**REPUBLIC OF TURKEY**
**ÇUKUROVA UNIVERSITY**
**INSTITUTE OF SOCIAL STUDIES**
**ENGLISH LANGUAGE TEACHING DEPARTMENT**

# CONSTRUCT SHIFT OF MARINE ENGINEERING CADETS IN MARITIME ENGLISH VIA ON BOARD TRAINING EXPERIENCE

**Müjgan ÖZENİR**

**MASTER OF ARTS**

**ADANA/2015**

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**Supervisor: Prof. Dr. Erdoğan BADA**
**Member of Examining Committee: Assist. Prof. Dr. Eser ÖRDEM**
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**MASTER OF ARTS**

**ADANA/2015**

**To the Institute of Social Sciences of Çukurova University**

We certify that this thesis is satisfactory for the award of the degree of Master of Arts in the Department of English Language Teaching.

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I certify that this thesis conforms to the formal standards of the Institute of Social Sciences …./…../2015

Prof. Dr. Yıldırım Beyazıt ÖNAL
Director of Institute

To the ones who make their living  in the infinite borders of the oceans ...
*Despite everything...*

# ETİK BEYANI

Çukurova Üniversitesi Sosyal Bilimler Enstitüsü Tez Yazım Kurallarına uygun olarak hazırladığım bu tez çalışmasında;

- Tez içinde sunduğum verileri, bilgileri ve dokümanları akademik ve etik kurallar çerçevesinde elde ettiğimi,
- Tüm bilgi, belge, değerlendirme ve sonuçları bilimsel etik ve ahlak kurallarına uygun olarak sunduğumu,
- Tez çalışmasında yararlandığım eserlerin tümüne uygun atıfta bulunarak kaynak gösterdiğimi,
- Kullanılan verilerde ve ortaya çıkan sonuçlarda herhangi bir değişiklik yapmadığımı,
- Bu tezde sunduğum çalışmanın özgün olduğunu,

bildirir, aksi bir durumda aleyhime doğabilecek tüm hak kayıplarını kabullendiğimi beyan ederim. 12 / 06 / 2015

Müjgan ÖZENİR

# ÖZET

## GEMİ MAKİNE MÜHENDİSİ ADAYLARININ İNGİLİZCE ÖĞRENİMİNDE KAVRAMSAL DEĞİŞİMLER

**Müjgan ÖZENİR**

**Yüksek Lisans Tezi, İngiliz Dili Eğitimi Anabilim Dalı**
**Danışman: Prof. Dr. Erdoğan BADA**
**Haziran, 2015, 66 sayfa**

Bu çalışmada denizcilik fakültesi öğrencilerinin açık deniz stajı öncesinde İngilizceye karşı var olan algılarını belirlemek ve staj sonrasında bu konuda oluşan kavramsal değişiklikleri ortaya çıkarmak amaçlanmıştır. Açık deniz stajı Dünya Denizcilik Örgütü -İMO- nun tüm denizcilik öğrencilerine öngördüğü standart ve zorunlu bir uygulamadır. Gemi makine mühendisi adayları için altı aylık açık deniz stajı – son değişiklikle 2013 girişli öğrenciler için 12 ay –öğrencilerin profesyonel olarak ilk adımı olan üçüncü gemi makine mühendisi yeterliliğini almak için girecekleri sınavın ön koşuludur.

İstanbul Teknik Üniversitesi, Denizcilik Fakültesi, Gemi Makineleri İşletmeciliği bölümünde üçüncü sınıfa devam eden 50 öğrenci, çalışmanın katılımcılarıdır. Çalışmada, staj öncesi ve sonrasında olmak üzere öğrencilere anket ve görüşme teknikleri uygulanmıştır. İngilizceyi öğrenmede ve stajda İngilizceyi kullanmalarıyla ilgili bakış açılarını ve deneyimlerini öğrenmek için açık uçlu ve yarı yapılandırılmış sorular yöneltilmiş,veri analizinde SPSS 16.0 kullanılmıştır. Çalışma, denizcilik İngilizcesi bağlamında, dil öğrenimi /öğretiminin kapsamı, kalitesiyle ilgili yeniden gözden geçirilmesi gerekenleri açığa çıkarmıştır. Ayrıca, geleceğin gemi makine mühendislerinin mesleklerinde dil kaynaklı sorunsalına bakış açısını yansıttığından gerek hizmet alıcılar ve hizmet vericiler açısından kayda değer sonuçlara ulaşmıştır.

**Anahtar Kelimeler:** Gemi makine mühendisliği öğrencisi,denizcilik İngilizcesi, kavramsal değişim, , staj öncesi ve sonrası, açık deniz stajı.

# ABSTRACT

## CONSTRUCT SHIFT OF MARINE ENGINEERING CADETS IN MARITIME ENGLISH VIA ON BOARD TRAINING EXPERIENCE

**Müjgan ÖZENİR**

**Master Thesis, English Language Teaching Department**
**Supervisor: Prof. Dr. Erdoğan BADA**
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This study focuses on construct shift in marine engineering cadets in the period between pre and post practicum. In accordance with IMO's requirements, practicum-on board training- is obligatory and standard pre-requisite for all prospective seafarers. Regarding engine crew members, it is compulsory to carry out working at sea for six months (twelve months for the engine cadets registered in 2013) prior to taking proficiency exam to be seafarer-entitled as a third marine engineer.

Participants in this research are 50 marine engineering cadets of Istanbul Technical University. They responded to questionnaires and participated in interview sessions to express personal views on their English learning and utilization experience. Both data collection tools which were constructed in open ended and semi-structured styles were presented to cadets both before and after on-board training. Collected data was analyzed via SPSS 16.0.The study holds issues worth reconsidering in terms of content and quality in the teaching and learning process of maritime English. Besides, the study reveals significant results regarding both Service Providers (SP) and Service Receivers (SR), as it reflects the views of prospective marine engineers toward language related problems in the profession.

**Key words:** Marine engineering cadets, maritime English, construct shift, pre and post practicum, on board training.

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I am also privileged to have a beautiful family, my dear parents Fatma & Enver ÖZENİR, my daughter -DOĞA- and the sweetiest Guide of my life… Without their everlasting help, effort and faith, this thesis would have never been completed.

*Müjgan ÖZENİR*

*Adana, 2015*

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## ABBREVIATIONS

**e/r** : Engine Room

**ESP** : English for Specific Purposes

**ITUMF** : Istanbul Technical University Maritime Faculty

**IMCO** : International Maritime Consultative Organization

**IMLA** : The International Maritime Lecturers' Association

**IMO** : International Maritime Organization

**ISM** : International Safety Management Code

**MARPOL** : International Convention of Marine Pollution Prevention

**ME** : Maritime English

**MET** : Maritime English Teaching

**OPA** : International Marine Environment Protection Training

**PCT** : Personal Construct Theory

**SP** : Service Provider

**SR** : Service Receiver

**SMCP** : Standard Marine Communicational Phrases

**SMNV** : Standard Marine Navigational Vocabulary

**SOLAS** : International Convention –Safety of Life at Sea

**STCW** : International Convention: Standards of Training, Certification, Watchkeeping for seafarers.

**SPSS** : Statistical Package for the Social Sciences

**T/E** : Third engineer-rank of marine engineer a four year faculty graduate student of maritime faculty and also completed training

**ToM** : Time of Mention

**VHF** : Communicational mean at sea- stands for Very High Frequency

**VTS** : Vessel Traffic System

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# CHAPTER I

# INTRODUCTION

This chapter contains an overview of the study. Firstly, the background of the study was presented in terms of cadets' personal constructs of maritime English regarding their profession. Following a brief introduction on the background of the study, statement of the problem and purpose of the study were presented. Research questions of the study were illustrated, and following this, limitations were expressed along with the conclusion part recommending further studies to be carried out in this field, particularly, concerning lecturers, syllabus designers and course planners.

## 1.1. Background of the Study

Being able to communicate in English nowadays is not only important but 'a must' of an individual in our global world, since it does not only offer a reliable basis for communication but also provides a source of technological progress as it gives the opportunity to exchange information rapidly and investigate common global problems. English has been the pioneer factor in determining the overall performance of personal and professional life regardless of nationality, age, gender, status and career as the world is getting globalized. As English is apparently a binding medium among people belonging to different cultures and countries thus capability in English makes an individual independent, self-confident and self-esteemed in the global world. This fact is also verified by various research carried out with engineering students (Baştürkmen, 1998; Pendergrass et al, 2001; Pritchard & Nasr, 2004; Joseba, 2005).

English is accepted as the most commonly used language all over the world as well as being the lingua franca of regarding most professions. Understanding and being understood efficiently is the prerequisite of global world regardless of the nationality and country of people one makes business with and English has also been considered to be a compulsory medium for conducting successful businesses and at workplace in multi-national companies (Davies, Forey, and Hyatt, 1999; Forey and Nunan, 2002).

As individuals having to learn throughout our life, we make use of personal perceptions and constructs subconsciously in order to discover and evaluate the world. The quality of perception determines the process of learning, acquiring new issues. Building and developing constructs has always played a prominent role not only in

evaluating the world but also in learning and processing knowledge. How well and easily an individual learns and internalizes knowledge depends on the perceptions and constructs s/he has developed so far.

In this study we aim to focus on the development of cadets' personal constructs on English in terms of their prospective profession: seafaring - specifically marine engineering, and 'effect of training on shifted constructs' was also sought.

Constructs constitute an important factor in understanding the world for each individual. George Kelly (1955) is the founder of the theory of personal constructs. His outstanding verbatim sentence summarizes the whole theory as:

'Every man is a scientist! '

He explains that every person is a scientist as he comes up with hypotheses or predictions about the world, including everyday events and social interactions, based on their own system of 'constructs.'

Personal constructs determine the way we perceive and conceptualize the whole world. Language is the basic medium to express oneself and define the world via coding and decoding systems; therefore, the way you realize the world is reflected through facilitated language. Construct building takes place long before the process of language acquisition and/or learning occurs. Attaining considerable competency and performance in the second language is highly related to how personal constructs on the language are reshaped and reformed through the learning process.

