Maritime English as a code-tailored ESP: Genre-based curriculum development as a way out

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Abstract

Maritime English (ME), as a type of English for Specific Purposes (ESP), is somewhat different in that its instruction and research are founded on specific international legal procedures. Thus, it is vital to determine an ESP framework that bridges the code-tailored ME curriculum development with the communicative language teaching approach. This paper reports on the revision of the International Maritime Organization (IMO)'s Model Course 3.17, Maritime English, where an integrated genre-based ESP framework helps to achieve the balance between language learning's "wide-angled" quality and ME's legal consistency.

It is argued that code-tailored ME competences find expressions in maritime domain-specific genres; those are the typical sets of English communicative events that seafarers are involved in while achieving their maritime professional objectives. The curriculum can be designed as to integrate linguistic systems, professional motivation and behaviors, communicative skills and cultural awareness into the teaching process, which entails a process of learning Maritime English while taking maritime domain-specific action. Specifically, the principle of genre as social action apprises the two-stage syllabus mapping, that is, General Maritime English (GME) and Specialized Maritime English (SME). In GME, the focus is placed on the linguistic content and how language tasks embedded in the maritime contexts are fulfilled; in SME, the focus is placed on the professional content and how the maritime workplace duties and identities are fulfilled through the English language. As such, syllabus mapping calculates the discursion-profession correlation and helps to ensure that code-tailored ME teaching is communicative performance-oriented. Thus, the multi-syllabus task

design and content selection must consistently maintain the genre-based balance on the linguistic-communicative continuum. As a result, the English linguistic systems underlying the maritime domain-specific performances are naturally presented to GME learners; duty-specific knowledge, understanding and proficiency (KUP) requirements for English competence are accordingly unpacked into genre sets to let SME learners develop professional communicative expertise. Moreover, specific intercultural registers defined by English as the lingua franca at sea and ashore demand indispensable cultural input to discursive practices in ME education.

Keywords: Maritime English, genre-based curriculum development, twostage syllabus mapping, linguistic-communicative balance, KUP.

Resumen

El inglés marítimo como un inglés para fines específico 'codificado': Una propuesta de desarrollo curricular basada en un enfoque de género

El inglés marítimo (ME, por sus siglas en inglés), un tipo de Inglés para Fines Específicos (ESP, por sus siglas en inglés), conlleva un uso del lenguaje relativamente diferente, en tanto que su instrucción e investigación están basadas en procedimientos legales de carácter internacional. Es por tanto importante el determinar un marco pedagógico de ESP que permita crear puentes entre un desarrollo curricular específico para ME y un enfoque comunicativo de enseñanza de la lengua.

En este trabajo se detalla la revisión del curso modelo de la International Maritime Organization (IMO, por sus siglas en inglés) (Model Course 3.17, Maritime English), en el que se integra una instrucción formal basada en un enfoque de género con el fin de que los estudianes adquieran una formación que incluya competencia lingüística general, así como conocimiento especializado en aspectos legales en el ámbito del ME. Se argumenta sobre géneros específicos del dominio marítimo y sobre la adecuación de introducir en el aula situaciones comunicativas reales propias de la profesión. En particular, el curriculum se puede diseñar para integrar en el propio proceso de enseñanza aprendizaje aspectos lingüísticos, la motivación profesional, las destrezas comunicativas y la percepción cultural.

El concepto de género como acción social se plantea a nivel curricular en dos etapas, una de formación en inglés general (GE por sus siglas en inglés) y otra en inglés especializado (Specialized Maritime English, SME). En la primera etapa, la instrucción se centra en aspectos lingüísticos y en tareas que se llevan a cabo en contextos marítimos. En la segunda etapa, la instrucción formal está

centrada en contenidos profesional y en el uso de la lengua inglesa para llevar a cabo tareas propias del ámbito profesional vinculado al mar. Teniendo en cuenta estos planteamientos, la planificación didáctica busca fortalecer la correlación entre el discurso profesional y la profesión, buscando así que la enseñanza específica de este tipo de ESP esté orientada al desarrollo de la producción lingüística. Por lo tanto, en este artículo se argumenta que se debe mantener un equilibrio entre aspectos relativos a los géneros profesionales y aspectos lingüístico-comunicativos. De este modo, en una primera etapa, los sistemas lingüísticos subyacentes a la producción lingüística se presentan a los estudiantes de GME. En una segunda etapa, se busca que el estudiante obtenga un conocimiento del ámbito profesional, a la par de competencia (comprensión y maestría) en inglés y en el conocimiento de los géneros propios de la profesión. Asimismo, se trabaja a nivel curricular con diferencias interculturales en el marco del inglés como lengua franca con el fin de formarles en prácticas de comunicación en el mar y en tierra.

Palabras clave: inglés marítimo, desarrollo curricular basado en un enfoque de géneros, aprendizaje en dos etapas, equilibrio lingüístico comunicativo, KUP.

1. Introduction

This paper reports the revision of the International Maritime Organization (IMO)'s Model Course 3.17, Maritime English, arguing that a genre-based framework of English for Specific Purposes (ESP) curriculum development can help achieve the balance between language learning's "wide-angled" quality and Maritime English (ME)'s legal consistency.

