Considerations Regarding the Application of IMO Maritime English Model Course 3.17 in Korean Contexts

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Abstract: The importance of clear and effective communication at sea has been greatly emphasized due to the increase in multiculturalism on board both ocean-going and coastal vessels, and the necessity of systematic English training based on 'Knowledge, Understanding, and Proficiency' specified in STCW has also been recognized. With these growing needs in mind, the International Maritime Organization (IMO) updated the Maritime English (ME) Model Course 3.17 in 2015 by providing guidelines on language education within two separate categories, General Maritime English (GME) and Specialized Maritime English (SME). The IMO is now attempting to create a new, global framework of ME education and training, and this this new course model must first be thoroughly understood in order to explore the ways to apply the modified version into the context of current ME education in Korea and to design an updated language curriculum. Therefore, the general structural features of the new model course will be explained in this paper, and the course focus set by IMO and to be considered and/or adopted by the Republic of Korea will be closely examined. Finally, suggestions will be made on how to implement this revised model course in practice with the following focus: the development of localized curriculum for GME and SME; the provision of practical teaching guidance through relevant online and offline materials for class and self-study; and the establishment of qualification guidelines and a teaching support system for language teachers in maritime and language education.

Key words: Maritime English, model course 3.17, General Maritime English, Specialized Maritime English, a new framework of Maritime English education and training, Teaching pronunciation

1. Introduction

With the increasing phenomenon of multiculturalism on board and the growing influx of seafarers whose mother language is not English in the global shipping industry (BIMCO, 2010), the importance of systematic English education that enables seafarers to clearly and effectively communicate between ships and ships to shore has become considerably more prominent(Kim and Kim, 2011). The International Maritime Organization(IMO) has also recognized the critical importance of English education for the safety of both ships and people, which ultimately led to a revision of Maritime English(ME) Model Course 3.17 (hereinafter, ME 3.17) in 2015.

According to documentation from a 2014 Human Element, Training and Watchkeeping sub-committee meeting(HTW 1/3/7, 2014), International Maritime Lecturers' Association raised the necessity of revising ME 3.17 by reflecting the amended 2010 STCW convention and newly added professional category(i.e., electro-technical officer). After a series of in-depth and detailed discussions among member

States, the final updated version of the course was officially published in 2015; major revisions were made to its curricular structures and now included two language categories, General Maritime English(GME) and Specialized Maritime English(SME), and five different categories(e.g., deck officer, engineers, electro-technical officers) onboard. Considering that this updated course version is established on the basis of the Knowledge, Understanding and Proficiency(KUP) in the STCW convention(2010), and suggested as an international guideline to ensure a high quality of ME education worldwide, it is important for us to consider an effective and practical implementation of this course in our teaching context.

Therefore, in this paper, a general introduction of the new ME 3.17 will be made and its major features, which will be applied in our current ME education and training system, will be fully discussed within three major categories: the general introduction of ME; the systematic divisions of GME and SME and their teaching and self-study hours; and the qualification of ME lecturers.

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Lastly, future directions for ME education and training suitable in Korean contexts will be outlined.

2. IMO Maritime English Model Course 3 17

2.1 General Introduction of ME 3.17

The purpose of ME 3.17 is to provide administrations, training institutions, and academies with a guideline to develop their own ME training programs that are the most suitable for their individual educational environments and contexts. ME 3.17 is largely divided into three sections: GME, SME, and the instructor manual. The sections of GME and SME are closely interconnected with language curriculums, whereas the instructor manual is a separate teaching guideline specifically designed for teachers to utilize various English for Specific Purposes(ESP) language education theories and methodologies. More specifically, the course outlines all language education elements(e.g., grammar, vocabulary, phonology) and four different communication skills(i.e., listening, speaking, reading, writing) under a topic specific to maritime affairs; these topics are based on the KUP in STCW. See below for one of the 35 teaching units in the GME category; this illustrates the typical structure of the ME model course.

Table 1 General Maritime English, Unit 5

Topic	Discuss navigational routes and		
	geographic locations; comprehend		
	standard helm orders; use numerical		
	information for engineering		
Grammar	Prepositional phrases of geographic		
	location and distance; it		
Vocabulary	Compass points; longitude and latitude;		
	distances on land and at sea; standard		
	helm orders; numerical information for		
	engineering		
Listening	Understand helm orders in the English		
and Speaking	language when steering the ship		
Reading and	Naming navigational routes and		
Writing	geographic locations		

As detailed above, within the three major topics(i.e. navigational routes and geographical locations, helm orders, and numerical information), a wide range of sub-categories are suggested under the six different linguistic elements.

