ABSTRACT
Testing one’s English Language in general is more or less standardized today. Standards of TOEFL and IELTS are widely accepted by international bodies and national institutions around the world.

But when it comes to the testing of a language for a specific purpose which is mostly English, our view of the matter is not very clear. To the native speakers of English, the language for a specific purpose is a natural part of the learning when one studies maritime sciences. But to those who study maritime sciences in another language, it is an additional study, an extra effort to comprehend and express their learning in a foreign language.

This extra effort is not a stand alone subject. It is interrelated with so many aspects of the maritime studies (but does not completely blend in) and therefore many national inputs are thrown into its deliverance and testing due the national perception of Maritime Education and Training. Thus, today maritime institutions are trying to apply many various methods and techniques of Maritime English (MarE) delivery and testing despite the fact that the Maritime World is increasingly reaching a supranational uniformity.

MarTEL - Maritime Tests of English Language - is a major project to become one of the key players of this supranational league, in terms of testing and assessment of English for the Maritime World. Of course, as testing and assessment naturally bring along the delivery methods and study packs of the subject, MarTEL will expand to cover all the aspects of Maritime English. In TÜDEV-PİRİ REİS UNIVERSITY, we are working to achieve MarTEL as a long sought answer to the search of a standard for Maritime English worldwide.

Keywords: Maritime English, Testing, MarTEL

1. INTRODUCTION
This paper does not solely intend to make an introductory presentation of MarTEL which is a major European project on Maritime English (MarE) and currently being undertaken by TUDEV-PİRİ REİS UNIVERSITY in Turkey and various partner institutions in other several European countries. What we would like to present here is a rationale on the importance of having a standard on both teaching and testing of MarE and while trying to achieve them, to share our experiences and discuss the methods along with the challenges and hardships they bring. We would like to share with you our experiences and insights on the teaching and testing of MarE and try to forecast a future standard by introducing MarTEL Project.

2. MARITIME WORLD TODAY
Our world is an ocean world. Under its many names and with variations in color and mood, a single ocean spreads across the three-fourths of the globe. At a time when every last patch of land is claimed by one government or another, the ocean is a realm that remains radically free (Langewiesche 2004).

Every day thousands and thousands of ships of various shapes and sizes are using this free realm and carrying nearly the full weight of international trade. They are owned by and manned from very many nationalities and cultures where every ship does not contain a uniformity of crew and management. Ships operating under the “flag of convenience” frequently change their identity as they are being sold from one owner to another.
who is themselves from different nationalities or part of multi-national corporations. These managements mix their crews without much reference to their nationality and language as to obtain optimum cost efficiency in terms of personnel expenditures. As a result, you can have a German captain commanding Pakistani deck officers who are managing Chinese deckhands, while the propulsion of the ship maintained by all Filipino engineering department. In fact, today a considerable percent of the merchant ships are managed by multi-national crews of various diversities.

Such a multi-national, multi-ethnical and multi-cultural realm of sea is transcending the control of each and every nation involved, enjoying almost a wild freedom of action and status.

Many efforts by international institutions, first and foremost by IMO and the other organizations, are trying to harness this supranational entity by imposing rules and regulations on various activities and compliances. Their works are becoming more detailed and more sophisticated as they try to infuse the multi-layered fabric of the Maritime World. Their cerebral produce are solidified and conveyed through a very human element that is language. This language is mainly English, as it is mostly, in all areas of international affairs but it sails into an unfortunate course as its impositions are being carried out. It is soaked by frequent splashes of maritime discourse, eventually changes its name to Maritime English and finally becomes as free and diverse as the realm it deals with.

3. TEACHING AND TESTING OF MARITIME ENGLISH (MarE)

Maritime English (MarE) is a restricted language and it is restricted to the activities of men (and women) tied to a specific purpose i.e. shipping industry (Trenkner 2002). Therefore we classify it as an ESP (English for Special/Specified Purposes) but we also face the consequences. Like in all other ESP’s but probably a bit more in MarE (though no more than in Medical English) it requires a certain level of professional knowledge and experience to become comprehensible. Although the major part of MarE is general English words and only a seven percent (7%) belongs to purely maritime or nautical terminology with their isolated meanings and distribution (Pritchard 2002), combined with semi-lexical or semi-functional words, it becomes a unique language that only men and women of sea will understand. All the locations, functions and actions it describes might only mean something on board a ship, on the sea or by the sea side. You can draw a line on land but you can only let it go on board. In this context, teaching and testing of MarE present major challenges.