Since its introduction to the field of ESP by Tarone, Dwyer, Gillette and Ickes in 1981 and Swales in 1990, genre has become an important notion and orientation in ESP research (see Hyon, 1996; Hyland, 2003; Cheng, 2007; Johns, 2008; Paltridge, 2009; Basturkmen, 2010; Tardy, 2011; Rose & Martin, 2012). Furthermore, the mounting literature (such as Nickerson, 2000; Lockwood, 2002; Pennycook, 2010; Paltridge, 2014) has witnessed that the trend in ESP approaches is towards genre analysis as being context-based, rhetorically-oriented, and "wide-angled" (Berkenkotter, 2009: 18). Explicitly, ESP research and practice increasingly emphasizes the contextual and situational characteristics of genre as language use and takes into account the language, communication skills, professional know-how and cultural issues when considering ESP curriculum development (e.g. Lockwood, 2002; 2012; Nickerson, 2000; Lam, Cheng and Kong, 2014). This paper outlines the

interface between such a theoretical framework and an ESP program: namely, the IMO Model Course 3.17, Maritime English and its revision.

This "Course" was first developed and published in 1999 and has been updated twice through the 2009 and 2015 revisions to meet the knowledge, understanding and proficiency (KUP) requirements for English language training within the context of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978 (STCW), as substantially amended in 1995 and 2010. Ever since its publication, the course has played a significant role in providing instructors in maritime academies, universities and training agencies, with professional guidance, rather than "a rigid teaching package", on the teaching of ME. Since English is regarded as the lingua franca in the international maritime transport arena, this Model Course has been a vital tool and indispensable handbook for those engaged in the education of seafarers worldwide, especially those from non-native English speaking backgrounds. The vision is that effective communication on board and ashore, as set out by the STCW Convention, can indeed help to enhance the safety of life at sea as well as to protect the marine environment.

To do this, Model Course 3.17 has been developed and designed as per the terms of competences regarding the English language contained in the STCW Code, as amended. However, industrial stakeholders, and especially those from native English speaking backgrounds, have urged that the contents contained should be rigidly maritime jargon-related. This paper argues that a too "narrow-angled" ESP syllabus design would be problematic. The paradigm of an ESP model course with a rigid, one-to-one correspondence to those items as prescribed in the Code, amounts to "transporting" the all-inclusive provisions to the curriculum framework which would be entry-like.

An effective communication-oriented ESP curriculum calls for braiding detailed language system knowledge with business-specific communicative tasks in situational and social contexts; this helping the learners to be involved in the process of "learning-by-doing". Transporting the Code directly to entry-like syllabi is likely to disorient the instructors, as well as the learners of English for maritime specific purposes. For the instructors, they expect a syllabus to provide guidance for their language lesson design, but an entry-like syllabus with only professional jargon and duty descriptions would make them feel disoriented in developing their own teaching programs.

Moreover, rigid professional entry-like syllabi are at odds with the generallyaccepted idea of many researchers and trainers of ESP today (see Paltridge, 2014), that is, a broad understanding of English is required in order to meet the specific objectives. On the other hand, for learners, the lack of appreciation of the socio-cognitive nature of language use in an ESP program would compromise the validity of training, especially for the target group learners with their language needs of ESP as a foreign language. It is further argued in this paper that ME curriculum design and content selection, with its legal foundation, should develop a feasible, but flexible paradigm, which meets the professional needs while setting language learning in social and institutional contexts and scenarios.

How such an effective paradigm can be realized via the genre-based ESP curriculum design and development in the revision of IMO Model Course 3.17, Maritime English, is the subject of this paper. In describing the genrebased rationale, the authors draw on, and incorporate the work of the three broad schools of genre analysis: "the New Rhetoric" school, as represented in the works of Freedman and Medway (1994); the Sydney school of systemic-functional approach, as developed by Martin and Rose (2003), Hyland (2003) and the ESP/EAP school, as represented in the works of Swales (1990) and Bhatia (1993, 2004).

The paper is structured as follows: following the Introduction above Part 2 gives the legal foundation of ME training and education, explaining how ME is a code-tailored ESP; Part 3 presents and analyses the needs analysis conducted prior to this curriculum development; the detailed argumentation for a genre-based framework of ME curriculum development corresponding to the needs analysis and adhering to its legal foundation is then elaborated in Part 4; finally, Part 5 is the conclusion, which wraps up the arguments to the thesis that a genre-based curriculum framework can be a way out of the dual requirements of ME with its "narrow-angled" legal consistency and its "wide-angled" communicative language quality.

2. Maritime English: a code-tailored English for **Specific Purposes**

ME is "an umbrella term" (Bocanegra-Valle, 2013), or "the entirety" (Cole, Pritchard & Trenkner, 2007: 125) of English language used in the international maritime community for the seaborne trade and for the safety

of navigation. In this sense, ME is typically a type of ESP (cf. Culic-Viskota & Kalebota, 2013) with its "wide-angled" communicative nature. Simultaneously, ME has a "solid legal foundation both for curriculum design and for research" (Cole & Trenkner, 2012: 242). The International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW), was adopted in 1978, entered into force in 1984 and has been frequently updated and amended; notably by two major revisions that were adopted in 1995 and in 2010. Essentially, the STCW Convention, 1978, as amended, prescribes and defines standards concerning the training, certification and competence of seafarers, and as such works as the legal foundation of ME. It is stated that:

All seafarers shall be properly educated and trained, adequately experienced, skilled and competent to perform their duties in a manner which provides for the safety of life, property and security at sea and the protection of the marine environment. (IMO, 2011: 71)

In this connection, IMO Model Course 3.17 Maritime English is one of 63 model courses developed by IMO to assist maritime education institutes and their teaching staff, and especially those in developing countries, to improve their maritime teaching capacities, thus enhancing their implementation of the STCW Convention. The Maritime English model course in particular sets out the education and training framework as a guide for ME teaching so that the learners will achieve the required standards of competence related to effective communication as specified in the STCW Code, as amended. As mentioned earlier, Model Course 3.17 was first published in 1999, marginally revised in 2009, and fully revised in 2015.

