The Implementation of Standard Training, Certification and Watchkeeping 2010 to Redesign The Maritime English Syllabus for Fulfilling Students' Needs

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Article Info	Abstract
	Effective communication among seafarers on board between ship to ship or ship to shore is very important in maritime industry concerning the safety at sea. This study aims to evaluate the current ESP syllabus of Maritime English for Nautical Study Program of Politeknik Maritim Negeri Indonesia (Polimarin) Semarang under the requirements of STCW 2010 and based on need analysis which in line with a Competency-Based Syllabus as anticipation of the vision of the Institution to be an international reputable maritime institution. The problems solved in the study were: (1) the implementation of STCW 2010 on the existing syllabus of maritime English for Nautical Study Program of Polimarin, (2) the format of the existing syllabus of Maritime English for Nautical Study, (3) the problems revealed when the existing syllabus is analyzed based on the STCW 2010, and (4) the influence of need analysis to redesign of the existing syllabus. The methodology of this study was the combination between desk and survey study that involved IMO curriculum and 32 respondents (26 students of Nautical Study Program; 4 English lecturers and 2 ex-seafarer for their evaluation on the set of English materials). With triangulation of data sources, the obtained data could get credibility and it was expected to serve for ESP course development. The results of the analysis indicated that the current syllabus has to be improved or, in other words, it should be redesigned in terms of format to be competency-based syllabus. Meanwhile, the survey of students' competency mapping and preference and needs toward Maritime English showed that the four language skills should be taught in an integrated way, using a package program of ESP for Maritime English Course suitable with the International Convention of STCW 2010, IMO Model Course 7.03 and IMO Model Course 3.17 as issued by IMO. Some suggestions are made related to the syllabus evaluation. Based on the results, it is necessary for the Nautical Study Program to considerredesigning the syllabus of ESP Maritime English. To support teaching and learning process, teaching materials need to be improved, especially related to some textbooks, handbooks and other maritime publications.

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INTRODUCTION

The status of English as an international language has affected many domains or life and also society. English has been claimed as an international language for which it is commonly used as a mean of communication among people across the world. It is evidenced by the inclusion of English as a compulsory course at different levels of education. Ellis and Johnson (1994) point out that "with the needs of rapid communication being what they are today, proficiency in a common language is necessity. Competitive demands of government, industry and corporations, both national and international, for economics and technology, that language is English.

In response to the above phenomena, there is a tendency for educational institutions to equip the students with a good command of English. Some high schools have launched their bilingual education. Some universities also claim to target themselves at world class level.

The teaching of English as a foreign language in Indonesia, as it is supposed, has shifted into a new paradigm, that is to equip the students with the balance mastery of the four language skills with its famous approach to teaching termed as the 'discourse approach' along with its competency-based curriculum (CBC), which in turn should be generated into competency-based syllabus.

English for Specific Purposes (ESP) program needs to be developed for there is a need for language courses in which certain contents, skills, motivations and processes are identified and integrated into specialized courses. ESP prepares the learners to use English in academic (students of different fields), professionals (people of different professions such as doctors, engineers, nurses, and seafarers, or workplace setting (technicians for example). One of the specialized courses that meet the needs of specific skills is Maritime English.

In Standard Training Certification and Watchkeeping for Seafarers 1995 (STCW 1995) and now is amended to be STCW 2010 (STCW 2010 Amendments), the graduates of Maritime Academic are required to have good standard of English competences. Then the STCW 2010 also requires the students to have knowledge of written and spoken English that is adequate to understand chart, nautical publication, meteorological information, message concerning the ship's safety and operation, and adequate skill to communicate with other ship and coast station, etc (IMO, 1995).

Polimarin as one of Maritime Academies in Indonesia sees that it is necessary to have a Maritime English course that fulfil the seafarers needs for their communication especially for technical communication at sea. Polimarin needs to equip the students with certain English proficiency level for a situation where language is to be used, in this case is the Maritime English.

In order to meet the requirements of effective communication for seafarers under STCW 2010, the proficiency in Maritime English has been extended to include communicative competence which is not limited to English language ability. It is worth noting that nautical students should be offered an ESP that equips them with certain English proficiency level to enable them to communicate in the target situation.