### 1.2. Statement of the Problem

Maritime English (ME) is designed in accordance with the area it is to be facilitated; i.e. ME for deck officers/ratings, ME for officers /ratings in engine room, ME to be used by port authority and workmen. In this study, we focus on ME for marine engineers. It is highly loaded with specific technical terms, patterns and linguistic structures.

Having attained intermediate level at School of Foreign Languages at İstanbul Technical University (ITU), students in marine engineering faculty- namely 'cadets' have only two hours of ME lectures for two semesters and in the last academic semester

they take two hours of ME; within the whole four year round total lecture hours of ME is limited to six hours.

This course period seems to be far from meeting the needs of the cadets who are expected to start training in the second semester of the third academic year. Training is a highly crucial period for the cadets considering how specific and demanding the profession they chose is. Training is a mandatory requirement of the International Maritime Organization (IMO) for a seafarer prior to taking certification exam to be a third engineer. During their stay and work on board they are to find the responses to questions such as:

Am I suitable for this profession (as seafaring is significantly different in nature)?

Which part of the sector is suitable for me?

To what extent should I rely on my professional knowledge?

To what extent can I handle communication efficiently with multinational crew and others at shore?

Cadets are most likely to have certain personal constructs about different aspects of their prospective careers. Here in this study personal constructs of maritime English are aimed to be revealed. Training is also regarded as an essential period for detecting their changed or unchanged constructs in terms of ME.

### 1.3. Aim and Scope of the Study

This study aims to discover how and to what extent on board training practicum affects marine engineering cadets' personal constructs towards maritime English; whether there is a significant change concerning pre and post practicum; whether engine cadets of maritime faculty confront professional problems related to ME when they are on board training; and whether ME causes any problems related to self-efficacy, self-confidence, efficiency of machinery systems and operations.

### 1.4. Research Questions

The study seeks responses to the following questions:

1. What constructs do engine cadets have prior to starting practicum at sea regarding ME?

2. Were there any changes in cadets' constructs following a period of six months on board? If so, how are these changes perceived?
3. Should there be any observed construct shift, what could the underlying reasons for the shift be?
4. Do marine engineering cadets have difficulty with ME?
5. Does/Did ME cause any problems related to self-efficacy, self-confidence, efficiency of machinery systems and operations?

### 1.5. Limitations

This study focuses on personal constructs of marine engineering cadets regarding ME at Istanbul Technical University Maritime Faculty (ITUMF). Unfortunately, only fifty cadets are assigned to get education at the department annually, thus the population of this research is limited to this number of population. Although ITUMF offers education in two different departments, namely Marine Transportation and Marine Engineering, the latter provides the population of our study as the former has different requirements concerning the training period (twelve months) and the use of ME. Most cadets work on Turkish-crewed vessels; thus, the responses may not project an objective picture of the severity of problems to be faced when and if the cadets are to work on multinational vessels.

### 1.6. Definitions

**Cadet:** University student specifically being educated in maritime faculty and also a **trainee on board.**

**e/r :** Engine Room

**ESP:** English for Specific Purpose

**Seafarer:** Official title given to person working on board regardless his/her rank on board.

**ITUMF:** İstanbul Technical University, Maritime Faculty

**IMCO:** International Maritime Consultative Organization

**IMLA:** The International Maritime Lecturers' Association

**IMO:** International Maritime Organization

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**ToM:** Time of Mention

**VHF- receiver:** communicational mean at sea- stands for Very High Frequency

**VTS:** Vessel Traffic System

# CHAPTER II

# LITERATURE REVIEW

This chapter aims to provide background information to highlight the issues of Maritime English (ME). Firstly, the relevant literature on ME was reviewed; then, overall change in the world -globalism- was presented. International Maritime Organization (IMO) - a thorough authorized organization in maritime sector, its relevant conventions and ME's discriminative features were also clarified; following this, construct and formation were investigated in the light of personal construct theory; construct reformation and construct shift were explained within the basic postulate and corollaries of the theory.

## 2.1. Changing World into Globalization

Globalization has in fact been the familiar issue of civilizations ever since people intensively interacted with each other. It has implicitly been on the agenda of the world's history long before the European age of discovery and voyages to the New World, the origins dating back to the third millennium BC (Gunder, 1998). The term 'globalization' was pronounced during the 80's and since then it has gained an immense speed. Globalization has been defined by various scientists in different quotations reflecting their beliefs as:

Professor of sociology at the University of Aberdeen, Robertson (1992) was the first to define globalization as 'the compression of the world and the intensification of consciousness of the world as a whole.

Albrow, M and King E. (1990) claim that globalization includes all those processes by which the peoples of the world are incorporated into a single world society.

Giddens (1991) defines globalization as "the intensification of worldwide social relations which tie distant localities in such a way that local happenings are reciprocally shaped by events occurring miles away".

Stever (1972) suggests that globalization is based on five components: economics, politics, culture, ecology, and ideology.

David Held et al.(1999) also point out that globalization takes place on a continuum with three main aspects of local, national and regional. At one end of the

continuum lie social and economic relations and networks organized on a local and/or national basis; at the other end lie social and economic relations and networks which crystallize on the wider scale of regional and global interactions. Globalization can be taken to refer to those spatial-temporal processes of change regarding a transformation in the organization of human affairs by linking together and expanding human activity across regions and continents.

Larsson (2001) accounts that globalization is the process of world shrinkage, of distances getting shorter, things moving closer. It is also related to the increasing ease with which somebody on one side of the world can interact, to mutual benefit, with someone else on the other side of the world.

According to Friedman (2008), the pace of globalization is gaining speed and that business organization and practice will be affected by continuation of growth since the beginning of the 20$^{th}$ century. He also sees globalization as an outcome of the process of world shrinkage, of distances getting shorter, things moving closer. It pertains to the increasing ease with which people can communicate with each other easily.

Globalization is accelerated by social dynamics, namely, religion, politics, economics, and technology. Developments in transportation and telecommunications infrastructure, including the rise of the internet, are major accelerating factors in globalization, generating further interdependence of economic and cultural activities.

In 2000, the International Monetary Fund (IMF) declared that trade and transactions, capital and investment movements, migration and movement of people and the dissemination of knowledge were the four basic aspects of globalization. Globalizing processes are inevitably highly interrelated with business and work organizations, economics, socio-cultural resources, and the natural environment.

### 2.2. Globalization in the Maritime Sector

As globalization takes the world by storm, all human-related abstract and concrete concepts were to be reshaped, reformed and re-constructed.

One can hardly ignore how the concept of having to get globalized has already been a must for the contemporary life within the recent decades in terms of cultural, social, technological and professional aspects of life.

In the 19$^{th}$ century steam ships reduced the cost of international transport significantly and railroads made inland transport cheaper. The transport revolution

occurred between 1820 and 1850 and more nations embraced international trade. The invention of shipping containers in 1956 helped advance the globalization of commerce. After the Second World War, the Bretton Woods Conference was held with the attendance of forty-four countries, to make an agreement on specifying the framework for international monetary policy, commerce and finance. The World Bank, The International Monetary Fund, and the International Trade Organization are the outcomes of this conference based on the purpose of founding essential structures towards a global economy. (Joshi, 2009)

Businessmen argue that survival in the new global marketplace requires companies to produce goods, services, labor and materials and export them overseas to maintain upgrade of their products and technology in order to survive in a growing competitive world (Hitt et al: 2006).

International businesses have rapidly grown after the beginning of the 20th century thanks to improvements in transportation and communication. International businesses include all commercial affairs (private sales, investments, logistics and transportation) taking place between two or more countries, regions and continents.

Discovering the world via huge and impressive vessels has always been an ambition for humans in history. The more they utilized sea for discovery and prosperity, the more dominance and authority in world affairs they possessed.

Year 1912 was a break-point for all shipping nations in the world. The most tragic sea-accident ever to occur in the world, the Titanic tragedy, is still remembered as it resulted in the loss of more than 1500 people's lives. Following this tragedy, eminent shipping nations such as the United Kingdom, the United States, Scandinavian countries came together to set up an inquiry committee. This would enable not only to judge what had gone wrong but also what should have been done. The Inquiry Committee concluded certain issues regarding ship building; navigation and safety were somehow underestimated or neglected. Thus establishment of a formal organization to design and practice standard specific rules and regulations in maritime sectors was considered to be an urgent must. The worst tragedy at sea was even commented as an indication that some good would come out of the bad.

### 2.2.1. Seafaring as A Global Profession

Understanding and being understood efficiently regardless the nationality and country you do business in/with is prerequisite for globalization, and English has been considered to be an important medium for conducting successful businesses in multi-national companies in this sector (Davies, Forey, and Hyatt, 1999; Forey, Nunan,2002).
Lane et al. (2002) points out that the global seafarers' labor market is not a new phenomenon in the shipping sector; in the 19th century there used to be seafarers drawn from the colonial territories such as Somalia, Yemen, China, India, etc. He holds the belief that this situation in manning was relatively homogeneous until the 1970s, and the labor market for seafarers has only been truly globalized in the last thirty years.
Sampson and Zhao (2003) observe that today's seafarers are generally recruited from different countries via networks of crewing agents and it is pretty common to see both men and women crew members aboard. The labor force, traditionally dominated by seafarers from such long established maritime nations as Britain, Germany, Norway and Japan, has been dramatically multi-nationalized with the addition of seafarers from Eastern Europe and developing countries of Asia. The ships-owners have never employed so multi-nationalized, multi-cultured and multilingual crew before. (Sampson, Zhao; 2003, pp 31-43)

## 2.3. The Emergence of Maritime English

It is presumed that there were six millions of native speakers of English mostly living on the British Isles at the end of reign of Elizabeth I (1588).This figure rocketed up to 250 million of which four fifth living outside of the British Isles- mostly in North America - just when Elizabeth II acceded to the throne in 1952. English evolved into its current position as a world language throughout significant developments during this period.

Nowadays, it is estimated that native speakers of English are around 336 million, and 505 million use English as a second language worldwide. Besides, the language has an official or special status in 112 countries, 55% of the world's total population (www.ethnologue.com).

Crystal (2003) also calculates that one in five of the world population uses English 'competently' and that one in three is exposed to it daily.