Significantly, in the 2010 Manila Amendments to the STCW Convention, the minimum "Knowledge, Understanding & Proficiency" (KUP) requirements of English competence for seafarers have been updated as clearly prescribed in the tables of the Code's two Parts, (where Part A is mandatory and Part B recommendatory). For officers in charge of the navigational watch, for example, the general requirement of English competence is to "use the IMO Standard Marine Communication Phrases and use English in written and oral form". As specified in Table Part A-II/1, STCW (IMO, 2011), relevant English KUPs for officers in charge of a navigational watch include: 1) using charts and other nautical publications; 2) understanding meteorological information and messages concerning ship's safety and operation; 3) communicating with other ships, coast stations and VTS centres; 4)

performing the officer's duties also with a multilingual crew; 5) using and understanding the IMO Standard Marine Communication Phrases. In addition, the English competence requirements for electro-technical officers have been added to Part A of the Code.

Furthermore, two aspects relevant to the ME competences prescribed in the STCW Convention, as amended, can be seen as the influential force of the present revision. Firstly, the English competence requirements, and correspondingly the specification of the KUPs of the English language in the Code, are tied to the duties of maritime-specific roles, among which are navigational officers, engineering officers, electro-technical officers, GMDSS radio operators and personnel on passenger ships. This legislation clearly stipulates the socio-situational quality of ME as an ESP. Second, communicative competence in the English language for maritime purposes is given priority in the Code, which renders ME instruction with discrete and isolated sections of terminologies, grammar and pronunciation to be unfeasible. For seafarers of all ranks, the criterion for evaluating their English competence is "communications are clear and understood". Here, the satisfactory exchange of communications in nautical situations is reiterated; English is the lingua franca on board and ashore among crew members and multilingual passengers and is thus the basis for the requirement of effective maritime communication.

Hence, the two aforementioned aspects challenged what existed in the 2009 edition of IMO Model Course 3.17, which was to develop the framework of linguistic knowledge while including the maritime content. The course structure was organized from the elementary to upper intermediate language level, a level division of general English language described by Heaton (1988). In addition, the general linguistic content of English language systems and communication skills was separated from the maritime content of the tasks seafarers are expected to be able to carry out in English, as prescribed by the STCW Code. Therefore, there was a need to integrate language more intensively with maritime-specific roles and tasks in nautical situations.

3. Needs analysis as the first step

Consequent to the adoption of the Manila Amendments in 2010 to the STCW Convention, IMO challenged its member states, Governmental organizations and Non-Governmental organizations to commit to revising and updating all the model courses related to the STCW Convention. As a result, the International Maritime Lecturers' Association (IMLA) responded to this invitation and offered to revise and update IMO Model Course 3.17, Maritime English. This was accepted by the IMO's Sub-Committee on Human Element, Training and Watchkeeping (HTW) at its first session, 17th to 21th February 2014 and subsequently completed by the 31st October 2014 deadline. The IMLA working group of the Model Course 3.17 consisted of ESP developers from the World Maritime University (Sweden), the maritime training agency Marlins (U.K.), and Shanghai Maritime University (China). As course designers, the IMLA working group was expected to be alert to the needs of mainly non-English native ESP target learners, to the relevant prescriptions required in the STCW, and to the context of maritime working operations.

Consequently, substantial information was collected and assessed in the form of a needs analysis to establish the "how" and the "what" of ME teaching. The needs analysis as an integral part of this ESP curriculum development program was conducted in a socio-rhetorical genre-analytic and ethnographic framework (See Jasso-Aguilar, 2005; Hyland, 2006; Johns & Makalela, 2011). This involved aspects that fed into the survey incorporating the language background and proficiency of target learners, the genre-analytical perspectives of the target discourse in nautical situations, the expectations and intentions of the maritime industry stakeholders, and the features of the maritime discourse communities and situations.

Simultaneously, a needs analysis process was undertaken that involved a workshop questionnaire, unstructured interviews (Long, 2005), existing textbook analyses, field observations and a corpus analysis.

The workshop questionnaire dissemination and unstructured interviews¹ were conducted among experienced teachers at maritime academies and agencies, maritime curriculum designers, and maritime industry stakeholders that included the IMO, maritime operation companies, and IMO member maritime administrations. The 26th International Maritime English Conference (IMEC26, Terschelling, Netherlands, July 2014) and its workshops, along with Model Course 3.17 working group meetings held regularly at international gatherings, were optimal occasions for collecting (vital) information, analyzing the results and testing/consolidating the outcomes. Unstructured interviews were centred on the maritime

stakeholders' observations and expectations of the code-stipulated and dutybound English communication competence of cadets and seafarers. A representative questionnaire item is shown as follows:

Consider the ME competency levels of your cadets / seafarers when they graduate / complete courses at your training establishment. Which of the following areas of ME language competence presents most difficulty to your students? Tick all that apply and note why your students have difficulties in these areas.