In accordance with that requirement, any syllabus is possible to be evaluated and analyzed in term of content and format for achieving the goals of the designed syllabus in reality. In this research, the first type of analysis is conducted in addition for integrating the researcher's experience of teaching Maritime English in Maritime Academy in Indonesia. In accordance with the reason above, the present study sought to answer the following research question: How does the implementation of STCW 2010 reflected on the existing of English for Speciifc Purposes (ESP) syllabus for Nautical Study Program?

Curriculum and Syllabus

Kelly (1989) cites that curriculum is the overall rationale for an educational program of an institution. It includes planning, procedures for the implementation of the plan and students' experiences in the learning process (p.14)

Syllabus refers to that sub-part of curriculum that is concerned with a specification of the units which will be taught. The syllabus is the typical plan of what is to be achieved through teaching. In order to define syllabus design, we need to start with the broader field of curriculum development. Syllabus design is one of the most important elements of the teaching process. It is a key document in pedagogical planning that refers to objectives of a course. It generally refers to procedures for deciding what will be taught in language program, and it includes how a syllabus will be carried out.

English for Specific Purposes

Dudley-Evans and St.John (1998, p.4-5) have presented a modified definition of ESP which is also comprised of absolute and variable characteristics of ESP. They explained that the absolute characteristics of ESP should be defined to meet the specific needs and also make use the underlying methodology and activities of the discipline it serves. Meanwhile, the variable characteristics may be related to specific disciplines and use specific teaching situations and different methodology from the general English.

ESP is the English language taught for professional, vocational and other specified purposes designed originally for courses of Business English for foreign learners, dated back in 1960s (McArthur, 1992:379).

However, actually ESP is mainly characterized to be different from one discipline to another only in terms of registers, which according to Wardhaugh (2006) refer to 'sets of language items associated with discreet occupational or social group. Thus, bankers and politicians use different registers. Secondly, ESP focuses on language meta-functions, which Halliday (1994) specified whether they are ideational, interpersonal and textual in which the three meta-functions of language are at the same time manifested whenever language is used to express meanings.

Maritime English

Demydenko (2012) states that Maritime English is a global language used at sea. It is a product of life on the ocean and used for clear communication between ship and shore, between crew members, between crew and passengers, where the cost of communication breakdown can be damaged to property, environment and loss of life. At present, the English language is recognized worldwide as the international language to be used at sea because "communication in English takes place incessantly in all ports, straits, fairways, waterways or sea routes of the world between and among speakers who are almost ninety percent are non-native speakers of English" (Pritchard, 2003: 153).

Maritime English can be divided into four main sections: 1) general education in the English language, 2) English used by those dealing with the navigation, safety communicatios, cargo operations, everything to used for work both for the deck department, 3) English used by those who dealing with the main auxiliary engines, the electrics, operation and maintenance that used for work of the engineering department, and 4) English used by those concerned with the commercial business of merchant marine, Maritime Law procedures, insurance, etc.

Standard of Training, Certification and Watchkeeping 2010

The International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW), 1978, as amended, sets qualification standards for masters, officers and watch personel on seagoing merchant ship. STCW was adopted in 1978 by conference at the International Maritime Organization (IMO) in London, and entered into force in 1984. The Convention was significantly amended in 1995. The latest ratification to the codes happened in 2010 in Manila where the name was taken and thus "The 2010 Manila Amendments" came into force which became effective last January 1, 2012.

The requirements for communicative competence of seafarers in STCW 2010 present a great challenge to Indoneisan seafarers who will struggle to improve their linguistic competences, most of Indonesian seafarers find it difficult to communicate in English with the Port State Control Officer (PSCO) and with multi-national crews on board. They cannot speak fluent English and find it difficult in understanding VHF radio messages, etc. Most of Indonesian seafarers regarded language barriers as the main contributing factor to ineffective communication and the language barriers for them particularly refer to poor listening and speaking ability.

According to Directorate General of Sea Transportation (2008), in the last five (5) years and the five years ahead as well, the job market for the seafarers is widely open. Singapore, Vietnam, and some other countries in South East Asia need thousands seafarers in each year. This opportunity can only be fulfilled by the Maritime education and training graduates meet requirement such as Maritime English as amended by the STCW 2010 curriculum.