Seidlhofer (2011) claims that three out of four people who communicate in English are non-native speakers. The main underlying reason can be found in obviously military expansion and trading desires of the island nation, the Great Britain, which involved traversing the globe by sea. Thus, wherever British rules commanded, it was inevitable for crews and passengers to transport their cultural and linguistic baggage throughout their voyages. As a dominating partner, it was expected that local inhabitants should be able to communicate in English provided that they wanted to do business with British vessels.

As Weeks (1997) suggests, the basis of the pre-eminent usage of English Bills of Lading and Charter Parties is formed due to this situation.

For British seafarers on British vessels, maritime English was specific to nautical purposes, consisting knowing and understanding terms, the use of which would identify them as belonging to the mariners 'club' . This would be much the same for seafarers from other countries who would largely serve on 'own flag', as a result monolingual vessels where the professional language would be their own; Greek vessels, Greek crew, Greek spoken, Russian vessel, Russian crew, Russian spoken etc. Weeks (1997) also observes that in the vast majority of ports of $18^{th}$ – $19^{th}$ centuries English appeared as a shore language; maritime business English became a pre-requisite for non-native speakers to conduct the ship's affairs. Besides, the acquisition of the new club language became the requirement for any transfer of officers or crews to other nations' vessels.

It is also worth noting that on board German imperial men of war of the period at a time when relationships with the British Royal Navy were far from congenial, amazingly, English was the language in command up until 1905, and was frequently the medium of understanding among German navy men onboard. The crews for onboard service were not drafted from conscripts but recruited from volunteers of the German merchant marine where English had widely been accepted as a sort of working language. From the last quarter of the $19^{th}$ century until the 1920s and 1930ies, the so called mixed crew were anything but isolated cases; ship owners and senior officers simply expected their ratings and junior officers to have sufficient English language skills which enabled them to do their work properly. On top of that, an insufficient command of English was regarded as 'a bad seamanship'

Ship to ship and ship to shore communication was carried out using flags until 1900 when the development of wireless radio for navigational purposes was gradually

in use. Just like today this novel technical development facilitated communication and set new challenging parameters not the least of which at a later stage involved in oral and aural skills.

During the era of the 19th century turning into the 20th century, while dominating in certain fields, English had the status of being only one of the some communicational languages across borders. French was for example the language of diplomacy for the first three decays of language of aviation until the end of World War II. As a result of dramatic increase in British-American commerce and trade which supported and facilitated their dominant military and merchant fleets that together with American scientific and technological progress and the impact of American lifestyle /culture on several post-war generations, the use of English internationally became intensified not only at sea and in the air but also in other aspects of life

This spectacular progress had very slight impact on the issue of teaching Maritime English until the 1960s. As Week commented (1997) on this situation, 'until about the 60s there was little if any need to teach difficult linguistic skills for ship to ship and ship to shore oral communication as VHF was still a novelty'. In fact, in maritime academies where English was taught as a foreign language, Maritime English lecturers would confidently base their lessons on standard English with the additions of 'belonging language and the language of the ship's business' (Weeks, 1997).

However, as early as the 1950s, US vessels used Very High Frequency (VHF) to prevent collisions and VHF was officially admitted for voice communications within port/VTS areas in 1961; consequently, Maritime English was initiated.

Weeks (1997) also points out that, it would still have been so hard to anticipate how massive impact English would have in maritime industry even at this stage. He considers significant developments enlisted below ensured not only the domination of English at sea but also the evolution of the subject as Maritime English.

1- Flagging out,
2- Cheap multinational labor,
3- Rapid advance in user-friendly communication technology, permitting practically unrestricted and undisturbed voice communication to and from any point in the world, and
4- The globalization of maritime industry and maritime training.

Thus, a seafaring career became a maritime career where a sea experience component consists of just 5-10 years, and finally,

5- The legal obligations in STCW and SOLAS that require maritime English are to be taught at Maritime English Teaching (MET) institutions, and are to be used in ship board, ship to ship and ship to shore communications.

The results of these developments have been a dramatic and consistent widening of the field that a Maritime English lecturer is expected to cover. In this respect, it is both honorable and remarkable that the fathers of the International Maritime English Lecturers' Association (IMLA) which came into being in Plymouth in 1977, recognized what was afoot and held its first IMLA Workshop on Maritime English in Hamburg, Germany.

English had been an examinable subject in European nautical colleges for many years, being among the first subjects to be taught and examined at navigation schools in European non English speaking countries since the mid of 19th century. However, at the first conference report over 30 years ago, we are informed that English was formally adopted by the IMO as the international language of the sea, and subsequently the Standard Marine Navigational Phrases Vocabulary (SMNV) was introduced in 1978.
The report also highlights that many lecturers are graduates of English having the quality of well-equipped for teaching general English but feeling ill-prepared for working to the technical idiom which the new emphasis demands.

### 2.3.1. Maritime English as A Lingua Franca at Sea

Most maritime phrases -even used in several languages as they were - derived from Italian such as bosun, cuisine, etc. as they used to be the governing control all over the oceans. Within the highlighted realities of a changing world the need for a common language for multilingual seafarers became irresistible.

The term 'lingua franca' -dating back to 17th century- is clearly defined by the Oxford dictionary as:

Lingua franca: language that is adapted as a common language between speakers whose native languages are different.

Viacheslav (2008) describes ‘lingua franca’ as a language systematically used to make communication possible between people not sharing a mother tongue, particularly it is the third language which is not the mother tongue of the people in communication throughout the world. According to statistics, over 3.5 billion people have some familiarity with English as a dominant language on the internet.

Swain (2011) states that nearly 35% of the world's mail, telexes, and cables are in English and he also adds that approximately 40% of the world's radio programs are in English.

As English is the most widely used language in the world, it has definitely become the lingua franca for any profession to meet this strong demand. McKay (2002) stresses the spread of the English language as the language of worldwide communication due to large numbers of native speakers of other languages using English as a means of communication. Maritime English (ME) has also been regarded and approved as the lingua franca of seafarers and is treated as a subject in the field of English for Specific Purposes (ESP) for the last two decades. ME seems to be a must not only for crew members but also for others making seafaring safe and secure at shore and for those making their living out of the sea. Trenkner (2000) states that English has been designated as a communication medium on board, and has thus become the lingua franca of seafarers for over a few decades. Trenkner also defines ME as being “…the entirety of all those means of the English language which, being used as a device for communication within the international maritime community, contributes to the safety of navigation and the facilitation of the seaborne trade” (Trenkner, 2000, p 7).

### 2.3.2. IMO and the Need For Standardization

The IMO is responsible for implementing every issue so as to carry out the mission of providing ‘safer navigation and cleaner seas’. Sagen (1999) points out dramatically staggering sayings in the maritime sector as:

‘Titanic created IMO
Torrey Canyon created MARPOL
Amoco Cadiz created MARPOL and amendments of STCW
Exon Valdez gave us OPA 90 (USA)
Herald of Free Enterprise created ISM ’

The IMO defines itself as a specialized agency holding the responsibility for the safety and security of shipping and the prevention of the marine pollution by ships. Due to having these remarkable responsibilities, the IMO holds the highest authority for marine sectors throughout the world. Based on these facts, the IMO is the supreme authority to set out rules and regulations not only for maritime institutions at every level but also for the shipping industry all over the world.

The fact that 80% of marine incidents arise from human element factors has been declared by the IMO. Miscommunication is the main problem under the issue of human element. This reality offers that it is high time that individuals in the industry were exposed to training as urgently as possible to provide efficient communication. Mostly, the communication on board is in English. The primary mission of the IMO is to provide safe navigation and clean seas all over the world. Having been aware of such crucial responsibility, the organization has already implemented and amended several international conventions, two of which are called as SOLAS (International Convention; Safety of Life at Sea) and STCW (International Convention; Standards of Training, Certification, Watchkeeping for Seafarers) which also aim to set a framework for ME requirements for seafarers. The IMO has also been organizing several meetings, congresses, demanding and emphasizing the vitality of these mandatory requirements from institutions and trainees, trainers, port authorities, and flag states.

As English is considered to be the lingua franca of seafaring, all hands on board are to possess certain level of Maritime English depending on their status on board. They are supposed to have proficiency in English, regardless of their workplace, which has never been emphasized so rigidly before. The British Council clarifies the reasons behind this rationale as: the rise in multinational crew and job related communication as a skeleton of the voyage. Communication on board takes place as (1) internal communication; from bridge to engine room, and (2) external communications; from ship to ship and from ship to shore. Besides these, social talk is to be achieved via a common language as well.

Seafarers are to navigate international coastal waters, which brings two fold external communications, namely communication from ship to ship and communication from ship to shore. All manuals (instruction books) of marine engineering cadets are in English - none of them has been translated so far. Such guidance books are undoubtedly to be comprehended perfectly so that no single injury or accident will occur on highly automated vessels. Most tags on machinery systems and instructions are in English,

which makes ME highly crucial at sea. Damage reports, bunkering, coast guard inspections are the very circumstances requiring marine engineers to use ME.

### 2.3.3. Present Status of Maritime English in Maritime Regulations

Integrated uses of technology in daily life had also shown extensive impact in the sector as well since all communicational means provide tough shield for vulnerable all hands, vessels and cargo navigating in the ocean at all times of the year. Therefore, it seems crucial to insert those integrated uses of technology in the maritime English while training of future maritime personnel, both for the seagoing and shore-based career purposes of maritime academy graduates.

A remarkable point on the course ahead was the revision of International Convention on the Standards of Training, Certification and Watchkeepng-STCW'78. After four years of intensive discussions and debates with IMO and on various other occasions, the Manila diplomatic conference on STCW Convention approved on '1st June2010 a number of significant amendments to STCW'78 (as previously revised in 1995) Convention which entered into force on 1st January 2012.

As mentioned in several speeches in International Maritime English Conferences (IMEC), the Maritime English community is considering intensively and corresponding new amended requirements regarding maritime English and maritime communications. Trenkner and Cole (2010) strongly believe that the main leading factor to Manila amendments (STCW '78/95) set higher demands first of all on nautical and technological fields. It gave special attention to realizing competency oriented rather than purely knowledge based MET and assessment. They also support the idea that this situation ensured further place for improvements in terms of maritime English instructions concerning both deck and engineer officers.