Reading skills / Listening skills / Writing skills / Speaking skills / Pronunciation / Grammar / General English vocabulary / ME terminology /Maritime communication discourse / Standard Marine Communication Phrases (SMCP) / Cultural awareness / Communication strategies

The results of the questionnaire and interview analyses are as follows:

- (i) The target learners of this model course mainly come from nonnative English speaking backgrounds, with an entry benchmark at the elementary English language level; a typical response being: "learners are able to use English for very basic, everyday needs but without sustained fluency and with many errors"; "they have a limited understanding of spoken English, requiring a lot of rephrasing, repetition and simplification of language". Such target learners include students of maritime academies, as well as seafarers of different ranks and departments already-employed in maritime administrations, ports and shipping companies.
- (ii) The maritime industry stakeholder perspectives on seafarers' English cohere highly with the competency standards set in the STCW Convention, 1978, as amended. However, in reality the stakeholders are generally not satisfied with the effectiveness of the seafarers' listening and speaking skills, especially in emergency situations. As they maintain, "it is a professional requirement to achieve effective English communication for maritime-specific purposes and duties". In addition, they emphasize that the consistency of the new ME model course within the provisions of the STCW Code is a vital ingredient in promoting best practice at sea and on shore.
- (iii) English has the legal status of being the lingua franca for communication purposes on board, ship-to-ship, and ship-to-

shore as well as playing a critical role in the maritime industry at large. It thus performs a significant function in maintaining the safety of life and property at sea and in preventing marine pollution. As such, ME education can never be limited to "transporting" maritime terminologies to multi-lingual learners who are not of an English language-native background. Communication breakdown can be attributed, to a certain extent, to seafarers' "non-effective" language use: pronunciation errors, problematic listening, limited lexical-grammatical pattern choices, lack of cultural awareness, and the absence of such discoursal knowledge as using proper linguistic resources in proper situations.

The analyses of existing ME textbooks showed the linguistic content of English was usually per se presented at levels identified by the complexity of phonology, grammar, and the frequency of vocabulary in general English. Moreover, the presentation of linguistic content was separated from maritime-purpose communications, and loosely tied to communication types concerning specific maritime duties.

Through the observation of nautical English communications on board/ashore as well as through the analysis of ME corpora2, difficulties in ME communication were located at the language stratum of discourse. That is, communication breakdown often happens due to the seafarers' inability to properly use English in real situations. Firstly, it was found that seafarers often experience difficulty in discerning the English pronunciation of multilingual crews, passengers or shore personnel, not to mention understanding the nuances of what is being said in physical situations, through the VHF radio, telephones and so on. Secondly, seafarers cannot always connect an ample range of lexical-grammatical choices, such as conditionals, imperatives, relative clauses, and modalities, with relevant maritime-purpose communication tasks such as giving directions, or reacting to emergency alerts on board and ashore. This lack of competence impacts on the quality of each communication and the intended effect. Thirdly, the problematic discourse strategies in a seafarer's English communications, such as negotiating and ordering, could be attributed to the lack of proper crosslingual, and/or cross-ethnic cultural awareness.

So, on the one hand, there is the Code confining the provisions of ME curriculum content, while on the other, the outcome of the needs analysis shows clearly the indispensability of a sociolinguistic framework in ME

teaching. How the ME curriculum, as an ESP program, has to address the discourse issues and cultural problems, is a topic which the maritime industry stakeholders and observers seldom consider. In fact, at the final stage of validating this model course, some key IMO member states "bought into" the idea that a broad understanding of English was required in order to meet specific objectives; this was initially perceived as too challenging, but fundamental to a successful outcome.

Thus, the balance between ME's legal consistency and ESP learning's "wideangled" quality can be achieved via a genre-based curriculum design. That is to say, an effective ME curriculum aiming at teaching effective communication competencies has to involve the "integration of discursive and professional practices" (Bhatia, 2008: 161). If effective communication is the target of Maritime English, then ME syllabus mapping, content selection and task design have to aim at teaching learners how best to get domainspecific actions done in English.

4. Detailed genre rationale

The socio-linguistic view of treating genre as institutionally and professionally situated actions and as ways of "getting things done through language" (Pennycook, 2010: 122) can be beneficial for ensuring the validity of ESP teaching. In the ME context, to develop the English competency of trainees is to train seafarers how to get maritime-specific "things" done through English, as per the relevant requirements of the STCW Convention. That is to say, that ME curriculum development can take an integrated genre-based approach, which helps achieve the balance between the communicative approach³ and the legal consistency aspects. Specifically, the phonological, lexical-grammatical resources of English language can be embedded into discourse strategies, which are involved in English communication for maritime-specific purposes and duties.

4.1. Genre as a social action: General Maritime English vs. Specialized Maritime English

When ME is treated as "getting maritime-specific things done", language learning embraces the integral participation of professional actions in the maritime community through the language, that is English. Thus, ME competence finds expressions in maritime domain-specific genres; those are typical sets of the English communicative events seafarers get involved in to achieve their maritime professional objectives. In this respect, ME "involves a combination of distinctive registers according to the field or subjectmatter, hence its register complexity and medium" (Cole, Pritchard & Trenkner, 2007: 136)4.

Thus the contextual and situational understanding of language use for specific purposes is in line with the New Rhetoric approach to genre in which genre is understood as those recurrent patterns of language use fusing semantic meaning and linguistic forms as rhetorical actions in situational and social contexts (Freedman & Medway, 1994). Here, on the one hand, maritime domain-specific genres are those maritime socially situated actions fulfilled by using the English language, indexing the socio-rhetorical contexts of the maritime industry worldwide. On the other, while performing these communicative activities, participants present themselves to the industry and take on their identities as seafarers (those of diverse duties and different ranks).

As stipulated in the STCW Convention, English as a lingua franca is used for "effective communication" on board, ship-to-ship and ship-to-shore, for the purpose of "maintaining safety of life and property at sea and in preventing marine pollution" (IMO, 2011: 347). ME means typified rhetorical actions in marine-related situations and contexts where the requirements of English communicative competence in the context of the STCW are presented as tied to different maritime-specific duties and inevitably in the form of "to do something in some situation". For example, for officers in charge of navigation at the operational level, qualified English competence means "to perform the officer's duties also with a multilingual crew" (IMO, 2011:105); for masters, officers, ratings and other personnel on passenger ships, it means "to communicate with passengers during an emergency" (IMO, 2011: 209). The process of ME acquisition is thus the learning of maritime-specific genres: braiding linguistic contents and rhetorical resources into the underlying assumptions, into the ways of behaving and into the aims of the maritime industry, thereby interweaving all of them to achieve the goals of the workplace.