New Paradigm of Indonesian Higher Education

The new paradigm of Indonesian Higher Education is marked by the issue of Ministerial Decrees of Research, Technology, and Higher Education of the Republic of Indonesia No. 44/U/2015, Ministerial Decrees of National Education of the government of the Republic of Indonesia No. 232/U/2000 and No. 045/U/2002 with reference to the concept of higher education of the 21st Century of UNESCO (1998) in which university graduates are supposed to have competencies for them to perform particular tasks in their future careers. A competency-based curriculum is developed through 7 stages, namely (1) determining the graduate profile, (2) formulating the graduates' competencies, (3) investigating the elements of each competency, (4) selecting the teaching materials, (5) estimating the credit points, (6) naming the subjects of studies, and (7) structuring the curriculum (*Direktorat Akademik, Dikti*, 2008).

Need Analysis

In order to come up with the competency standard, it is important to conduct needs analysis of which of the role is to identify the task within ESP (Ferris & Tagg, 1996 and Ferris, 1998). Through needs analysis, the real setting in which the target language is used can be described (John & Dudley – Evan, 1998), or to use the knowledge gained as the basis for change in the target context (Benesch, 1996).

A need analysis must be conducted 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 Water (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 cover the necessities, lacks, and wants. Necessities are determined by the demands of the target situation (what learners have to know in order to function effectively in the target situation).

METHODS

This study uses explorative and descriptive method with qualitative approach.This study is descriptive qualitative research in which the writer focuses on collecting data, analyzing data, interpreting them, and making a conclusion.

The object of this research is the syllabus of Maritime English for Nautical Study Program. The data is the script of some interviews which are conducted for some key persons. The utterance by all respondents of the research will be transcribed and will be analyzed further. In this study, the writer also used library study and survey study. It involved some observation of the Curriculum and lesson plan of Maritime English as required by International Maritime Organization (IMO), which is amended in STCW 2010.

In collecting the data, questionnaires were administered to around 26 students. It was conducted in order to obtain their needs and expectations regarding the English

competencies. In other word, the 26 students were the stakeholders or the users of the old and proposed new syllabus after evaluated by the study.

The study also made use of formal documents, such as the English syllabus currently used at the department and the academic handbook in support the current syllabus after reviewing.

The analysis of the syllabus based on the STCW 2010 is actually set to answer the research questions. The data obtained from the questionnaires was analyzed categorically to determine the nature and the extent of the needs in order to come up with English competencies, English language functions and linguistics features in anticipation of the target command of English as required in the workplace as seafarers.

To validate the data, the writer used triangulation. In this study, the writer used methodological triangulation as there are more than one method of collecting data and instruments of collecting the data such as observations, questionnaires, interviews and supporting documents.

RESULTS AND DISCUSSIONS

The Implementation of STCW 2010 related to the existing syllabus of Maritime English

Polimarin, in particular the Nautical Study Program has Maritime English in its curriculum as a compulsory subject. The requirements for English language knowledge are specified in STCW Code in table A-II/1 and noting the guidance in the Code, section B-IV/2, paragraph 36.1and B-VI/1, paragraph 7 which states that English language both written and spoken is necessary for the exchange of communications relevant to the safety of life at sea.

Based on the analysis of the implementation of STCW 2010 related to the current syllabus of Maritime English, it can be inferred that all the requirements which are stated on this amendment (IMO Convention STCW 2010 table A-II/1) have been

implemented on the syllabus in term of content of material.

The Format of the Existing Maritime English syllabus

In every educational institution, course syllabus is considered as an important document, because it explains policies, expectation and assignment to the students. By observing the documents, the writer found that for the materials, starting from the Maritime English I, II and III, all the materials have the compatibility with those which are cited on the IMO Model Course 7.03 and IMO Model Course 3.17 for the details. However, for the format, the syllabus have not been designed into what is termed as competency-based syllabus in which it should covers the components as heading, course description, course contents per week, competency standard, basic competency, indicators, learning materials, assessments, course requirements, course outlines and validation.

Problems revealed

Problem revealed was related to the transformation from Diploma III to Diploma IV, by its first founding on February 2012, the graduate students of Nautical Study Program will have Diploma III and ANT III for the competency, but as a demand of the Ministry of Research, Technology, and Higher Education, now, it should be transformed into Diploma IV. Some problems were then revealed. One of the problems faced is related to the document. Polimarin should design curriculum and other documents including the syllabus compatible for Diploma IV (Data 1.11 and Data 2.5, 2.6).