Regarding Maritime English it is interesting and gratifying to note that this important issue has played an ever-growing part regarding the three successive versions of the Convention STCW 1978 via STCW 1978 and as amended in 1995, and is gaining an optimum level in the Manila amendments of 2010.

The term of reference as specified by the IMO as '*requirements for effective communication'* is highly relevant for the corresponding consideration in terms of Maritime English. The extract suggests that (Regulation 1/ 14/.7) "each administration shall require… every … company ensure that:….at all times on board ships there shall

be effective oral communication in accordance with chapter 7, regulation 14, paragraphs 3 and 4 of SOLAS Convention" (2010).

As clearly prescribed above, two terms are highly significant; the modal 'shall' postulates the highest of commitment in legal context i.e. conventions, regulation, laws in terms of all concerned organizations, institutions, training centers, schools and companies. Regulation 1/14/.7 strengthens the position of Maritime English.

Secondly, the reference to SOLAS Convention of 2004 made above is of utmost importance for the future development of Maritime English both for MET institutions and maritime industry and here especially for the complements of active fleets and their shore-based services such as VTS and emergency allied services. SOLAS regulation referred to reads:

"English shall be used on the bridge as the working language for bridge to bridge and bridge to shore safety communication as well as for the communications on board between the pilot and the bridge watch keeping personnel." (SOLAS, 2004)

The usage of modal 'shall' is observed again with the implication described above; this regulation totally corresponds to the IMEC policy.

Furthermore, the mention of IMO, Standard Marine Communicational Phrases (SMCP) both for deck and engine room crew members is solidly advised by the SOLAS regulation.

### 2.3.4. Present Status of Maritime English in the Maritime Sector

Several conventions and meetings are held to transfer, exchange and update the data, knowledge and research results in terms of ME. This is a concrete indication which shows a rising value of maritime English. IMEC has had its 25th meeting in October 2013. International Maritime Lecturers' Association (IMLA) will have a yearly Workshop for Maritime English (WOME) in the world to deal with ME teaching for three main purposes: (1) to be well aware of the present situation of ME teaching, (2) to probe into the effect of modern educational technology on ME teaching, and (3) to set out a more suitable English teaching model for training marine practitioners.

However, Maritime English curricula is specified according to cadets' prospective working areas on board; ME for watch-keeping officers, ME for watch keeping engineers, ME for those to be working at port operations. Therefore, Maritime English is highly specific in nature let alone general English. Having competency in

English does not mean having competency in Maritime English as the latter has its own characteristics of jargon for seafarers. English has its own peculiarities regarding the use on board; it has been reformed; and eventually possessed standard structure and form. Maritime English has become the most peculiar branch in terms of ESP. Some significant determinants make it different from other branches of ESP.

Cui (2010) states that ESP deals with the learner's attention on the language and communication requirements in a particular professional field, and defines the characteristics of Maritime English in terms of three aspects:

1. SMCP – Standard Marine Communicational Phrases
2. Written English in Maritime English - scientific English used in weather report, manuals, operations' guide, rule and regulations at seaport and legal English used in accident reports, claims, contracts, conventions etc.
3. Maritime English has its own technological jargon or expressions.

### 2.4. Kelly's PCT: Personal Constructs Theory

The interpretations of occurrences have strong impacts on our lives; they even govern our whole lives. Interpretations on the same occurrence diverge from one individual to another as each has different variables in terms of backgrounds, beliefs, past experiences etc. For example: suppose that a child wandering in a park may think he needs protection from strangers while another thinks how self-confident he is.

Cherry (2014) points out even if we are all living in the same world, the way we experience it differs for each individual. Robbins -a leading author on the personal development – states that it is never the events of our lives, but the meaning we attach to events- how we interpret them-that shapes who we will become tomorrow. Maxwell also agrees with the former quotation by the statement of "life is 10% what happens to me and 90% of how I react to it".

As obviously seen, in fact we are all surrounded by constructs throughout our lives; this issue does not merely entail linguistic perspective but some other aspects of life.

George Alexander Kelly is well-known as a clinical psychologist, though he started his career as an engineer. He is the founder of cognitive clinical psychology and also famous for personal constructs theory namely (PCT). A single handed masterpiece

of Kelly entitled as- the Psychology of Personal Constructs- was written in two volumes containing over one thousand pages. Surprisingly, although it was written more than fifty years ago (1955) and republished in 1963 it is still considered to be a definite work in the field (cited in Atherton, 2013).

Kelly (1955) claims that starting from our early age we all need to build up reality to interpret all occurrences around us. Our mind is pretty busy in making assumptions to understand the world throughout our lives. He also notes as long as we carry on living we perform experiments that put our beliefs, interpretations to the test. Should our experiments work they strengthen our beliefs, otherwise we are to change our views. It is inevitable to change to reach certain development and progress mentally.

Kelly believes that we realize the world via the lens of our constructs. These constructs are to anticipate and predict the events which in turn determine our behaviors, feelings and thoughts. Kelly discovers that personality is made up of various mental constructs through which each individual sees reality. He also believes that we start by developing a set of personal constructs which are essentially mental representations that we use to interpret events. These constructs are based on our experiences and observations. Constructs can be defined verbally or sometimes they are nonverbal in the form of feelings: anger, anxiety, worry, etc. (cited in Cherry 2014, and Özkan 2011).

People understand themselves, their environment and anticipate future events by construing empirical models or personal theories and by evaluating these theories against personal criteria as to whether the prediction and control of events -based upon the models -have been successful or not. All theories created by people are hypotheses, and may be valid at any particular time, but suddenly invalid in some unpredictable respect and are replaced by better ones. In his theory, he basically assumes that our present constructs or interpretations of the universe are to be revised or replaced (Kelly, 1963).

He based his theory of personality on the memorable axiom of “every man-in his own particular way- is a scientist”.

This may sound challenging when considering how mind operates in understanding the world, observing, making predictions on possibilities, and creating theories to explain events. He thinks that the process is pretty congeneric to the way a scientist deals with the problem.

Kelly believes that science and theory building is not the privilege of scientists, theorists or researchers but that every human being is a “personal scientist” and “capable of creating theory at various levels”. Personal scientists – indviduals- are engaged in a process of observation, interpretation prediction and control. They erect for themselves a representational model of the world which guides their behavior and action. This model is constantly tested, modified or replaced in order to allow better predictions and control in the future. People’s behavior in the present is determined by the way they anticipate events in the future via the use of personal constructs in order to predict events (theory building) or to evaluate previous predictions and their validity or efficiency (theory testing). This process of knowledge creation and constant review of one’s knowledge is applicable to the researcher, to the learner in the formal education system as well as to people in everyday life. The only difference is the level of theorization and abstraction (cited in Zuber-Skerritt, 1988).

All these theories are built up from a system of constructs. A construct has two extreme points, such as "happy-sad, good-bad, easy-difficult’’ and we tend to place people and things or occurrences at either extreme or at some point in between. Kelly, who is the founder of constructivism, defines his theory and explains how our mind is filled up with these constructs, at a low level of awareness. He does not use the concept unconscious; instead, he believes that some constructs are preverbal, 'their lack of verbal labels often being because they were developed before the person had the use of words' (Winter, 1993, p. 244). A given person or set of persons or any event or circumstance can be characterized fairly precisely by a set of constructs we apply to it and the position of the thing within the range of each construct. Let’s say that the boss for instance may be just half between happy and sad (one construct) and definitively clever rather than stupid (another construct). The baby above may have a preverbal construct "Comes… when I cry."

Constructs are applied to anything we put our attention to, including ourselves, and also strongly influence what we fix our attention on. We construe reality via forming constructs. Hence, determining a person's system of constructs would go a long way towards understanding him/her, especially the person's essential constructs that represent very strong and unchangeable beliefs; and also the constructs a person applies to him/herself.

### 2.4.1. Constructs and Learning

Knowledge is considered to be a primary medium of one's power in this era. Learning process is prerequisite of getting knowledged. Besides, we have been passing through a learning process since we were born. The accomplishment in this process enables us to survive, live better, be in accelerating progress with change towards development.

Kelly is the first to state that people, individually develop internal models of reality which are called constructs - so as to understand and explain the world around them. They create verbal or non-verbal constructs based on observation and experiments. The significant development for a person can only be achieved via construct formations which are of tentative feature depending on several variables such as time, situation, place, and people. It is inevitable to set up a hypothesis to guess what is going to happen with reasons whilst construing the reality (www.changing.minds.org).

Hence, these personal constructs have always been found to be substantial by leaders of societies: philosophers, politicians, sociologists, the clergy,etc. Their solid impact had been recognized long ago, but not uttered explicitly for some reasons until recent decades.

Focusing on language acquisition and learning in social studies, this issue namely constructs –has engaged the attention of various researchers. According to Fishbein &Ajzen (1975), and Ajzen (1985), beliefs are a central construct in every discipline that is related to human behavior and learning. They consider that in one sense beliefs or personal myths about learning do not differ from the majority of myths about the human race, nor do they differ from those of the majority of psychologists and educators.

Harri-Augstein (1985) points out that Bruner, Rogers, Socrates and Kelly hold myths about learning and the arguments about the relative value of their myths has hidden the more interesting coherence that each student constructs a feasible myth of their own. (cited in Zuber-Skerritt,1988),

Breen (2001) observes that students bring the perceptions, beliefs, attitudes and meta cognitive knowledge together with them to the learning situation, and this has been recognized as a significant contributory factor in the learning process and ultimate success in the classroom context. In respect to second or foreign language learning setting, students may hold strong beliefs about the nature of the target language, its

difficulty, the process of its acquisition, the success of certain learning strategies, the existence of aptitude, their own expectations about achievement and teaching methodologies. Identification of these beliefs and reflection on their potential impact on language learning and teaching in general, as well as in more specific areas such as the learner's expectations and strategies used, can lead to inform future syllabus design and teacher practice in the course. Pedagogy has the capacity to provide the opportunities and conditions within which these learner contributions are found to have a positive effect upon learning and may be more fully engaged (Breen,2001; Arnold, 1999),

#### 2.4.1.1. Fundamental Postulate and Corollaries

Kelly has developed his theory within the framework of a fundamental postulate which was designed under eleven corollaries.

