is that the students are able to communicate in English by using the Standard Marine Navigation Vocabulary as replaced by the IMO standard Marine Communication Phrases in written and oral form.

**Listing Topics**

The writer listed the topics based on the goal presented before. These topics were selected and arranged based on the Maritime Education Training required by International Maritime Organization. The topics were adjusted with result of the needs analysis, and what the students needed to actively communicate in English when they enter the maritime world later. The followings are the topics of the designed materials:

1. Welcome on Board
2. Manning
3. Vessels
4. Safety Equipment on Board
5. Cargoes and Supply

**Stating the Basic Competency**

It is very important to make the general purposes for each meeting. Those basic competencies were formulated based on topics listed before. The basic competencies were arranged according to the level of difficulties.

**Stating the Indicators**

The indicators or aims were formulated as specified as possible so that the student’s achievement of each meeting will be clear.

**Designing Instructional Materials**

To design the instructional materials, the writer needed to determine the subject contents of the designed set of the instructional materials. The contents were identified
in the form of tasks. They were determined based on the needs survey, the lists of the topics, the competency standard, and the basic competencies.

According to Kemp, the subject content consists of five types of activities. They are dialogues, language study, dialogue practice, language exercise and games. The writer has applied them in every unit of the designed materials with some improvement. Besides, the writer expanded the activity into some types which was adjusted with the needs of the learners. Thus, the characteristics of those activities are clarified as follows:

1. Dialogue or Conversation
   In this activity, the writer gave examples of a conversation between two people under the related topics. It also presents grammar in a communicative way. It also discusses functional and conversational expression which is combined with maritime terms. The people involved in the dialogue are the profession in maritime industry such as deck personnel, engine room personnel, shore personnel etc. By reading the dialogue, the students may understand the conversation model and its circumstances related to the topic. Also, the writer also gave some example of useful expression to help the learners understand and practice the topic.

2. Language Focus
   In this stage, the writer presented grammar rule. By understanding the language focus, the learner would be able to apply the grammar rule with the situation related to the topic correctly.

3. Dialogue Practice
   It is an activity that encouraged the learners to be an active the language under the target situation. The learners were given a chance to come in front of the class to practice the language.

4. Language Exercise
   This activity was given separately to the learners as supporting techniques in teaching the target language. The writer also put this type as a written exercise of the designed materials.

5. Games
   In this activity, the learners got a chance to have freer language production related to each topic. The activities are meant for the students to practice the grammar rule, useful expression and the vocabularies. The communicative exercises are the central parts of
the meeting. It also encourages the students to make the simulation of the real situation on board so that they used the language communicatively.

Another activities that are considered primary in encouraging the learners' motivation of learning are monologue practice, vocabulary exercise and listening practice.

1. Monologue Practice
This activity is required by the learners to use the target language in a self-directed way. The learners were sometimes asked personally to express the target language to his friends in front of them. In the designed materials, this activity is named as 'Show Time'.

2. Vocabulary Exercise (Word Power)
Vocabulary becomes one important element which is need to be built since the materials deal with specific field. The vocabulary exercise was presented in attractive and meaningful way. It did not merely provide the list of vocabulary but it also show the learners how to use the words in the list in the suitable context.

3. Listening Practice
This activity is always given in every unit. It is conducted to help the learners improve their listening skills. The language used in the

listening is always adjusted to the topic.

As the issues of fulfilling the IMO-MET, the writer decided to provide the designed materials with reading and writing practice. They were conducted to encourage the learners' ability of the written work and to support the language ability related to the topic given. Unfortunately, the reading and writing activity do not show up in every unit because of the time allocation.

Evaluating Instructional Materials
In this research the evaluation is administrated by the practitioners and lecturers of Akademi Maritim Yogyakarta and some instructors of English course in Yogyakarta. In order to find out whether the whole design is effective or not. These evaluations also provided data for the revision and the improvement of the instructional materials.