In addition, related to the teaching materials, the lack of relevance of existing materials of Maritime English in the library also become a problem that should be figured out by providing some new books, textbooks or even handouts, learning materials, and other maritime publications to support the teaching of Maritime English in Polimarin to be more effective.

Needs Analysis

The need analysis in this study is based on the results of the questionnaires administered to 26 students of Nautical Study Program, especially from the third semester. The questionnaire is of two parts: part one leads to the identification of the Competency Standard, and part two leads to the students' preference with respect to the Maritime English subject.

Competency mapping

Competency mapping can be developed to analyze the competency standard for each language skill. Competency mapping is a process to identify key competencies for a particular role related to the teaching and learning process.

Table 1. Competency Mapping for Listening Skill

No	Competency	5 (%)	4 (%)	3 (%)	2 (%)	1 (%)
1.	The students can understand lectures in Maritime English delivered in English.	0	30.76	57.69	7.69	3.8
2.	The students can participate in discussion on Maritime English Subject.	3.8	23.07	69.23	0	3.8
3.	I respond orally if there is person who talks to me in simple English.	3.8	30.76	61.54	3.8	0
4.	The students respond physically to instructions in simple English with respect to the profession of seafarer.	7.69	34.62	57.69	0	0

In analyzing the syllabus, competency mapping for listening skill is used as the assumptions that listening skill is needed by the students of Nautical Study program, since they are prepared to be the prospective seafarer who have a good competence in their work field, in this case is the competence in English communication. From the result of the questionnaires, it can be justified that the most of the students do not have competencies as

assumed in order to be ready for the skills as globally required.

Table 2. Competency Mapping of Speaking Skill

No	Competency	5	4	3	2	1
1.	The students can give a short presentation in English related to the maritime communication or even English in general.	19.23%	7.69%	57.69%	23.07%	0
2.	The students participate actively in discussion in simple English related to the maritime field and seafarer work.	3.8%	26.92%	50%	19.23%	0
3.	The students can initiate a communication in English related to the maritime field and on board communication.	7.6%	19,23%	50%	23,07%	0
4.	The students can give simple instructions in English related to the maritime field and on board	3.8%	26.92%	38.46%	26.92%	3.8%

No	Competency	5	4	3	2	1
1.	The students can understand simple texts in English with respect to Maritime field.	0	38.46%	61.54%	0	0
2.	The students can respond orally to a simple text in English with respect to Maritime field.	0	30.77%	50%	19.23%	0
3.	The students can respond a simple text written in English related to the maritime field.	0	23.07%	65.38%	19.23%	0
4.	The students can give arguments in simple with respect to Maritime English communication.	3.8%	15.38%	53.85%	23.07%	3.8%

Identifying Competency Standard

Based on the need analysis above, it seems that it is not difficlt to identify the competency standard for evaluating the syllabus. However, before going any further, it is necessary to review the competency standard of each language skill formulated on the basis of the results of questionnaires as follows:

Table 3. The Competency mapping of Writing Skills

No	Competency	5	4	3	2	1
1.	The students can write application letters in English in respond to the vacancies which are offered in advertisement with respect to the profession of seafarer;	3.8%	30.77%	26.92%	34.64%	3.8%
2.	the students can write application in English in respond to the vacancies which are offered in advertisement with respect to the professions of other than seafarer	7.69%	7.69%	46.2%	34.62%	3.8%
3.	the students can write CV in simple English with respect to a profession of seafarer	7.69%	19.32%	50%	19.23%	3.8%
4.	the students can write CV in simple English with respect to the other professions.	7.69%	7.69%	61.54%	19.23%	3.8%

Listening skills: upon completion of the course, students are able to understand meanings expressed in simple and carefully structured spoken texts of Maritime English discourse, in this case refers to the English communication on board.

Speaking skills: upon the completion of the course, students will be able to express meaning and ideas using English especially for conducting communication on board.

Reading skills: upon completion of the course, students will be able to understand meanings expressed in simple structure written texts in Maritime English discourse.

Writing skill: upon the completion of the course, students will be able to write application letter and CV in line with job application.