The fundamental postulate refers to the basic assumption underlying his theory, Kelly's Fundamental Postulate as: "A person's processes are psychologically **channellized** by the way which he anticipates the events" (Kelly, 1963, p.46).

Atherton (2013) defines the term "channelized" as "other psychological theories see the person as a static entity requiring some other agency to prod it into action. They postulate 'needs' or 'drives' for his purpose. PCP rejects this: a person is seen as a process, always making efforts to understand and always acting on and in the world". Kelly's fundamental postulate and his corollaries give a picture of the person/learner as a 'personal scientist ', with a hierarchical construction system –organizational corollary- which is personally unique-Individuality Corollary- and which can be explored by him/herself as well as by others-Sociality Corollary. Apart from their individuality, a group of people may be similar in terms of their construction of experience-Commonality Corollary. The development of intelligence or conceptual change depends on permeability i.e. the degree for the openness for the change of a person's constructs-Modulation Corollary – and on the balance between hierarchical integration and consistency of differing constructs on the one hand and their differentiation and inconsistency- Fragmentation Corollary- on the other. Finally a person is not predetermined in his/her thinking, but can choose alternatives-Choice Corollary. One's construing is both cognitive and emotional; the personal construct system is a holistic entity. Should any change occur in any part within the system, this change will have implications for other parts of the total system. Although Kelly's view of a person is a

holistic one, including cognitive functions and psychological feelings such as fear, anxiety, as well as early experiences and social conditions, he writes almost exclusively about people as personal scientists and cognitive construers of knowledge about the universe. Kelly regards that learning is active, creative, rational, emotional, intentional and pragmatic construction of reality. But he knows that all theories, including his own are human hypotheses which may fit all requirements at a particular time, but may eventually be found wanting in some unpredictable respect and thus is to be replaced by a better theory.

Kelly (1955) designs his fundamental postulate as:

"A person's processes are psychologically channelized by ways in which he anticipates events". He explains this via the eleven corollaries.

- The construction corollary: We conservatively construct anticipation based on past experiences.
- The experience corollary: When things do not happen as expected, we change our constructs (thus reconstructing). This changes our future expectations.
- The dichotomy corollary: We store experience as constructs, and then look at the world through them.
- The organizational corollary: Constructs are connected to one another in hierarchies and network of relationships. These relationships may be loose or tight.
- The range corollary: Constructs are useful only in limited range of situations. Some ranges are broad, whilst other ranges are narrow.
- The modulation corollary: Some construct ranges can be 'modulated' to accommodate new ideas (e.g. 'big'). Others are 'impermeable'.
- The choice corollary: We can choose to gain new experiences to expand our constructs or stay in the safe but limiting zone of current constructs.
- The individuality corollary: As everyone's experience is different, their constructs are different.
- The commonality corollary: Many of our experiences are similar and/or shared, leading to similarity of constructs with others. Discussing constructs also helps to build shared constructs.

- The fragmentation corollary: Many of our constructs conflict with one another. These may be dictated by different contexts and roles.
- The sociality corollary: We interact with others through understanding of their constructs.

#### 2.4.1.2. Construct Shift

Learning, i.e. attaining a certain level of competency in the second language, is significantly related to which underlying variables a learner has been exposed to; how the language is being perceived, whether the learner has positive/negative attitude, any bias, and any kind of motivation. From this point, personal construct formation is observed to have a determining factor in the accomplishment process of Maritime English.

Having competency in English (in case of seafarers, Maritime English) is one of the most essential requirements of a literate person in a global world. This study focuses on how cadets reformed, reshaped the constructs of Maritime English in terms of experience, organizational and individual corollaries.

Answers to the following identified questions were sought within the framework of this study to reflect personal constructs of Maritime English before training and the emergence of construct shift following the training experience.

1. What constructs did engineering cadets have before practicum concerning ME?
2. Following a six month of practicum on board, were there any changes in their constructs, if any, what is the nature of these changes?
3. If any changes in constructs are to be observed, what would be the underlying reasons for the shift in cadet’s perceptions?

### 2.5. The Training Book and its Procedure

Engine cadets are given 164 paged on board training record book by the faculty administration.Upon completing the service requirements, it is to be signed by both c/e and the master of the vessel. Cadets are responsible for safekeeping and making records either checklist or short paragraph styles. The language of the training book is

completely in English thus engine cadet is to facilitate English in completing every single part .

Content of the book is based on the structure of STCW Convention given in section A-III/1 of the STCW Code. Ship engineer officers and supervising engineer officer will also consult it to facilitate planning and organization of the training.

Certificate of the competence as watchkeeping engineer, ITUMF Sea Training Division' examiners will sight the completed approved training book and its attachments as proof of the duties and competencies acquired during the mandatory service period aboard ship.

On board training record book serves three aims as;

i. i-directing the practical training,so the cadet is guided as to the objectives of the practical training period;
ii. ii-giving guidance to the engineer officers regarding the development of the practical training to enable them to judge the progress and ,if necessary to make chief engineer the progress and, if necessary to make adjustments.
iii. iii-providing sign off space so that the required training can be proved and documented

Detailed tasks and competencies to be conducted during their 6 month on board training are gathered in six chapters as; 'introduction,'marine engineering at operational level', 'electrical and electronic control engineering at the operational level','maintenance and repair at the operational level,''controlling the operation of the ship and care for persons on board at the operational level ' and 'sea project work'

Chapter 1 Introduction - guides the cadets on the issues of purpose of on board training program, shipping documentation, instructions on the use of the book and also appropriate and effective completion of the training record book.

Chapter 2 'marine engineering at operational level', informs on the selection of hand tools, usage of hand tools electrical and electronic measuring and test equipment. It also covers repair faults and correct malfunctions,coorective actions with/out assistance, interpretaion of manuals.

In chapter 3 'electrical and electronic control engineering at the operational level' illustrates the usage of relevant manuals,drawings,and diagrams,operation of alternators.

In chapter 4 ’maintenance and repair at the operational level’ covers maintenance and marine engineering sytems, safety of all the personel working on the plant/equipment,undertaking maintenance and repair to auxiliary, plant and several equipment

In chapter 5 ‘controlling the operation of the ship and care for persons on board at the operational level ‘ concerns the issues of compliance with pollution prevention requirement, ballast, bilge , bunkering procedures, fire fighting, conducting drills etc.

Finally chapter 6 ‘sea project work’ covers all included on board to be conducted as a Project.

# CHAPTER III

# METHODOLOGY

In this chapter methodological aspects of the study are presented. Firstly, the design of the study is pointed out, and then the participants of the study are described.

Finally, the data collection procedure and data collection tools are explained. The purpose of the study is to discover pre and post ME constructs of cadets and how and to what extent on board training has had an impact on the constructs of the cadets.

## 3.1. Research Design

This qualitative study was conducted by means of collecting two types of data. As Merten (2005) suggests, a more complete picture of human behavior and experience is available, provided that more than one technique is used within the framework of research study.

Both, questionnaires and interviews, were implemented in collecting the data. The results were analyzed trough SPSS and content analysis techniques.

## 3.2. Participants

The participants involved in this study are the cadets attending Marine Engineering Department of Maritime Faculty at İstanbul Technical University (ITUMF). They were all third year cadets (all male; n=50; age range: 21 to 25 years) who were being educated and trained to become ocean-going marine engineering officers. Upon having undertaken university entrance exam they are exposed to two semesters of English program at the Preparatory School of Foreign Languages of ITU. Once they are at their Maritime Faculty, they begin to take two hours of Maritime English (ME) weekly during three semesters only.

## 3.3. Data Collection

This qualitative research aimed to reveal whether there is a significant change in marine engineering cadets' personal constructs on facing different situations following a six month training period on board. In cases of confrontations, what kind of construct

shift would occur was another issue focused on. Pre and post constructs were obtained via questionnaires and interviews given in the periods of pre and post training.
For pre practicum data collection, questionnaires and interviews were conducted in the spring semester of 2011-2012 academic year. After completion of their training at sea – lasting six months- they continued their education of fourth year at the faculty. As soon as they were back from training, the same questionnaire and interview were conducted again in the fall semester of 2012-2013 academic year.

- usefulness of ME
- importance of ME
- determining factor in choosing the working place
- advantages of being able and disadvantages of being unable to communicate in ME

Questionnaires were made up of open ended and semi structured questions in order to elicit themes concerning constructs. Items and content of interview focused on issues such as: A chi-square test was run to determine any significant difference in the dispersion of overall themes obtained for each item.

### 3.3.1. Data Collection Tools

Two kinds of instruments were used for data collection: a questionnaire and an interview for both pre and post practicum periods. The questionnaire and interview were designed by the researcher focusing on the research questions and in line with the aims of the study.

#### 3.3.1.1. Questionnaire

Pre and post questionnaires were implemented in both periods (pre and post on-board training). The questionnaire was designed to depict personal constructs and beliefs of cadets regarding Maritime English (ME), and consisted of seven open ended and semi structured items (see Appendix 1).

### 3.3.1.2. Interview

Pre and post interviews were semi structured in design and were conducted in face to face style and utilized as a second type of data collection tool.

Many types of interviews can be recognized in the field of social sciences. Semi-structured interview is usually chosen since it does not only offer the researcher an opportunity to direct the interview but also allows the participants to express their opinions and feelings in a broad perspective.

The pre interview was conducted after the implementation of pre questionnaire and the post interview, following the post questionnaire implementation. Duration of each interview was approximately 330 minutes in total and each interview lasted 5-7 minutes per cadet.

- One question was asked at a time.
- The interviewer verified unclear responses.
- Cadets were asked semi-structured and open-ended questions (see Appendix 1)
- Leading questions were avoided; unbiased questions were preferred.

Content analysis was conducted for the data elicited from both questionnaires and interviews.

### 3.3.1.3. Procedure

Fifty cadets attending third year, marine engineering department of ITUMF were handed out the questionnaire and taken into interviews prior to commencing on board training – professional practicum. The questionnaire and the interview consisted of seven items; interviews lasted approximately 5-7 minutes per cadet. Each participant was interviewed order to observe whether what was stated in the questionnaire did match the voiced views.