This example clearly shows that ME 3.17 is oriented around the English language, on the basis of maritime knowledge. It can be said that ME 3.17 aims to provide effective and systematic language training templates that can be directly applied in a real classroom setting by integrating multiple language education elements with maritime contexts for teachers

2.2 General Maritime English and Specialized Maritime English

As previously discussed, ME 3.17 is largely divided into GME(elementary and intermediate levels) and SME. Starting in GME with basic English in general maritime contexts that can be commonly applied for all types of seafarers, the scope of maritime contexts is specifically narrowed down in SME according to the students' working positions and duties(e.g., deck officers, marine engineers, electro-technical officers). Whereas several types of common topics on board, such as ask for and give personal data, describe crew roles and routines, and name types of vessel, are dealt with in GME, more duty-oriented topics are provided in SME, including use charts and other nautical publications for deck officers and use publications of main and auxiliary machinery and associated control systems for engineering officers.

Detailed recommendations for classroom and self-study hours are provided in each unit. The table below summarizes the recommended hours outlined in each section(IMO Model Course, 2015).

Table 2 Recommended Classroom and Self-study Hours

Category	Levels/ Duties	N. of units	Classroom hours	Self -study hours
General Maritime English	Elementary	18		
	Intermediate	17	443	93
Specialised Maritime English	Deck officers	2	90	56
	Engineering officers	2	105	56
	Electro-technical officers	2	104	54
	GMDSS radio operators	2	32	16
	Personnel in passenger ships	1	42	20

For example, students at a novice English level, who plan on becoming a deck officer, should spend a total of 533 classroom hours and 149 self-study hours on ME

throughout four years of a university English curriculum. ME 3.17 clearly states that the starting point of the curriculum(i.e., whether to start from an elementary or intermediate level) is optional and based on the target students' English levels, and that all topics suggested in ME 3.17 do not necessarily need to be covered by language teachers. While each maritime topic and language element should be dealt with in a harmonious and organized manner, how to include these language guidelines in our Korean local language education context must be carefully considered. Such in-depth considerations should include not only the classroom hours, but also the self-study hours, which are used to maximize the language learning effects through continuous exposure after class.

of 2016, when the current curriculum education/training hours in Korea METs are considered, accommodating all the hours recommended by ME 3.17 into the college curriculum seems impossible. For example, the Division of Navigation Science and the Division of Maritime Transportation Science in Korea Maritime and Ocean University offer a maximum of 180 and 90 hours of English classes, respectively, from students' entry to graduation (e.g. Practical English, Maritime Practical English, Maritime Communication Practice). In addition, the Korea Institute of Maritime and Fisheries Technology provides 96 hours of maritime English classes for cadet training through subjects General Maritime English (40 hours), SMCP (40 hours), and Practical Shipping English (16 hours). In this regard, the ways to bridge the huge gap between the hours of ME 3.17 and those of Korean METs need to be carefully considered in future planning.

2.3 Qualifications of Maritime English Instructors/Trainers

The third issue that needs to be highlighted is the qualification of ME trainers. The qualification is defined as follows in ME 3.17(p.40):

The instructor should be a qualified teacher of English language who has the pedagogical skills for language teaching and has sufficient ability in the Communicative Approach, content-based instruction and task-based learning etc. and has an adequate understanding of marine subjects.

As specified above, IMO's primary and core prerequisite for trainers is a qualification in English language education and the trainer should possess the ability to apply several

types of ESP-oriented language education methodologies into the classroom with a sufficient knowledge in maritime subjects. Therefore, the first step in developing a solid language training program in line with the KUP in STCW is to hire a qualified language practitioner who has a wide range of ESP teaching methodologies, and to further train them on maritime subjects(Choi, Jang, and Chae, 2014). International Civil Aviation Organization(2010) also requires similar qualifications to aviation English trainers by dividing their grades into three different levels (i.e., Best / Very Good / Minimum) according to the trainers' academic qualifications: a master's degree in English Education, English Applied Linguistics, and Teaching English as a Foreign/Second Language for the best level and a certificate in the field of English education as a minimum pre-requisite. The IMO and ICAO both require adequate understanding and general experience in the target fields; however, how to train English teachers/instructors to be familiarized with the target contexts through hands-on training experiences must be further discussed. Specifically for the Korean context, how to train marine-subject teachers who are currently teaching ME to be familiarized with English language and ESP pedagogies should be discussed in detail.