Students' preference and need towards Maritime English

The second part of the questionnaire leads to the students' preference and need toward Maritime English. To obtain the data of the students' needs, the writer designed the questionnaires, which then distributed to the students who are taking Maritime English as subject. The total numbers of respondents were 26 students. The following table is the result of the need survey.

Hutchinson and Waters (1987: 55-56) propose the framework of target situation analysis as follows:

Why is language needed? → The language needed for the study for the future employment

How will the language be used? → Medium: speaking, writing and listening; channel: face to face, through radio or telephone.

What will be context areas be? → Subject for seafaring (maritime context), level: academic

Who will the learners use the language with? → Native, non-native speakers of English.

The relation of them can be students, lecturers, partner on board, visitors, shore personel, people from another country, etc.

Where will the language be used? → Physical setting in class room, onboard vessel and simulator and other places.

When will the language be used? → As frequent as possible.

After finishing the need survey, the writers found some informations related to students' needs of studying English. From the result of need analysis, according to them, the interest of learning English is dominantly for their future career. All students stated that English, in a communicative function, is absolutely important and useful for them as a means to conduct safety navigation and to work efficiently.Therefore, the teaching of four language skills must be integrated in one package of teaching and learning materials. Hence, there is correlation between maritime English and the four language skills in which STCW itself required the maritime institution graduates must be able to communicate in English both spoken and oral.

The Implementation of STCW 2010 and need analysis to redesign the existing syllabus of Maritime English

Based on the analysis of the implementation of STCW 2010 and need analysis of the students, it is needed to redesign

the syllabus of Maritime English for Nautical study program to find the effectiveness of the implementation related to the existing syllabus and also to get another perspective in line with the competency based syllabus.

A syllabus can be regarded as a contractual agreement between a study program represented by teacher or lecturer and the students representing educational customers or stakeholders. Based on the analysis results, the current syllabus has to be improved or in the other word it should be redesign in terms of format to be Competence-Based Syllabus which covers the components such as (1) Heading, (2) Course description, (3) Course contents per week, (4) Competency standard, (5) Basic competency, (6) Indicators, (7) Learning materials, (8) Assessments, (9) Course Requirements, (10) Course outlines, and (11) Validation.

Nautical Study Program must give the best services to the customers (students) by providing clearly-defined package of Maritime English course so that the students not only pass the subject but they are expected to know what they have to do after graduation. Take an ESP program, the students, upon graduation have a considerably good command in English to help fight the global competitions of job seeking and as the requirements for communicative competence of seafarers recommended by IMO (International Maritime Organization).

Reason for redesigning the existing syllabus

A need analysis must be conducted in order to offer an awareness of the target needs. Target needs distinguish ESP learners because it has definable needs to communicate in English. A need analysis through survey questionnaire and interview was done in this study through three different groups: the students, the lecturers/instructors of Maritime English, and experts or practitioner in the case are seafarers. With the triangulated data sources, our data and findings obtained credibility and are expected to serve as the bases of ESP Maritime English course development. Everything is subject to be changed, as the trend in English language

education also changed, especially with respect to the teaching ESP in general and Maritime English as recommended by IMO under the requirements of STCW 2010.

In the present study, the survey was administered to the lecturers and practitioners in order to find out whether the whole syllabus were compatible or not with the requirements of STCW 2010 and in line with the competency based syllabus to enable the nautical study program to redesign the existing syllabus into competency-based syllabus.

CONCLUSION

Based on the analysis results, the Nautical Study Program of Polimarin needs to redesign its Maritime English syllabus to become a competency-based syllabus and in line with the vision to be an International Maritime Institution. With respect to the competency, "The students, after accomplished the course, can perform and communicate in English considerably in the four language skills within Maritime English discourse"

Overall, the syllabus has implemented the requirements demanded on the STCW convention in terms of the materials. The materials given on the Maritime English I, II, and III met the materials listed on IMO Model Course 3.17 and also inserted Standard Marine Communication within each of the subject.

Nevertheless, referring to the format and with respect to competency-based syllabus, the existing syllabus of Maritime English is needed to be reconstructed as an anticipation to the vision of the study program itself and also the institution. Meanwhile, the interviews and questionnaires conducted for the Head of Study Program, the English lecturers, and Practitions justify the dire and pressing need for English Syllabus improvement.

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