As a consequence, this genre-based ME conception appropriately shapes the content selection and task design in both of the two syllabus stages of the Model Course 3.17 revision.

Furthermore, the model course is intended to provide guidance to assist administrations in developing their own instruction programs to achieve the

standards of English competence as prescribed in the amended STCW. Therefore, it is expected that instructors will "customize" it to their learners' needs and levels by including the relevant parts from the course as applicable. Moreover, Cole & Trenkner (2009) ascertain that a certain command of general English has to be acknowledged as a basic prerequisite of ME. For that reason, the "new" model course has thus been revised into two "new" core sections: General Maritime English (GME) and Specialized Maritime English (SME). Here, GME braids general English language input (grammar, vocabulary and phonology), and the four language communication skills (listening, speaking, reading and writing) into typical sets of English communicative events that seafarers of all ranks may become involved in. This section covers the elementary and lower-intermediate levels of proficiency in ME where the communicative events cover and expand those mandatory and recommendatory maritime-specific actions through English, as prescribed in the amended STCW. These events are thus general to seafarers, but not specific to their ranks. In other words, GME takes a broad approach to maritime domain-specific genres, encompassing generalized maritime settings and context.

SME, on the other hand, correlates specific types of English communicative events with explicit types of seafarer ranks or duties, and directly immerses learners into those specialized types of communicative tasks that are specific to each professional rank and workplace function. This section sets the task's difficulty at the intermediate level through to the upper intermediate level in terms of English proficiency. The syllabus structure is mapped out into five parts corresponding to five types of maritime duties or departments, namely:

- 1. For navigation officers.
- 2. For engineering officers.
- 3. For electro-technical officers (ETO).
- 4. For GMDSS radio operators.
- 5. For personnel on passenger ships.

Contents listed in these parts are organized by the English competence requirements of the KUP for the different maritime ranks or departments prescribed in the amended STCW (respectively, Tables A-II/1, A-III/1, A-III/6, A-II/4, and A-V/2). The tasks are designed to focus on the specific

KUPs of the mandatory English competence requirements in the abovementioned tables of the STCW Code, Part A. Corresponding to the "action" format of the Code, these tasks are intended to lead learners to the "required performances" of different ranks or departments. If these actions are properly fulfilled, the maritime duty-specific genres are thus satisfactorily acquired. Therefore, the tasks in the syllabus are always presented as "cando" acts prefixed by the words "The expected learning outcome is that the trainees" act through the English language.

A modified and truncated version of the GME and SME syllabus mapping is exemplified in Table 1 below.

| Section | Competence | Grammar | Vocabulary | Listening and speaking | Reading and writing |
|------------------------|---|--|--|---|--|
| GME 34 | Evaluate different perspectives on a problem and recommend appropriate action; describe emergency response procedures; give instructions to passengers in the event of an emergency | Second conditional clauses | Modal verbs would, could and might in conditional sentences; conjunctions suppose, imagine, what if in conditional sentences | Instructing passengers and crew members to evacuate | Read about emergency response procedures; describe procedures for the evacuation of passengers and crew members in writing |
| SME 2.1- C 1.3.2 | Emergency communication | - apply the correct procedure for transmitting a distress alert/call; - create distress messages based on different scenarios in written and oral form; - simulate acknowledgement of distress messages; - listen to orally simulated emergency situations and practise the given scenarios with colleagues; - simulate on-scene communication between different parties involved in SAR; - demonstrate Urgency and Safety communications and practise the given scenarios with colleagues;. | | | |

Table 1: GME and SME syllabus outline (2 examples).

In Table 1, the communicative event of emergency handling shows GME and SME have different syllabus mappings while following the same sociolinguistic principle. In GME, the functional linguistic features of second conditionals, modals and conjunctions are presented through authentic texts of the emergency communication. In addition, the communicative event is deconstructed into a series of language skill tasks that practise these functional linguistic features. Most importantly, the tasks designed have the authentic texts as a reference and aim to fulfill real maritime acts through the

English language, for example, instructing evacuation in a marine emergency situation. This section targets the learners at the elementary and lowerintermediate English levels, and is therefore suitable for seafarers of all ranks and departments. Here, the focus of the GME syllabus is placed on linguistic content; on how language tasks embedded in maritime contexts are fulfilled.

However, for learners at the lower-intermediate to upper levels, professionally fulfilling communication acts specific to their ranks or departments are the targets. In this respect, the correlation between lexicalgrammatical choices and the communicative purposes of maritime domainspecific actions, as introduced and considerably practised in GME, is taken as having been accepted and understood by these learners. Therefore, the SME section places the focus on professional content; on how maritime workplace duties and identities are fulfilled through the English language. SME divides these learners into "professional" groups and immerses them into "professional" assumptions, motivation and the conventions of doing duty-specific acts through the English language.