3.1. Teaching of Maritime English

In a survey of MarE teaching materials by Boris Pritchard in 2004, it is indicated that:

* There is rarely a comprehensive, all inclusive MarE textbook or other learning/teaching material.

* No single material (textbook or other) has imposed itself yet as the material with world wide use or the one setting standards to other MarE materials though one or two have found a wider, international use (e.g. T.N. Blakey - 1987, P. van Kluijven 2003)

In parallel with these statements one can say there is no standard or globally accepted teaching method for MarE. Various Maritime Training Institutions are trying to apply methods either based on previously published books or practicing self devised syllabuses fulfilling the curriculums under the impositions of their governmental bodies. The latter subjects MarE to national perceptions of Maritime knowledge and its due inputs and pushes it away from meeting the challenges of the supranational entity as we speak of Maritime World today.

The rapid technical advancements in various sciences and changes in management policies which also contribute to Maritime Industry, bring along their new terminology and phrases or remove some, thus easily make the already existing textbooks incomplete if not out of date. For example, in electronic navigation LORAN (LOng Range Navigation) gets less and less mentioned while GNSS (Global Navigation Satellite Systems) dominate the field with all of its newly established concepts. The veteran oilers and the wipers of the engine room are hardly finding a place in the engineering departments of the ships anymore as managements equip their ships with UMS (Unmanned Machinery Space), reducing the number of their crews to cut the expenditures, benefiting from computerized automation.

With the exception of very marginalized areas of training that can be given in short-term courses (i.e. sea protests, port state control, spare parts acquisition etc.), the ever changing (and mostly increasing) domain of MarE is getting more and more extensive and far reaching, to a level that requires long periods of time and
very well organized delivery methods. These requirements are leaving us with no other option but to install the delivery of MarE to the main education and training period of the cadet officers.

In the four or five-year term of a cadet’s education and training; we may comfort ourselves with plenty of time to deliver a full scale, all inclusive MarE teaching that may reach a standard form and be applicable for all the cadets around the world, but things are not easy so.

To native speakers of English, the language for a specified purpose like MarE is a natural part of the learning when one studies Maritime Sciences. But to those who study maritime in another language, it is an additional study, an extra effort to comprehend and express their learning in a foreign language. Even they follow their main courses of maritime sciences in English, there is still a barrier of a "foreign language" with its lexicon, grammar and structure; sometimes bent and twisted or simply changed through the needs of maritime use. This will lead the lecturer to spare an extra time and effort for making the cadet understand or, better, comprehend the mechanics of English language in due learning of the topic delivered. This can be hard for the lecturers who are not much interested in linguistics or whose English are limited to specific areas of their teaching. In this case, an extra linguistic support of maritime context which requires a careful planning due the "phase problem" is needed for the cadets.

The "phase problem" is a challenge hard to overcome, mostly for those who are following the main courses of their profession in their own language. How can you teach a novice cadet Maritime English without first make him/her understand what you are talking about in his/her own language. As a MarE teacher; when you are teaching what "hatch" is, the cadet should have been already familiar with the ship structure and cargo handling. Because the definition of "hatch" contains other maritime words like "deck" or "superstructure" or "stowing", that means before you teach the cadet cargo handling operations in his or her language, you can not teach MarE for cargo handling. If you do, he/she will force you for further explanation on the subject, most likely in his/her native language. This will be time consuming and distractive. Worse, he/she will try to memorize the vocabulary or parrot the phrases, which are undoubtedly not a very healthy way of learning in a career based education. We call this the "phase problem" and a precisely synchronized curriculum is needed for the solution but it is not always possible due the complexities of semester programs.

I would like to share with you a basic method with a new approach to MarE which we have initiated at TUDEV this year. We called it "Location, Function and Action (LFA) approach. It was an attempt to overcome some consequences of the "phase problem" mentioned above and to gain grounds for our novice cadets for an early start to MarE. We have applied this program by the beginning of the second semester to our prep students who have no or little maritime background and a level of elementary English.