Survey Study
From the evaluation given by the respondents, the researcher got the data that was used as the feedback to compose the final version of the Maritime English Instructional Program for Maritime Academy students.
Description of the Respondents

The number of the respondents was 2 practitioners from Akademi Maritim Yogyakarta and 2 English instructors of English Course in Yogyakarta and 2 English lecturers of Akademi Maritim Yogyakarta. The researcher stated the description of the respondents on table 3 below:

<table>
<thead>
<tr>
<th>Respondent</th>
<th>Sex</th>
<th>Educational Background</th>
<th>Teaching Experiences (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>F</td>
<td>S-1</td>
</tr>
<tr>
<td>Lectures</td>
<td>-</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Practitioners</td>
<td>2</td>
<td>-</td>
<td>2</td>
</tr>
</tbody>
</table>

Table 3. Description of respondents

Description of the Data

The data of the respondents' evaluation of the designed materials were obtained through distributing both the designed materials and the questionnaires that gave feedback in composing the final version of the English instructional materials for nautical cadets of Akademi Maritim Yogyakarta. In the questionnaire, the respondents were given option to choose the representative numbers raging from 1 to 4 as the measurement points.

1 = Strongly disagree with the statement
2 = Disagree with the statement
3 = Agree with the statement
4 = Strongly agree with the statement

The result of the evaluation can be seen from the following table:
<table>
<thead>
<tr>
<th>No</th>
<th>Statements</th>
<th>Frequency of Points of Agreement</th>
<th>N</th>
<th>Respondent's opinion presented in the form of central tendency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>1</td>
<td>The Basic Competencies are well formatted</td>
<td>6</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>The indicators/aims are well formatted</td>
<td>6</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>The materials are matched with the objectives</td>
<td>5</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>The topics are well selected and arranged</td>
<td>2</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>5</td>
<td>The content is relevant with the context and the situation in which the language is used</td>
<td>4</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>6</td>
<td>The phrases presented are good items and they can help the students understand the lesson</td>
<td>2</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>The activities presented provide adequate opportunity for students to develop their ability to communicate in English</td>
<td>2</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>8</td>
<td>The exercise given enable the students to practice using the language in communicative way</td>
<td>2</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>9</td>
<td>The materials are well elaborated</td>
<td>4</td>
<td>2</td>
<td>6</td>
</tr>
</tbody>
</table>

Table 4. The description of the respondent opinion
Note:  
N = Number of respondents  
Mn = Mean  
Mdn = Median  
Md = Mode

The writer also gave the respondents a space to contribute their suggestions and recommendations which were used for the revisions and improvement of the designed materials. In general, the respondents considered that basically the materials had already been appropriate for maritime English instructional materials for maritime academy students. Moreover, four respondents had the same questions on how to cover the materials in every meeting. They thought that the materials for each unit were too much for 100 minutes meeting.

Meanwhile, the respondents also gave some suggestions toward the designed set of materials. These suggestions can be seen as below:

1. One respondent said the writer needed to add writing assignment as mastering written English is also the aim of this lecture.
2. Two respondents suggest the writer to provide an evaluation to measure the learners’ proficiency. They recommended the writer to design the progressive tests or final test for the evaluation at the end of the discussion of every unit.
3. One respondent said that some indicators or aims stated in each unit were unclear. She assumed that indicators must be more applicable. She suggested the researcher to avoid using the term ‘to be able to understand or comprehend as it is difficult for the lecturer to assess it.

Discussion

In this discussion, the writer has analyzed the evaluation from the respondents and concluded that the designed materials were acceptable because according to the data formulated in table 3, all average numbers are above 4.0. The writer has also reevaluated the designed materials and found that some the suggestions are not acceptable with the consideration as follows:

The Language Study

The writer did not give more practices on writing because of two the limited time allocation. She has already managed the time as efficient as possible so that it can cover the whole topics. Writing can be assigned as take-home assignment.

The Time Allocation

The writer has managed the time allocation of each topic as efficient as possible so that all materials can be
covered well. To be clearer, she has made the lesson plan of each topic in the appendix.

Evaluation

The writer did not conduct the evaluation to measure the students' achievement in learning the materials because it was under the instructor responsibility. In the other words, the writer just provided the set of instructional materials that could be advantageous and helpful for the instructors.

CONCLUSION AND SUGGESTION

The background of the study is to design the suitable English instructional materials design for maritime academy especially the materials that are applied for professional purpose. Then it is proven that after having the proper materials the students feel more enthusiastic and confident to study English as the materials are match with their level of competence.

Based on the solution of the problem given, the writer would like to give some suggestions for those who are involved in maritime human resources development.

1. The various competences of the materials cannot be neglected so that in designing the materials a researcher need to make sure that the various competences of the materials should be covered.

2. The specific vocabulary and terms used in maritime academy should be the priority for the teacher in making the preparation before teaching.

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