As is shown in Table 1, for those with the specific workplace duty of emergency communication as part of their rank-specific responsibilities, namely, officers in charge of a navigational watch on ships of 500 gross tonnages or more, the SME syllabus mapping directly prepares the learners for the specialized tasks associated with the sub-actions, such as transmitting a distress alert/call, of the complete communicative event of emergency handling. Here, the general communicative competence of emergency communication is "unpacked" into a series of professional know-how tasks, i.e. the learners are led into participating in the substantial activities of their ranks and departments. ME acquisition is thus in the process of a real-sense onscene action where the learners are taught what conventionalized actions are required out of a recurrent marine situation, such as an emergency, and how to connect meaning and form to realize those actions. Indeed, in doing these actions, the learners can present their professional identities as being of specific ranks or departments in the maritime community.

As a consequence, the two-stage syllabus organization gives ME instructors the flexibility to weight the teaching program according to the KUP requirements of English competence in the STCW Code. The correlation between language and content, or the discursion-profession correlation, is maintained, but with the focus on the language in GME, on the content in SME. The code-tailored ME is thus "tailored" as oriented towards communicative performance and to "getting maritime-specific things done" as argued earlier.

4.2. Multi-syllabus approach: Genre-based balance of the linguisticcommunicative competence continuum

In English as a Foreign Language (EFL), there has been continual tension and constant debate over the teaching and learning of English (i) as the acquisition of a linguistic system or (ii) as communicative behavior (cf. Gass, 2013). In teaching, the former means that the language input of vocabulary, phonology and grammar guarantees the learner's language skills acquisition (listening, speaking, reading and writing), whereas the latter gives priority to immersing the learner with the pragmatic use of language in real situations. In this respect, the history of ESP education witnesses the shift in focus from the linguistic system and skills in general, to communicative behaviors in specific settings (cf. Belcher, Johns and Paltridge, 2011). However, there is a high risk in undermining the instruction of the linguistic system knowledge in ESP teaching, especially for non-native English learners. On the one hand, if the linguistic form and skill instruction is too narrow it would be inadequate in developing a learner's capacity to handle specialized professional communicative tasks; on the other hand, to immerse the learner into settings and situations without explaining the grammar-genre specific correlation would also compromise the validity of the learning activity. In addition, for second language learners who have not yet developed the cultural awareness skills across languages, a communicative approach to language teaching that is too broad would sometimes result in "throwing the baby out with the bathwater".

As a result, the revision of Model Course 3.17 follows a multi-syllabus approach: for the GME part (Core section 1), the maritime domain-specific performances have been deconstructed and restored to language input (grammar, vocabulary and phonology) and language communicative skills (listening and speaking, reading and writing). For the SME part (Core section 2), the duty-specific KUP requirements for English competence have been unpacked into "genre sets" (Bhatia, 2004: 53) in order to involve the targeted learners. A "genre set" incorporates a class of typical maritime professional genres of different modes that seafarers with a particular duty and department would be engaged in as part of their routine professional activities.

This multi-syllabus approach can help to achieve the balance of the linguistic-communicative continuum. That is, neither the total communication situation immersion, nor the only language input instruction, can guarantee the effectiveness of the ESP teaching. In the ME context, English linguistic systems underlying the maritime domain-specific performances can be firstly made maritime-general and language-substantial. Then ME teaching can be tuned to be more maritime-specific regarding the duties and departments, thus aiming at realizing maritime professional identities through using the English language.

In the GME part, the learner, from reading and listening to relevant authentic materials, catches the genre-specific explanation as to how the language input presented realizes specific values in the maritime-related communicative events. For example, the linguistic systems of the present perfect continuous tense, adverbials of time such as since and for, as well as phrases for expressing degrees of certainty, can all find their predominance and generic values in the performances of reporting recent events on board, handing over the watch, and recording the log. Through the identification and selection of these contents as language input, and embedding them into authentic texts, it is possible to convey to the learner a much needed psychological reality and relevance to the learning tasks of speaking and writing.

A modified and abbreviated version of balanced syllabus mapping is exemplified in Table 2.

| Required performance: Check task completion in routine operations: VHF communication regarding bunkering, distress and urgency messages using SMCP | | | | | | |
|--|---|---|--|--|--|--|
| | Listening and speaking | Reading and writing | | | | |
| Grammar: present perfect; regular and irregular verb forms Vocabulary: verbs relating to bunkering, maintenance and safety procedures; Phonology: elision, the weak vowel sound, contracted and merging sounds in connected speech | Simulating VHF communication .1compare normal speech with VHF protocol; .2 identify some VHF recordings; .3 check stages of completion of a variety of tasks form spoken information; .4 talk about the recent activities with partners | Identifying VHF communication regarding distress, urgency, safety and bunkering operations 1 read messages concerning VHF communications regarding distress, urgency and safety; 2 simulate urgency procedures; 3 refer to a checklist to describe stages of completion in a routine procedure; 4 simulate VHF communication regarding bunkering operations | | | | |

Table 2: Balanced syllabus mapping in GME

Given the reliance on voice communications from ship-to-ship and ship-toshore, pronunciation, speaking and listening are emphasized in the GME curriculum development. In addition, a challenging variety of functional linguistic features realizing the relevant required action performance are represented in the input of listening/reading texts and practised in the output of speaking/writing activities.

Multi-mood (the understanding of different moods or attitudes when listening) and multi-mode (different types of communication, such as VHF radio, telephone, or formal/informal face-to-face conversations) listening materials form the basis of grammar, vocabulary and phonology input. As revealed in Table 2 above, the tasks of VHF communication are designed for the learner to identify and interpret specific phonological features such as merging in connected speech, or meaningful features like distress and urgency. Such functional linguistic features can be found in the genrespecific explanation in the action of "VHF communication regarding bunkering, distress and urgency messages" where these features are particularly problematic for those who are non-native English speaking seafarers.