The same questionnaire was again utilized right after the cadets come back to the faculty to complete their fourth year of education at the faculty. Both the questionnaire and the interview were conducted in their mother tongue, i.e. Turkish, in order to avoid any misinterpretation.

### 3.4. Data Analysis

The obtained data was analyzed in terms of common emerging themes categorized as pre and post practicum constructs. The findings were analyzed regarding frequency of occurrence and valid percentages. A chi-square test was also run so as to detect any significant differences in the dispersion of overall items using Statistical Package for Social Sciences (SPSS) v.16.0.

SPSS is a program widely used in analyzing and presenting data in the social and behavioral sciences ( Everitt & Landau 2004).

# CHAPTER IV

# DATA ANALYSIS AND RESULTS

## 4.1. Introduction

In this chapter analysis of the collected data via questionnaire and interview are processed and presented. Both of these instruments were utilized to collect data relevant to pre and post practicum periods. Firstly, the items in the questionnaire and interviews were thrashed out regarding their aimed items. Secondly, emerging themes were listed and classified. Data analysis was carried out by means of SPSS 16.0.and content analysis.

## 4.2. Aims and Items in the Data Collection Tools

Seven items were prepared to obtain both oral and written statements. The items were designed in open ended and semi structured types. They are designed to reflect cadets' pre and post constructs of ME, the benefit, expectancy to use, need for both personal and professional purposes, and possible language related problems on board.

### 4.2.1. Items in Pre Questionnaire and Interview

1. Do you think knowing English will be beneficial in your profession, if so point out the reasons why?
2. At what part of the sector would you like to work after graduation; why?
3. Do you mind if you work on Turkish /multinational crewed vessels in the future? Explain.
4. Do you think English is of importance in terms of marine engineering profession?
5. Do you think you are likely to have any communicational problems based on language with the senior officers and other crew members on training?
6. In what form of English do you think you will come across during on board training (i.e. reading, speech, orders, reporting, orders, etc.)
7. Do you expect to be able to communicate in English effectively and actively (oral /written) with the crew members on board?

### 4.2.2. Items in Post-Questionnaire and Interview

1. Have you observed that knowing English was beneficial on board training? If so explain.
2. Which part of the sector have you been attracted to after having completed on board training regarding your prospective career?
3. Would it make any difference if you were to work on Turkish /foreign-crewed vessels after graduation? Explain.
4. Have you observed that English is important after the completion of on board training? If so, explain in a few sentences.
5. Have you experienced any communicational problems based on language with senior officers and other crew members on training?
6. In what form of English have you come across during on board training (i.e. reading, speech, orders, reporting, orders, etc.)
7. Did you take part in communication in English effectively and actively (orally /in writing) with the crew members on board? If you did so, write about your impressions regarding your profession, yourself and the English language.

The first item was ‘Do you think knowing English will be beneficial in your profession, if so point out the reasons why?’ and appeared in the post as ‘have you observed that knowing English was beneficial on board training? If so explain’

Item 1 and 4 aimed to find out the cadets’ constructs on the importance of English in terms of their prospective profession. The responses reflected whether and to what extent they were aware of the importance of having language on their competency and performance on board. It would also show to what extent they really were aware of the importance of English pointing out with rationales. It would depict the cadets’ construct on the usefulness of English in terms of their profession. The responses reflected whether and to what extent they were aware of the usefulness of having language competency on board.

Item 2 was ‘Which part of the sector would you like to work after graduation, why?’ re-appeared in the post as ‘which part of the sector have you been attracted to after having completed on board training regarding your prospective career?’ This item was designed to illustrate construct of cadets on professional predictions.

Here it was sought whether they were suitable for this sector, which would highlight crucial decision in terms of their profession; keeping on to work at sea or shore. It would also unveil the sector cadets visualize/d themselves to work at for several years. Item 3 was 'Do you mind if you work on Turkish /multinational crewed vessels in the future? Explain.' In the post it was asked as 'would it make any difference if you were to work on Turkish /foreign-crewed vessel after graduation? Explain.' This item was designed to find out cadets' construct on their competency in English.

The item was to reflect cadets' preference regarding crew members' nationality they would like to work for and the reason/s behind this rationale. Results emerging from cadets' responses depicted whether this preference had something to do with lack of competence and/or self-confidence in the English language.

Item 4 was 'Do you think English is important in terms of marine engineering profession?' and re-asked in the post as 'Have you observed that English is important after the completion of on board training? If so, explain in a few sentences.' This item is closely related to item 1 as it aims to verify the outcome of the first item.

Item 5 was 'Do you think you are likely to have any communicational problems based on language with the senior officers and other crew members on training?' was asked again as in the post 'Have you experienced any communicational problems based on language with the senior officers and other crew members on training?'

This item was designed to highlight any difficulty resulting from lack of English or any communicational deficiency due to insufficient speaking ability in English. Here, we see item 3 and item 5 to be interrelated.

Item 6 was 'In what form of English do you think you will come across during your on board training (i.e. reading, speech, orders, reporting, orders, etc.)' and asked as in the post 'In what form of English have you come across during your on board training ( i.e. reading, speech, orders, reporting, orders, etc.) ?'

This item was to explain potential situations necessitating English in view of cadets and clarify which specific skill/s constituted troublesome issues.

Item 7 was 'Do you expect you are able to communicate in English effectively and actively (oral /written) with the crew members on board?' and asked again as 'Did you take part in communication in English effectively and actively (oral /written) with the crew members on board? If you did so, write about your impressions regarding your profession, yourself and the English language'.

This item aimed to disclose the beliefs of cadets in capability of expressing themselves in English (both in writing and orally) and also reveal if they had any language basis problems. The finding from this item would unveil skills leading to problems in communication whilst on training.

### 4.3. Data Analysis

Several themes emerged via the seven-itemed data collection tools. The themes considered in this study were listed in terms of **frequency**-time of mention (ToM). (Bada, 2004).The values indicating ToMs obtained in pre and post practicum are also listed below. Frequencies and percentages were shown in the relevant tables together with chi-square results. The table below was designed to illustrate the overall themes emerged after both the questionnaire and the interview. These twelve themes are:

‘Importance of English’,
‘If so why’,
‘English is useful’,
‘Work after graduation’,
‘Willing to work with foreign crew’,
‘Why Turkish crew’,
‘Why foreign crew’,
‘Difficulty due to lack of English’,
‘If so which skills’,
‘Expected situations necessitating English’,
‘ Belief in expressing oneself in English’ and,
‘Expected skills leading to communicational problems’

The table below presents the overall displayed themes together with frequency.

Table 1

*Emerged Themes*

| **Themes** | **Pre ToM** | **Post ToM** |
|---|---|---|
| Importance of English | 50 | 50 |
| If so why | 58 | 12 |
| Work After Graduation | 50 | 48 |
| Willing to work With Foreign Crew | 49 | 50 |
| Why Turkish Crew | 36 | 27 |
| Why Foreign Crew | 17 | 45 |
| Difficulty due to Lack of English | 50 | 50 |
| If so which skills | 37 | 12 |
| Expected Situations Neccessitating English | 125 | 153 |
| Belief in Expressing Oneself in English | 50 | 47 |
| Expected Skills leading Communicational Problems | 61 | 33 |
| **11 themes emerged in total** | | |

Considering the overwhelming importance of English, the question of 'do you think English is beneficial' was asked. All responses indicated that 'English is definitely beneficial due to its importance. The theme 'Importance of English' appeared with one of the highest among the other twelve themes (see Table 1). The item 'is it beneficial, if so why' was asked to see whether cadets were aware of the benefits and the reasons. Some selected illustrative verbatim sentences are presented below:

'I personally believe it is important'

'Without any doubt, yes'

'Inevitably important'

'For sure, needless to ask.'

Cadets' personal construct was in total agreement on the importance of English in terms of their prospective profession.

Table 2

*Importance of English*

| **Importance of English** | | **Pre** | | **Post** |
|---|---|---|---|---|
| | ToM | % | ToM | % |
| YES | 48 | 96.0 | 50 | 100 |
| NO | 2 | 4.0 | --- | --- |
| **Chi-square result** | **P=.000** | | **-----** | |

As can be seen from Table 2, ‘the importance of English’ was agreed on by almost all the participants (96% p=.000) in PreP; only 2 out of 50 did not believe that English was not important for their profession. While, importance of English in their profession was commonly agreed on in PrepP, the whole population was in consensus on the importance of English in PostP. It could be interpreted that cadets had no hesitation on the solid importance of English even if they did not complete their practicum period. It is quite pleasing to obtain positive construct on the importance of English. Upon getting the confirmation responses, the cadets were asked about the reasons for importance of English in their prospective profession-‘seafaring’. The responses would also show to what extent they were really aware of the importance of English while pointing out their rationales. In PreP, five themes emerged as:

‘Seafaring is an international job’,
‘Most resources are in English’
‘Lingua franca of seafaring is English’
‘English is beneficial’, and
‘English helps in communication’
In PostP six themes were listed as:
‘Seafaring is an international job’,
‘Most resources are in English’
‘Helps with professional development’ ,
‘English is beneficial’,
‘Makes me feel privileged on and off board life’ and
‘Facilitates my social life’ (see Table 3).

Here are some of the illustrative expressions from the questionnaires and interviews:

‘Seafaring is an international profession’
‘This is the lingua franca of our job’
‘It will be beneficial on board to know English as it comforts your life’
‘English will provide efficient communication’
‘If I know English, I feel I am privileged’
‘The people on and off board respect me if I am able to speak in English’

PreP and PostP themes were identified together with percentages and chi-square results are shown in Table 3.