This program aims to supply a novice cadet with the very basics of Maritime English in terms of vocabulary and phrases. Its curriculum covers an amount of 200-220 maritime or nautical words which are considered essential for every one on board. The program requires an elementary level of English at the beginning and develops its own leveling as it proceeds. Every newly introduced maritime word is explained and taught with the use of previously learned words and structures, thus a gradual vocabulary building along with their usage is achieved at the end of the program. At the completion of the program, a cadet is at least acquainted with MarE and through it with maritime sphere and he is ready to start his main study with a certain ground covered. One should keep in mind that this program is directed to those with null maritime knowledge even in native language. The amount of vocabulary and sophistication of its usage can be rearranged in parallel with the prep curriculum of the institution. The following are the general explanation of the approach, the curriculum of the program and a sample study unit which is handed out to the cadets in the class.

3.1.1. A New Approach to the Delivery of Maritime English for Elementary Level

(Location, Function, Action)

**LOCATION:**

*What it is? Where is it?*

Basic definition of the Maritime “word”. The “word” as the subject of the sentence.

*(What is it?)*

Basic description of its whereabouts. Again the “word” as the subject of the sentence.

*(Where is it?)*
Examples: A “ship” is a sea vessel. (What is it?)
A ship “floats” on the sea (Where is it?)

Remarks: Proposed structure is “simple present or present continuous tense”
Injection of another maritime word (float) combined with the primary word.

FUNCTION: What does it do?
Basic definition of the function or the role of the maritime “word”. Again the word as the subject of the sentence.

Examples: A ship "transports" cargo.
A ship "carries" passengers.

Remarks: Proposed structure is “simple present or present continuous tense”
Combination of the “word” with the verbs and some other maritime words previously learned or newly introduced (“transport” and “carry” the aimed verbs, passenger a previously learned word, “cargo” the newly introduced)

ACTION: What to do with it?
Basic description of the action you take with the injected maritime “word”, this time the “word” as the object of the sentence.

Examples: We sail the “ship” across the sea.
We load the “ship” with cargo.

Remarks: Proposed structure is “simple present or present continuous tense”.
Introduction of the verb (sail across) combining with the “word” and the combination previously learned maritime word “cargo” with the verb “to load”.

General Remarks: Vocabulary to be introduced for the first time should not exceed 10 in number for a 45-minute lesson period.
The Turkish meaning of the “maritime word” which is to be explained will also take place in the notes delivered to the class.

3.1.2. Maritime English Curriculum for the 2nd Semester of the Prep Class

REMARKS: Learning outcomes for the first ten weeks are designed for a "one class-hour a week" schedule. Each outcome aims to introduce around 10 new words, along with their explanation and usage.

Week 12-16 outcomes are designed for two class-hour duration.

WEEK 1: The Ship
WEEK 2: The Ship Parts
WEEK 3: Locations on board a Ship
WEEK 4: Directions on board a Ship
WEEK 5: Dimensions on a Ship
WEEK 6: Tonnage of a Ship
WEEK 7: Who is who on board a Ship?
WEEK 8: Where do they live?

WEEK 9: Where do they work?

WEEK 10: Some other places on board

WEEK 11: PHASE TEST 1

WEEK 12: In times of danger: Alarms

WEEK 13: Fire fighting

WEEK 14: Life Saving Appliances

WEEK 15: Abandon Ship

WEEK 16: Where the sea meets the land: sea and land geography

WEEK 17: PHASE TEST 2

3.1.3. Sample Study Unit: STUDY UNIT 1

THE SHIP

VOCABULARY TO BE INTRODUCED:
Ship : 
Vessel : 
(to) Float : 
On board : 
Aboard : 
Cargo : 
(to) Sail on, across : 
(to) Load/ (to) Unload: 
(to) Depart from/Departure : 
(to) Arrive at/Arrival : 
Port : 

Vocabulary Reminder:
(to) Swim : 
(to) Carry : 
(to) Transport : 

SAMPLE SENTENCES:

A ship is a vessel.
A ship is a sea vessel.
A ship does not swim but she floats on the sea.
A ship is a floating vessel.

Ships sail on the sea.
Ships carry passengers aboard.
Ships transport cargo on board.
Ships depart from ports.
Ships arrive at ports.
Ships leave ports at their departure.
Ships come to ports at their arrival.

We sail the ships across the sea.
We sail on board ships.
We load ships with cargo at ports.
We transport cargo and passengers on board ships.
We carry passengers and cargo aboard ships.
We unload cargo from ships at ports.