Connecting the linguistic system with the communicative actions in syllabus design makes for better awareness of the text-genre/action rationale. Here, the explanation of the linguistic system comes from the analysis and understanding of the maritime domain-specific genre/action in which they are conventionally used. Accordingly, Basturkmen (2010) claims this meaning-making integration of the linguistic system and generic resources helps develop the learner's capacity of handling specialized professional communicative tasks without sacrificing their language accuracy.

When it comes to SME, the focus is more towards the procurement of maritime professional identity via the English language. Here, the learners are firstly divided up according to their specific professional ranks or departments, and then directly introduced to, and involved in, their maritime duty-specific genre set where a range of typical communicative activities are provided.

A modified and abbreviated version of the SME "genre-set" syllabus mapping is exemplified in Table 3.

Specialized Maritime English for GMDSS radio operators (IMO Reference: STCW Code Table A-IV/2)

Competence: transmit and receive information using GMDSS subsystems and equipment and fulfulling the functional requirements of GMDSS

Training outcomes: demonstrate a knowledge and understanding of:

1 The English language, both written and spoken, for the communication of information relevant to safety of life at sea

- 1.1 Use Maritime Safety Information and special services
- read NAVTEX messages including meteorological and navigational warnings, etc. to become familiar with special terms and message patterns and extract important information from Enhanced Group Calling (EGC) messages by scan reading
- read EGC messages including meteorological warnings and navigational warnings, etc. to become familiar with special word message patterns and scan read to identify the key information in the EGC message
- understand Maritime Safety Information (MSI) broadcasts on VHF/MF/HF radio
- draft special service text messages to obtain special services from relevant coastal special stations (for example MEDICO)
- demonstrate communication with coastal special service stations (for example meteorological stations) to obtain special services
- 1.2 Read GMDSS operational instructions and communication publications
- scan read the relevant List of Radio Signals and/or ITU References to obtain the specific information
- 1.3 Role play communication based on distress, urgency or safety
- render the correct Calling Procedures for transmitting a distress alert/call/message
- create distress messages of different scenarios in written and oral
- simulate a distress communication with colleagues between two or more vessels
- create correct acknowledgements of given distress messages
- create a distress call by a station, not itself in distress, based on a given scenario
- simulate the cancellation of a given false distress alert/call
- demonstrate distress/urgency/safety traffic with relevant simulated parties, e.g. RCC, SAR unit, and information provider, etc.
- listen to simulated emergency communication on VHF with background noise and record the information in writing
- simulate urgency and safety communications based on given scenarios applying the correct Calling Procedures

Table 3: Syllabus mapping in SME

It is presumed that the linguistic system-genre/action correlation has been accepted and developed to some degree by SME learners. Here, the principle of syllabus mapping is to follow the professional division using specialized content designs for specialized maritime ranks or departments, as defined in the STCW Convention.

Take for example GMDSS radio operators, who are in charge of, or performing GMDSS radio duties on a vessel as shown in Table 3. Their professional identity defines the limited range of generic texts in their work routine centring around producing and interpreting distress/alert calls or messages, dealing with emergency communications on VHF. These genres/actions comprise a genre set, jointly realizing the narrowly defined professional activities, and internally intertextually linked in terms of their shared professional motivation and obligation. "Drafting distress messages" and "creating and interpreting emergency VHF radio calls" are both communicative stages involving different moods, modes and "moves" of communication. However, they share the linguistic resources while most importantly, jointly contributing to the accomplishment of the professional performance required for GMDSS radio operators. The safety culture and requirements, the communication channel features and the marine environment form the socio-rhetorical and situational context, coconstructing real communications.

Worth noting is the SME syllabus "unpacks" rank-specific competences into duty-specific genre sets and puts the learner into "action" through using English in particular settings for particular professional objectives. Here, ME acquisition is realized through participating in the knowledgeproducing activities of professional duties. Therefore, communication skills are developed around the complex and dense sociological and professional context for communication. This means that the SME syllabus design is oriented towards the development of the learners' professional expertise, which depends not only on the linguistic system and skill mastery but also the accomplishment of an accruement of complex and intertextually linked communicative behaviors required by the particular field of work.

4.3. Multi-cultural factors in ME education

There are two themes that cannot be overridden in the accounts of English education for maritime domain-specific purposes: internationalization and the use of English as the lingua franca. As the STCW Code states (IMO, 2011:347), during the most recent three to four decades, the seafaring profession has become international in character and the increasing use of multinational crews is the norm. This is also true of the maritime business at large, which has fast become globalized in nature with the outcome that effective communication in English today is a necessity for all the parties involved.

As to the English language as the lingua franca, it is argued that "adoption of a common language for maritime communications would promote safe practice by reducing the risk of human error in communicating essential information". Moreover,

Although not universal, by common practice English is rapidly becoming the standard language of communication for maritime safety purposes, partly as a result of the use of the IMO Standard Marine Communication Phrases. (IMO, 2011: 347)

Therefore, in syllabus design and content selection, the Model Course 3.17 developers bore in mind that English for maritime-domain specific purposes involves the diversity of cultural input to discursive practices. On the one hand, performing maritime-socially situated actions through the English language itself it would be intertwined with English native cultural factors while on the other, the multilingual and multinational crews would also bring variability to the use of English lexical-grammatical and discoursal resources, which are influenced by their non-English nativized cultural factors. This duality in the use of linguistic resources in professional genres has long been noticed and explored by ESP researchers and curriculum developers as seen in the work of Bhatia, 1993, 2004; Gimenez, 2001; Poncini, 2004; Nickerson, 2005; Dovey, 2006; Lockwood, 2012; and Lam and Kong, 2014.