Table 3

*Reasons for the Importance of English*

| **Reasons for the importance of English** | **PRE ToM** | **PRE %** | **Reasons for the importance of English** | **POST ToM** | **POST %** |
|---|---|---|---|---|---|
| Seafaring as an international job | 20 | 34.5 | Seafaring as an international job | 26 | 21.7 |
| Most resources in English | 17 | 29.3 | Most resources in English | 15 | 12.5 |
| Lingua franca of seafarers | 10 | 17.2 | Helps with professional development | 20 | 16.7 |
| Beneficial | 4 | 6.9 | Beneficial | 10 | 8.5 |
| Helps with communication | 7 | 4.6 | Makes me privileged on/off board | 33 | 27.5 |
| | | | Facilitates social life | 16 | 13.3 |
| Chi-square result | $p = .004$ | | Chi-square result | P=.002 | |

The first theme ‘seafaring is an international job’ was observed to have the highest ToM of 20 (34.5 %), ‘most resources are in English’ with the ToM of 17 (29.3 %), ‘lingua franca of seafaring’ 10 ToM (17.2%) , ‘English is beneficial’ having 4 ToM (6.9 %), ‘English helps with communication’ 7 ToM (4.6 %). All these themes illustrate that cadets had already the construct on the overwhelming importance of English in their profession with rationales. Surprisingly, only 7 ToM (4.6 %) emerged citing that English helped them with communication. This could be interpreted as that cadets might have the idea of working on Turkish-crewed vessels, thus they would not have to communicate with foreign crew mates; besides engine crew were to deal with only internal communication rather than external communication as set out by the International Maritime Organization (IMO). It was also presumed that they were urged to make use of English on board only while dealing with manuals and preparing some documents, which was outlined by the IMO -as a professional requirement of English for engine room crew. The value for -English helps with communication -would have

been different if the participants had been deck cadets as they would have to deal with both internal and external communication. A remarkable construct expansion emerged with the themes of ‘seafaring as an international job’ and ‘English is beneficial’. The former construct illustrated smooth expansion from 20 participants to 26, and the latter from 4 to 10.

A meaningful construct shift was observed in ‘English helps with communication’ to be reshaped namely ‘helps with professional development’ ‘makes them privileged on/off board life’ ‘ facilitating social life’ with significantly high ToM values. Cadets credited that English ‘helps with professional development’ appeared with ToM value of 20 (16.7 %). ‘English makes cadets privileged on and off board life’ supporters emerged with ToM value of 33 (27.5%)’. ToM value of 16 (13.3%) belonged to theme of facilitating factor of English in social life. The theme ‘English helps with communication’ emerged with the value of 7 ToM (4.6%) which was observed as a surprisingly low percentage seemed to have vanished, however in the post practicum period this theme reemerged in specific verbatim as:

‘English makes me privileged on and off board life’

‘English facilitates my social life’

‘Unless I have sufficient English, I cannot be successful and respectful in the engine room’

These extracts clearly reflect a severe shift in ME constructs of cadets since English was experienced and confirmed as a medium for privileged status both professionally and socially. This transformation in construct unveiled that it is just a myth among seafarers from bottom to top i.e cadets, lecturers, syllabus designers, institutions and organizations - E/r crew necessitate knowledge of English in some certain parts; do not have to bother for more. Besides IMO’s requirements of English for marine engineers might have made them predict so. Having to comprehend and complete training book in English can be a determining factor for the values (see appendix 6 ). E/r crew started to think that they also needed communication. New themes were most likely to emerge via their personal experiences and exposures during the practicum period, which certainly seemed to be a leading factor in reshaping and transforming acquired fossilized constructs apart from gaining professional awareness. Cadets did not realize how English would impede or accelerate their prestige on board

for they had no expression on this issue in PreP. Besides, they seemed to be unaware of how English would ease and comfort their social life in the pre practicum period, which would be expressed in PostP.

PreP themes in Table 3 illustrated that the cadets seemed to have some awareness of English. When we took into account PostP themes, cadets spotted English as a scaffolding factor to conduct their profession in an efficient, effective and privileged way, since seafaring has the qualities of being global, international, multi-cultural in nature. Furthermore, the practicum period had an undeniable impact on transforming, developing and changing the constructs about English. As this period enabled the confrontation of the use of English mainly via training record book besides speaking with coast guard inspectors.

Regarding this theme, we can cite some of the excerpts from the interviews:

'Yes, English is useful.'

'Certainly, useful.'

'We see this at shore and will see it on board.'

Table 4

*English is Useful*

| **English is useful** | **Pre** | | **Post** | |
|---|---|---|---|---|
| | ToM | % | ToM | % |
| Yes | 48 | *96.0* | 50 | 100 |
| No | 2 | 4.0 | _ | _ |
| **Chi-square** | **P=0.000** | | **_** | |

Here, this item aimed to find out the service receivers' (SR) perception of English in terms of their profession. The responses reflected whether and to what extent they were aware of the usefulness of having language competency on board.

The ToMs of the Theme 1 indicates that English is useful with the frequency value of 48 (96%) in prep; however, this value reaches a certainty of usefulness with the frequency value of 50 (100%) in the PostP period.

The responses to the question of ‘which part of the sector would you like to work after graduation, and why?’ would reflect cadets’ crucial decision in terms of their profession.

Oral and written statements illustrate that cadets believed they were suitable for this sector, whether they thought of working at sea or shore. It would also emerge that the exact part of the sector cadets visualize/d themselves to work for several years.

The PreP period suggests six themes as ‘onboard’, ‘first on board then ashore’, ‘in a company at shore’ ‘first on board then academic carreer, ‘in a non-marine company’ and ‘undecided’ as shown.

Table 5

*Work After Graduation-Pre*

| **Work after graduation-PRE** | **ToM** | **%** |
|---|---|---|
| On board | 18 | 36.0 |
| First on board then at shore | 18 | 36.0 |
| In a company at shore | 7 | 14 |
| First board then academic career | 3 | 6.0 |
| In a non marine company at shore | 2 | 4.0 |
| Undecided | 2 | 4.0 |
| **Chi square results** | **P=0.000** | |

Table 5 demonstrates how marine engineering cadets were planning future careers prior to the practicum period. Cadets holding the belief that they would work on board were 18 (36%), the same value was with those thinking that they would work on board then continue to work at shore. Participants who would like to work in a company at shore were only 7 out of 50, which occupies14% in the whole population, and which is also worth considering. They might be thinking that the sea life would not be suitable for them. Out of 50, 3 (6%) were thinking about working on board for a limited time, and then come back to the faculty to pursue an academic career. 2 of the participants (4%) had the intention of working in a non-marine company.

Surprisingly, we still had 2(4%) of the cadets not to have decided as to what to do about their future career whilst they were attending the last year of their faculty education.

Table 6

*Work After Graduation-Post*

| **Work after graduation-POST** | **ToM** | **%** |
|---|---|---|
| On board | 3 | 6.2 |
| First on board then at shore | 16 | 33.3 |
| In a company at shore | 11 | 22.9 |
| In a company at shipyard | 4 | 8.3 |
| After getting s/e certificate at shore | 5 | 10.4 |
| After getting s/e certificate at shore | 6 | 12.5 |
| Sailing not for me | 3 | 6.2 |
| **Chi square results** | **P=0.002** | |

PostP of Table 6 illustrates significant constructs shift with surprising percentages namely.

The participants having the desire to work on board sharply decreased from 18 (36 %) to 3 (6.2 %) after the practicum period. It can be inferred that the practicum is a significant medium in enabling cadets to decide whether this profession is appropriate for them in the long run.

The participants expressing 'I would work first on board then at shore', depicted no prominent construct reduction: from 36.0 % to 33.3 %. As for to 'having the desire to work in a company at shore, we can observe and increase from 7 participants (14%) in the PreP to 11 ( 22.9 %) in the PostP.

From this point on, the fourth construct in Table 5 'working on board then carrying pursuing an academic career' somehow shifted. In the PostP nobody had the intention of returning to faculty to carry on with an academic career whereas there were 2 (4 %) participants who wanted to do so in prior to practicum.

This figure makes sense as it shows why maritime faculties and educational organizations in Turkey experience difficulty in finding and employing qualified lecturers with marine background.

Participants pointing out that they 'will work in a non-marine company were 2 (4%). In PostP, they specified the quality of the company stating that they would work in a company at shipyard, with a rise of 4(8.3 %). Another construct shift appeared in

the number of cadets having not decided about their career plan, in PostP they disappeared; they were most likely to be among the decided ones.

In the PostP a diversity of constructs were observed:

‘I would work at shore after getting s/e certificate’

‘I would work at shore after getting c/e certificate’

‘I think sailing is not for me’

5 (10.4%) participants claimed that ‘I would work at shore after getting s/e certificate’.

6 (12.5%) participants had expressed that I would work at shore after getting c/e certificate.

A third new construct appearing in the form of ‘I think sailing is not for me’ was quite worth considering. Participants with the percentage of (6.2 %) agreed on this decision. Even if this could trace back with undecided participants in the PreP, the number slightly increased to 3 in PostP. One participant may not be that significant in a whole population, but when it came to the point of final decision of profession which requires 5 year of university education plus 6 months of training; this showed a critical position in one’s life. The practicum period again seemed to serve a purpose for cadets to keep on or give up. Should their decision before ‘keeping on’, the practicum made them to visualize themselves where exactly they would be pleased to work in the sector. In professional life, colleagues are highly important as we spend much more time with them than we do with family. When it comes to the profession of seafaring, the impact of colleagues is undeniably prominent considering they are not only the colleagues but also their social environment as long as they are navigating.

Shipmates – term for colleague among seafarers are scaffolding factor to carry on their journey. One is to handle with navigational difficulties while working with shipmates they have probably never met and worked before. Regardless of the length of the voyage, all hands are expected to work and be in a perfect harmony in a limited space on board for scheduled period. Focusing on this difficulty, they were questioned if they mind to work on Turkish /multinational crewed vessel in the future. They were also asked what made them think so. The responses would also depict whether this preference had something to do with lack of confidence in English or not.

Here are some selected summarizing expressions from the questionnaires and interviews:

‘I definitely prefer Turkish mates.’