Suggestions for the Implementation of ME 3.17 in the Local Context

As discussed in the previous sections, the IMO is paying closer attention to the enhancement of seafarers' English competencies in a more systematic and organized manner. ME 3.17 aims at attaining a part of the IMO's goal, securing navigational safety, by providing an education/training guideline for effective communication, which is one of the major human errors leading to fatal accidents at sea(Jeong and Park, 2010). In this regard, it is vital that we, the Republic of Korea, listen carefully to the voices of IMO and try our utmost to meet the language requirements for the global shipping industry; thus, more and more Korean seafarers can enter into the global market with a satisfactory level of English language competency, and therefore, be internationally recognized as more qualified seafarers. In order to accomplish this goal, administrations, training institutions, and academies should complete the following items.

3.1 The Development of the Localized Curriculum for GME and SME

First and foremost, the localized curriculum for GME and SME, whichever is the most suitable to Korean maritime education/training contexts, should be developed. As pointed out earlier, the total number of units suggested in ME 3.17 both for classroom and self-study are quite large(more than 35 units, at least) and the hours for teaching/learning and self-study are also extensive(around 600 - 700 hours). Considering that the students' English competency and the classroom hours allocated to ME are quite varied from school to school(e.g., maritime high school, maritime universities, maritime training institutes), the adequate ME curriculum, GME or SME, should be systematically developed based on the considerations of the individual institutions' characteristics and educational environments(Park, 2016). This enables training bodies and their students to best adopt teaching and learning materials according to their individual needs(e.g., students' different levels of English) and their own learning/teaching priorities. For this, several types of language courses should be established; for example; 35 units of ME introductory course from elementary to intermediate for all personnel onboard(i.e., GME) and, respectively, two additional courses for deck/ engineering/ electro-technical officers(i.e., SME).

This type of attempt has been already made and is being successfully implemented in the Chinese context under the title of "Maritime English Education Reform" (Li & Luo, 2015). The project, which was initiated by China MSA and Dalian Maritime University, aims to innovate the Chinese maritime English-testing system for Certificate Competence(CoC) by focusing on on-board communication, For this, a well-organised maritime English curriculum for cadets has been established to support their learning throughout their four years of college. This reform project was initiated by both the Chinese government and academia. It is significant in that the ME curriculum design should be structured on and reflect the needs of national CoC in order to enable instructors and learners to make a linear approach from GME to CoC via SME. Therefore, it implies that the efforts of government, industry, and academia will be essential in making a nationwide maritime English curriculum that can be directly applied in the teaching environment and fulfil the requirements both of national CoC and of the actual working situations on-board.

3.2 The Provision of ME Learning/Teaching Materials for Class and Self-Study

ME teaching and self-study materials and learning

programs available online and offline should be systematically developed and provided. Considering that the recommends a large number of hours spent on ME classes and self-study, a wide range of supporting materials, including text books, workbooks, online lectures, and mobile content, need to be provided alongside the localized language curriculum previously mentioned. This will not only enable teachers to conduct their English classes in a more dynamic and student-friendly fashion by actively utilizing audio-visual supplements throughout the class, but also gives students the opportunity to explore ME in a wider, more in-depth way through self-study after class. This can also be a good education tool for existing seafarers working onboard, as life-long education and self-study is required in their ever-evolving working environment. Ultimately, these materials and learning programs should be directly connected to the certification of seafarers by reflecting all language elements covered in the language program under the KUP in STCW and on the testing for Certificate of Competencies.

The European Union(EU) recognised the importance of providing a supported-learning system for ME, and this led development funding for a Web-based language-learning tool as a part of the Leonardo da Vinci program(ADAM, 2008). This open-source, life-long learning tool was funded by the EU and developed by a wide range of maritime institutions and maritime experts, including English teachers, researchers, and seafaring professionals in the industry. This tell us that the development and provision of ME learning and teaching content is regarded as a public good that is supported by government bodies but shared by all relevant parties.