The competency of communicating with multinational crews is given significant prominence both in the mandatory standards, for example, for navigation officers as stated in Table A-II/1 of the STCW Code, 1978, as amended, and in the guidance for all seafarers as defined by Section B-VI/1 of the Code. Cultural awareness is given attention in the Code because it contributes to maritime safety and marine environment protection.

From the perspective of ESP teaching and learning, culture permeates through linguistic system-genre/action practices and professional activities. Communicative practices of "clarifying, warning, apologizing, thanking", among others, are indispensable elements of required performances in an emergency, watchkeeping on board, ship-to-ship and sea-to-shore communication scenarios. However, conceptualizations of these practices are different among cultures. As to the lexical-grammatical resources, a non-English native's misunderstanding of modals in instantiating different degrees of coercion and attitude, for example, would damage the effectiveness of the communication, and thus directly risk the safety of the ship, the crew and the marine environment⁵.

Given the genre-based framework and the noticed intercultural issues grounded in the communication on board and ashore, intercultural meaning is therefore "unpacked" into communicative events for which the corresponding lexical-grammatical resources are required. The language input of discoursal resources such as modals and conjunctions are braided into the communication strategy practices in the GME section. Moreover, in the SME section, cultural awareness even becomes a key word in the task design. For example, the tasks for navigation officers are designed as consisting of the genre set demanding the cross-cultural awareness from oral event descriptions, order (given by non-English-native speakers) identifications to onboard ship communications.

This "unpacking" approach encapsulates language, culture, communicative skills as well as professional motivation and behavior in the teaching process, where these elements are continuously negotiated in the process of learning ME while fulfilling maritime domain-specific tasks. In the maritime communication context, the content of what is being transferred and discussed, the "specific sociolinguistic circumstances" (i.e. specific speakerhearer relationships are often developed under various degrees of stress and panic) (Cole, Pritchard & Trenkner, 2007:137) and the multi-mode communication at sea and ashore interact with each other to produce very specific intercultural registers. All of these factors point to the part in ME education and training of communication strategy development, rather than product-based terminology teaching.

5. Conclusion

This paper reports on syllabus mapping, task design and content selection in the context of the revision and subsequent validation of IMO Model Course 3.17, Maritime English. It proposes a genre-based ESP curriculum development framework.

The needs analysis offers points to the indispensability of a sociolinguistic framework in Maritime English teaching: that is, communicative competence can be defined as a seafarer's know-how to get maritimespecific "things" done through English, as per the relevant requirements of the International Maritime Organization's International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as amended. Problems that arise in ME communication are found in the

discourse issues, cross-cultural awareness, and the link between language form and meaning.

It is argued that code-tailored ME competence finds expressions in maritime domain-specific genres; these are typical sets of the English communicative events seafarers are involved in to achieve their maritime professional objectives. An effective ME curriculum should integrate linguistic systems, professional motivation & behavior, communicative skills and cultural awareness into the teaching process, which entails a process of learning ME while taking maritime domain-specific action. Specifically:

- Syllabus mapping can be divided into two sections: General Maritime English (GME) and Specialized Maritime English (SME). GME focuses on the linguistic content, generalizing how language tasks embedded in maritime contexts are fulfilled; SME focuses on professional contents, specializing in how maritime workplace duties and identities are fulfilled via the English language. As such, syllabus mapping calculates the discursionprofession correlation and helps ensure code-tailored ME teaching to be communicative performance-oriented.
- (ii) The multi-syllabus task design and content selection can help achieve a genre-based balance on the linguistic-communicative continuum. In GME, the meaning-making integration of linguistic systems and generic resources can strengthen the textgenre/action rationale, developing the learners' capacity of handling specialized professional communicative tasks without sacrificing their language accuracy. In SME, duty-specific genre sets can directly immerse the learners into specialized tasks, developing their professional expertise through accomplishment of complex and intertextually linked communicative activities.
- (iii) Furthermore, specific intercultural registers defined by English as the lingua franca at sea and ashore demand indispensable cultural input to discursive practices in ME education.

In short, genre-based curriculum development in Maritime English education is a way out of the "game" between the "narrow-angled" legal requirements for Maritime English and the "wide-angled" communicative nature of English for Specific Purposes.

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NOTES

¹ The questionnaire was distributed extensively to 26 maritime academies and agencies throughout the world for group discussion and collective submission; that is, the questionnaire part of the needs analysis targets covered maritime academies worldwide. Unstructured interviews targeted and covered maritime stakeholders. Nine interviews of IMO officers, maritime operation companies and government administrators lasted a total of 610mins. The raw data can be accessed on http://www.IMLA-IMEC.com and from chriszy924@hotmail.com.

² The two corpora studied were the "Maritime English Corpus" established by Shanghai Maritime University, and the Corpus of MARS Reports found at http://www.nautinst.org/en/forums/ mars/search-all-mars-reports.cfm.

³ The genre-based framework is the orientation at the stage of curriculum development; accordingly the linguistic system, professional know-how, and social/situational contexts can be braided into syllabus mapping, content selection and task design. This helps to ensure the Communicative Approach at the stage of classroom teaching as emphasized in the Instructor Manual of the Model Course 3.17.

⁴In this paper, we differentiate the terms of discourse, genre and register according to their nuances in the three schools of genre analysis. Discourse emphasizes more the attitudinal, and interpersonal components in language use; register, as is more of a systemic-functional concept, focuses on the situational contexts of language use; genre involves all the processes of a communicative event, integrating language use to situational contexts of professional actions and to socio-cultural factors in a given community.

⁵ This is also the reason why modals are discouraged in the SMCP; this being a list of standard core phrases in marine communication.