We welcome you aboard.
Welcome aboard.
This is your first day on board.
Welcome on board.

The study unit given to the cadets constitutes the core of the delivery. The lecturer may lead his or her students to create their own sentences, practice their pronunciation by letting them read aloud in the classroom and discuss the good or bad points. It is open to progressive approach depending on the level and enthusiasm of the cadets. It is a content based method which requires a lecturer with a reasonable maritime knowledge.

Speaking of the content based method; one should also keep in mind that the progress of teaching will eventually lead from content based to competency based teaching. What we mean by the “competency” is the ability of the cadet to use English efficiently to carry out his/her professional tasks. This is an important issue, because in compliance with the nature of an ESP; the language itself transforms, changes status from being the subject to the service of the purpose (McDonough 1984). IMO SMCP as a subset of MarE may be regarded as a result of this transformed functionalism (Trenkner 2002) requiring a proficiency of English in oral communication (listening and speaking). Another good example is the usage of a troubleshooting list for engineering officers and preparing a work order accordingly (reading and writing).

The methods and programs of competency based teaching are too extensive to discuss here but it will suffice to say that there are surely no standards but plenty of challenges to overcome.

In our search for a supranational standard for MarE, teaching of MarE doesn’t seem to be a good starting point. Its dynamics are much complex and interrelated with many technical, economical and national elements. Therefore it might be better perhaps if we concentrate on another aspect of MarE which is testing and assessment.

3.2. Testing of Maritime English

Testing one's English Language Proficiency in general is more or less standardized today. A sound arrangement of the questions under the selected skills and the desired level of competency will result in a fine, solid test to assess the applicant's English language proficiency for a pre-determined degree or stage. But when it comes to the testing of an ESP that is MarE, our view of the matter is not very clear.

As we have mentioned before, for those who study maritime in their native language, MarE is an additional study, an extra effort to communicate and execute their learning in a foreign language. When we are to test the outcome of this extra learning, we are inclined to take great care and a fine focus for staying on the right side and avoiding trespassing too much into the realm of professional knowledge. Although the maritime competency of a person is not totally separable from the language one uses to express his/her learning but when you dig too much into one's professional knowledge to test MarE, you may not achieve what you are intending. You may find the applicant's whole background, educational and professional, interfering with the results of your assessment.

This may also keep us away from our intent to set a standard for MarE because both education and professional history might have been subjected to strong personal and national influences.

We would like to explain this matter with some example questions.

3.2.1. Sample question 1:

Please give examples to the "Enclosed Spaces" aboard a ship.

a) Ballast tanks
b) …………….

c) …………….

d) …………….

e) …………….

This is purely a professional question expressed in English. The test taker naturally will use his/her Maritime English first to understand the question and what an "enclosed space" means on board but then refer and heavily rely on his/her professional knowledge to give the correct answers which he/she will write down in English.

3.2.2. Sample question 2:

List three basic steps in fire fighting on board a ship:

a)

b)

c)

This is another example that shows us the influence of educational background rather than the language proficiency for the correct answer. Yes, the test taker must use his MarE to fill the correct answers but first of all he must refer to his firefighting training in the past to recall the steps of firefighting on board. And there is a possibility of having a different training with different priorities other than the examiner has in mind.

3.2.3 Sample question 3:

Compliance audits in Technical Ship Management deals with:

a) Ship Captain's certificates of safety.

b) Ship Chief Engineer's record of planned maintenance.

c) Ship's certificates of international statutory requirements.

d) Crew's personal records of professional experience.

e) Ship's records of dry dockings and repairs.

This is an example of a semi-professional or quasi-linguistic approach to MarE. Here the test taker must have a certain understanding what "Technical Ship Management" is but his Maritime English will help a great deal to choose the correct answer when he knows what "compliance audit" is and sees that it has nothing to do with the rest of the choices but (c).

3.2.4 Sample question 4:

Which one of the below is not a consumable on board a ship?

a) Fuel  b) Food  c) drinking water  d) cargo  e) spare parts

Same as the previous question, a certain linguistic approach supported with maritime knowledge is aimed in this question. The test taker who understands what "consumable" means will surely choose choice (d) for he knows that he should not consume the cargo of the ship.
3.2.5 Sample question 5:

When you are ordered to maintain the cooling water temperature below 90 degrees C, that means:

a) You can exceed 90 C.  

b) Your temperature can not be less than 90 C.

c) You have to keep the temperature above 90 C.  

d) You can not exceed 90 C.

e) You have to stop the Engine when the temperature is less than 90 C.