Further to this, ME content is being also developed by individual lecturers and school, not by the public sector. According to Ferreira(2015), the French Naval Academy encourages their lecturers to create e-learning ME materials and tools in order to provide blended-learning courses for students, which gives maximum flexibility of learning at home and school. The platform uses video, audio, and electronic materials for ME classes and self-study and is openly available to students and lecturers in the French Naval Academy.

The above-illustrated cases clearly demonstrate that the development and provision of ME content should be approached at the institutional and national level rather than rely on individual lecturers. In this regard, how interested parties should make a mutual effort needs to be discussed publicly so the benefits can be openly and commonly shared

in the target educational contexts.

3.3 A Qualification Guideline for Language Teachers and the Development of a Support System

Finally, the provision of a practical teaching guideline needs to be tailored to actual applications in a real maritime language education environment. Even though range well-organized curriculum and of teaching/learning contents are fully developed and provided, it would be no use if ME teachers do not properly utilize this under optimal language education pedagogies. Furthermore, IMO requires ME instructors to have adequate qualification in the fields of English education and/or English applied linguistics, but it is not practical at the moment to implement this in the local context, as most current ME teachers did not major in language education subjects and, therefore, do not possess the required qualifications and/or certifications in language education. Since obtaining relevant academic qualifications and accumulating specialties in English education field also takes a considerable amount of time(i.e., at least four years of university study or two years in a master degree program in post-graduate school), a wide range of alternative options for current teachers must be provided.

In order to respond to the needs of ME lecturers, IMO currently organises and provides Maritime English Instructor Training Course(MEITC) through technical cooperation funding. It has been pointed out that the training period is quite short (only one or two weeks) to cover the wide range of knowledge and skills needed for ME language teaching (KIMFT, 2016). This phenomenon has also been observed in several other ESP sectors(Nazari & Estaji, 2015; Zhou, 2015). The studies point out that the barriers to ESP language teaching as a lecturer are lack of content knowledge, lack of confidence for teaching ESP, lack of suitable training, and lack of course materials. In order to overcome these difficulties, it is suggested that the opportunities to attend a wide range of workshops and seminars related to the target professions should be given(Nazari & Estaji, 2015), and team teaching with language and subject specialists should be considered(Zhou, 2015).

One alternative option would be a revised model that includes a very detailed practical teaching guideline. In the guideline, all teaching elements specified in ME 3.17(e.g., vocabulary, grammar, phonology) could be included with clear

instructions on what should be taught and how should it be delivered to the students. Under a course title, for example, the following course contents could be specified in detail: knowledge and skills to be transferred in terms of reading, listening, speaking, and writing; the focus of language skills practiced; types of language education pedagogies recommended in each target element; the suitable duration of each section out of a whole class hour(e.g., 60 minutes). For the further development of instructors, IMO ME 3.17 could provide one sample unit for a 60-minute class, which is to describe weather conditions as follows:

Table 3 A Sample of Detailed Teaching Guideline in ME 3.17

Course: Maritime English: GME		LESSON NUMBER: SIZE OF GROUP: 16		Date: Duration: 60 minutes	
Main element Specific learning objective (in teaching sequence, with memory keys)	Stages: Activities (and type of interaction)	Instructor guidelines / notes	Time (mins)	Textbooks/ Materials/ Teaching aid	Language sub-skills practised
14.2 Vocabulary: months and seasons; objectives describing weather conditions 1 know and pronounce the names of moths and seasons correctly 2 use various adjectives to describe a wide range of weather patterns 14.1 Grammar: it	Lead in - elicit today's date in full Present / revise (ss → T/all) - elicit names of months and seasons - drill word	- Ask ss. which months are hottest. coldest. wettest etc - Revise functional phrases for stating preferences quickly - Start with	10	English calender	Speaking: accuracy
	stress/pronunciation if necessary Controlled practice(s. → s.) – elicit description of today's weather		5	Flash-card s showing symbols of different types of	Speaking: fluency Speaking:
I use it to describe weather conditions 14.3 Phonology: I pronounce groups of word-final consonant sounds clearly without inserting vowel sounds	- present structure it's+adj. then elicit more examples using flash cards of weather symbols - ss. describe typical weather in different months/seasons/plac es	- Start with open pairs, change to closed pairs - Check ss. know it's rainy/windy/ foggy/ misty	15	weather T1 p. 14.2-14.3	Speaking: accuracy Speaking: accuracy & fluency