Here is a question purely on the linguistics side of MarE. Almost no professional background is needed to choose the correct answer. All the vocabulary are chosen from SMCP and the comprehension of the statement with the attention of the test taker drawn to the key words "maintain” and "below” will lead to the correct answer (d) with little reasoning.

3.2.6 Sample question 6:

When you switch over from No.3 bilge pump to No. 4 bilge pump for discharging No. 3 tank, that means:

a) You stop using No. 4 pump.  

b) You stop discharging No. 3 tank.

c) You start using No.4 pump.  

d) You start using No. 3 pump.

e) You stop using both pumps.

Same as the previous question, all vocabulary and their usage are from SMCP and the function of the phrasal verb is being questioned. The test taker will only need to comprehend the function of the verb in the sentence, in maritime context, to choose the correct answer (c). A little mischievous attempt was made with the similarity of the tank and pump numbers to refine the attention of the test taker.

As we tried to clarify through the sample questions; in the course of testing MarE, we have to make a decisive move. This move will give an answer to a very basic question that is:

What is the subject of our assessment? Is it the English proficiency in maritime context or the maritime proficiency in English context?

In other words we can express the question like this:

Which testing; “Maritime testing of English language” or “English testing of maritime knowledge”?

This is not just “playing with words”. In our point of view, these two statements above are describing two different approaches to MarE and they must be kept separated. Only one of them should be used in an application of an assessment for the sake of focus and clarification of the purpose.

“Maritime testing of English language” focuses on the language itself as the subject of the assessment with the usage of nautical vocabulary and communicational phrases; thus, testing the English proficiency which serves the maritime sphere. This makes MarE a medium, an element of Maritime World.

On the other hand, “English testing of maritime knowledge” relies heavily on the professional competency only to use English as a translative means, in both ways, when understanding the question and giving the answer. In this way, MarE will serve as a vehicle to transport one’s maritime knowledge from one language to another.

4. CONCLUSIONS

Our search for a supranational standard for MarE finally landed itself on the grounds of “testing of Maritime English”. In TUDEV-PIRI REIS UNIVERSITY, we are favoring the “maritime testing of English language” not just for the reasons I tried to explain but it is a better and more flexible tool to use on both content based
or competency based learning. More importantly, it is a firmer ground to build a standard and as it happens; we are currently working on one, the MarTEL project.

The Maritime Tests of English Language (MarTEL) Project will create a series of qualification standards for professional mariners and cadets through the application of computer based tests.

These tests will have weight on different skills according to the applicant’s branch (i.e. Navigation, Engineering, piloting etc.) and position (junior/senior levels). The officers are expected to reach certain levels of proficiency and competency in MarE as they move through their ranks and duties.

This project is supported by a partnership of several major European education and training centers namely:

- Piri Reis University - Institute of Maritime Studies (TUDEV), TR
- Centre for Factories of the Future (C4FF), UK
- Satakunta University (SUAS), FI
- Glasgow College of Nautical Studies (GCNS), UK
- University of Strathclyde (SU), UK
- Tromsø University College (TUC), NO
- Maritime University of Szczecin (MUS), PL
- Spinaker (SPIN), SL

Our road map is directing us on developing a series of standards at three different phases. These are:

- Phase 1, The Foundation Level which is to be applied to those who wish to follow the curriculum of a Maritime College in English.

- Phase 2, The Professional Level which is to be applied to officers of deck and engineering who are ready to go to sea or already working on board a ship.

- Phase 3, The Senior Level which is to be applied to officers of senior positions (i.e. captains, chief engineers and chief mates) as well as the senior officers at ports and pilots.

Currently we are through with sample tests of the phase 1 and 2 and working on the study guidelines of phase1.

We believe that a standard created in testing of MarE will eventually lead to a standard of teaching as it happens today with the TOEFL and IALTS. These international bodies with widely accepted English language qualification standards are followed by various private enterprises dealing with teaching methods, learning materials and facilities. It is our hope that MarTEL will lead the same process and a supranational standard in Maritime Teaching and Testing will be established to the benefit of all men and women of the sea.

5. REFERENCES

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