Along with the provision of a teaching guideline for immediate use with current language teachers, a guideline for ME language teachers' qualifications should be established for the long-term. A very detailed guideline for language teachers currently exists in ICAO document(2010) which include minimum entry requirements for language trainers, a wide range of train-the-trainer issues, and the necessity of a continuous support system to regularly update the trainers' qualifications as a part of life-long education. This could be a possible answer for our local ME education/training environment. That is, systematic and continuous training opportunities on English teaching pedagogies and maritime knowledge should be given to marine-subject English teachers and English language practitioners, respectively, and regular updates on both fields should be provided through

various kinds of workshops, seminars, and short courses.

4. Conclusion

English language competency is regarded as one of the critical factors directly gauging seafarers' competencies, specifically for those who are engaging in international voyage. In order to meet the requirements for the global shipping industry, it is vital that we thoroughly examine our domestic ME language education/training system to compare our curriculum and English teaching methodologies and/or approaches with those of IMO, and then renovate our system to be more internationally recognized, standardized, and in line with IMO's goals in maritime communication.

In order to this, we must reconsider the following factors at a national level and assist with MET institutions, ME lecturers, and learners to approach ME education and training in a more systematic and well-organised manner. First, we should establish a localised curriculum for GME and SME covering institutions' ME classes and learners' self-study. As evidenced by the Chinese maritime English reform project, this needs to be led by the government to renovate ME testing systems and organise systematic approaches in terms of curriculum planning from GME, SME, and the CoC test. Second, ME learning and teaching materials should be created to support the curriculum. The online and mobile teaching content will help eliminate some of the burden that ESP teachers and learners have, and this ultimately contribute to the improvement of overall quality of ME education both in terms of class and self-study. As illustrated by the EU and others, the development of the content must not solely depend on the efforts of individual lecturers. Rather, this should be approached in a larger sense, or at a national and institutional level, so that high-quality content is developed through the mutual efforts of specialists in relevant maritime fields and the output can be shared and directly applied into an actual ME classroom. Last but not least, the qualification guidelines for language teachers should be established and a support system on how the challenges faced by ME lecturers can be overcome with the systematic assistance should be established.

References

[1] ADAM(2008), Maritime English Learning Tool, Retrieved on 05th Sep 2016 at www.adam-europe.eu/

- adam/project/view.htm?prj=4606
- [2] BIMCO(2010), Manpower 2010 Update: The Worldwide Demand for and Supply of Seafarers.
- [3] Choi, S., Jang, E & Chae, J.(2014), "The Development of Maritime English Instructor Training Course and Its Further Development", Proceedings of the Korean Institute of Navigation and Port Research Conference, June, pp. 5–7.
- [4] Estaji, M. & Nazari, N.(2015), "Exploring Instructors' Conceptions about EGP Teacher Challenges for Becoming an ESP Instructor in Iran: A Qualitative Study", English for Specific Purposes World, Vol 46.
- [5] Ferreira. A.(2015), "Rapid-Learning and IT Tools for Teaching and Learning Maritime English", Proceedings of the International Maritime English Conference, 12~15 October, pp. 74–82.
- [6] International Civil Aviation Organization(2010), Manual on the Implementation of ICAO Language Proficiency Requirements.
- [7] International Maritime Organization(2010), International Convention on Standards of Training, Certification and Watchkeeping for Seafarers.
- [8] International Maritime Organization(2015), IMO Maritime English Model Course 3.17.
- [9] Jeong, B. and Park, J.(2010), "The Features of VTS English and the Further Considerations on the Education for VTS Communication", Proceedings of the Korean Institute of Navigation and Port Research Conference, October 2015, pp. 190–193.
- [10] KIMFT(2016), "The Final Results of MEITC 2016", Internal reports of Korea Institute of Maritime and Fisheries Technology, June 2016.
- [11] Li, Y. & Luo, W.(2015), "On-going Maritime Education Reform in China", Proceedings of the International Maritime English Conference, 12–15 October 2015, pp. 118–126.
- [12] Park, J.(2016), "The Maritime English Education in Korea, Is It Okay to Proceed with?", Korea Maritime Press, 04th November 2016.
- [13] Zhou, J.(2015), "Study on College English Teachers ESP Teaching Transformation", Proceedings of the International Conference on Social and Technology Education, October 2015, pp. 776–780.

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