‘I want to work with foreign colleagues’

‘No matter for me ‘

The frequency and valid percentages are presented below:

Table 7

*Willingness to Work With Multinational Crew*

| **Willingness to Work with Multinational Crew** | **Pre-ToM** | **%** | **Post-ToM** | **%** |
|---|---|---|---|---|
| Prefer Turkish Crew | 27 | 55.1 | 22 | 44.0 |
| Prefer Foreign Crew | 16 | 32.7 | 28 | 56.0 |
| Not Sure | 6 | 12.2 | 0 | 0 |
| **Chi square results** | **P=0.002** | | | **P=0.396** |

When participants were asked if they were willing to work with multinational crewed vessel, 27 (55%) expressed their preference on Turkish crewed vessels, which dropped to 22 (44 %) in PostP. Still 6 participants (22 %) were not yet sure as to what they preferred exactly.

Prior to the practicum period, 16 (32.7 %) would like to work on multinational crewed vessels; this number remarkably increased to 28 (56%) –this is more than half of the whole population. It is most probable that both 6 (12.2%) unsure cadets in PreP and some of those who previously were willing to work on Turkish crewed vessels shifted their constructs. They most likely gained self confidence in expressing themselves in English. As can be seen from this table, the practicum enabled cadets to become more specific and determinant on their preference.

From the data two preferences, emerged as willingness to work on Turkish crewed and foreign crewed vessels. Reasons are illustrated in Table 8:

Table 8

*Why Turkish Crew Members*

| **Why Turkish crew members** | **Pre-ToM** | **%** | **Post-ToM** | **%** |
|---|---|---|---|---|
| Easy to communicate | 12 | 33.3 | 15 | 55.6 |
| Comfortable and relaxing | 24 | 66.7 | 12 | 44.4 |
| **Chi square results** | **P=0.046** | | | **P=0.564** |

This item aimed to find out the reasons behind the willingness to work with Turkish crew members. The participants had two main constructs: 'it is easy to communicate' and 'it is comfortable and relaxing'. In the PreP period 12 (33.3 %) of them thought that it was easy to communicate when crew members were Turkish and 24 (66.7 %) believed that it is comfortable and relaxing in the mother tongue. The values showed a small rise in the first construct of easy communication up from 12 (33.3 %) to 15 (55.6 %), whereas construct reduction was observed by half –from 24 (66.7 %) to 12 (44.4 %). The construct 'it is comfortable and relaxing' seemed to be prominent that in the PostP, they realized they did not have to communicate in L1 to feel comfortable and relaxed. Participants having the belief that L1 makes communication easy remained more or less with a similar figure.

Table 9

*Why Foreign Crew Members*

| **Why Foreign Crew Members** | **PRE ToM** | **PRE %** | **Reasons for the importance of English** | **POST ToM** | **POST %** |
|---|---|---|---|---|---|
| English Practice | 8 | 47.1 | English Practice | 17 | 37.8 |
| Enjoyable | 6 | 35.3 | Enjoyable | 11 | 24.4 |
| Different Cultures | 3 | 17.6 | Different Cultures | 7 | 15.6 |
| | | | Different Learning Environment | 10 | 22.2 |
| Chi-square result | $p = .0.327$ | | Chi-square result | p=0.196 | |

On having asked why they preferred foreign crew, PreP had three themes of ‘English practice’, ’enjoyable’ and ‘they would like to experience different cultures’; in PostP construct expansion was again observed with ‘they would like to be in a different learning environment ’.

In PreP, cadets thinking that working with foreign crew offers practice of English were 6 (47.1 %), and almost tripled as 17 (38%) in PostP.

Participants believing that working with foreign crew is enjoyable were 6 (35.3%).This figure almost doubled with11 (24.4%) in the PostP.

The relationship between figures of ToMs and percentages could be dilemmatic in nature that the reason behind this rationale is that there were far more cadets mentioning themes in the PostP compared with the themes in PreP. In PreP, 17 ToMs for the total themes were replaced with 45 ToMs in the PostP.

Of the cadets,3 (17.6%) responded with ‘different culture’ as a reason of why they want to work with foreign crew members. This figure had 7 ToMs (15.6 %) in the PostP.

A new theme appeared in this table as working with foreign crew offers ‘different learning environment’ with a significant figure, 10 (22.2 %), It is obviously clear that the practicum period played a crucial role in remodeling constructs of the prospective seafarers.

Table 10

*Any Difficulty Resulting from Lack of English*?

| **Any Difficulty Resulting from Lack of English?** | **Pre-ToM** | **%** | **Post-ToM** | **%** |
|---|---|---|---|---|
| Yes | 30 | 60 | 8 | 16.0 |
| No | 20 | 40 | 42 | 84.0 |
| **Chi square results** | **P=0.157** | | **P=0.000** | |

Of the participants,30 (60 %) anticipated they would have difficulty resulting from lack of English and 20 of them (40 %) had no prediction of having difficulty for the same reason prior to practicum. On having completed practicum, they were asked again if they had any difficulty related to lack of competence in English, the figures depicted that 42 participants (84 %) had no difficulty; only 8 (16.8 %) had language-

basis problems. The change in figures emphasizes the issue of lack of confidence and efficacy of participants in terms of English. The estimation that they might not be aware of how well they were competent in English is worth considering here.

Table 11

*If so, in What Skills*

| **If so, in What Skills** | **Pre-ToM** | **%** | **Post-ToM** | **%** |
|---|---|---|---|---|
| Speaking | 19 | 51.4 | 8 | 66.7 |
| Cultural literacy | | | | |
| ME terminology | 10 | 27 | 4 | 33.3 |
| | 20 | 40 | 42 | 84.0 |
| **Chi square results** | **P=0.062** | | **P=0.248** | |

Table 11 reflects the participants' views on problematic issues; three constructs emerged as 'speaking', 'cultural literacy' and Maritime English terminology. Of the participants, 19 (51.4 %) assessed themselves as not quite competent in speaking. Following the practicum, surprisingly, the figure had a sharp drop to 8 (66.7 %). There might be possible reasons underlying this result.

The second theme concerns difficulty resulting from cultural literacy which was cited by 10 (27.0 %) participants, then dropped to 4 participants. Of the participants, 8 (21.6 %) thought they would have hardship due to insufficient Maritime English terminology but came up with no participant having suffered from lack of Maritime English terminology.

From above it could be concluded that cadets had not felt comfort, confidence, and efficacy in speaking English until they experienced the real environment. They expressed themselves satisfactorily even if they had not thought so beforehand- as it was also confirmed by the figures of Table 9.

The reason why they had no difficulty regarding Maritime English terminology could be; Considerable number of engineering terminology had the same form even if they were translated into Turkish – which sometimes caused awkward situations; necessitating a meaningful paraphrase statement when they were in Junior class.

Table 12

*Expected Situations Necessitating English*

| **Expected Situations Necessitating English** | **Pre-ToM** | **%** | **Post-ToM** | **%** |
|---|---|---|---|---|
| Manual Comprehension | *50* | 40 | 48 | 31.4 |
| Docs. Completion | 26 | 20.8 | 37 | 24.2 |
| Reporting | 34 | 27.2 | 37 | 24.2 |
| On/off board comm. | 15 | 12.0 | 31 | 20.3 |
| **Chi square results** | **P=0.000** | | **P=0.268** | |

Cadets were asked to expect possible situations necessitating English; four specific items appeared: ‘manual comprehension’, ‘document completion’, ‘reporting’ and ‘on and off board communication’. (See table 12)

Manual comprehension emerged as an utmost situation agreed by everyone 50 ToMs in the whole population which is more or less the same in both periods. Document completion was mentioned as an expected situation by 26 ToMs (20.8 %), but gradually increased to 37 ToMs in PostP. Reporting skill was expected to appear with 34 ToMs, and showed a little rise up to 37 ToMs. The last theme as ‘on and off board communication dramatically rocketed from 15 ToMs up to 31ToMs. The practicum period could be seen as a activating factor to make cadets rethink-remodel their constructs and a tool to understand to visualize the real side of their profession-seafaring.

Table 13

*Belief in Expressing Oneself in English*

| **Belief in expressing oneself in English** | **Pre-ToM** | **%** | **Post-ToM** | **%** |
|---|---|---|---|---|
| Yes | 8 | 16.0 | 32 | 68.1 |
| No | 19 | 38.0 | 15 | 31.9 |
| Not sure | 23 | 46.0 | 0 | 0 |
| **Chi square results** | **P=0.027** | | **P=0.013** | |

Belief in expressing oneself in English led to the emergence of three themes: the believers, the non-believers and the unsure. Of the participants,8 (16%) highlighted their positive belief in their capability to express themselves in English in PreP whilst this figure quadrupled with 32 participants (68.1 % )in PostP period. Nineteen cadets reflected that they were not capable enough in expressing themselves in English which was 38 % of the population. In the PostP, this figure showed a slight drop to 15 (31.9 %).

The participants who were not sure of their competency in expressing themselves in English should not be underestimated as they were 23(46%)- which generated almost half of the population. Upon completing the practicum period, this theme fortunately vanished. The unsure participants were most likely to be among the ones citing they were capable of expressing themselves in English thanks to practicum. The reason underlying this situation there was not much substantial change with the figure of cadets stating ‘no’ in both pre and post practicum periods.

Table 14

*Expected Skills Leading to Problems in Communication*

| **Expected Skills Leading to Problems in Communication** | **Pre-ToM** | **%** | **Post-ToM** | **%** |
|---|---|---|---|---|
| Speaking | *28* | 45.9 | 15 | 45.5 |
| Listening | 15 | 24.6 | 10 | 30.3 |
| Vocabulary | | | | |
| Translation | 10 | 16.4 | 4 | 12.1 |
| | 8 | 13.1 | 4 | 12.1 |
| **Chi square results** | **P=0.01** | | **P=0.06** | |

The question of 'Expected skills leading to problems in communication' offered four skills of English: speaking, listening, vocabulary and translation. Prior to practicum, 28 participants regarded the skill of speaking with high expectancy whereas this figure dropped to 15 (45.5 %) in PostP.

Here, the percentage should not be regarded as a key factor as it may be misleading due to participation. The listening skill appeared second in frequency with 15 (24.6 %) which had a fall to 10 (30.3 %) in PostP. Of the participants, 10 had thought that vocabulary was a troublesome skill in PreP; somehow, the figure decreased to four who thought so in PostP. Prior to practicum, 8 cadets considered that communication could be hindered due to lack of translation; this figure showed a drop of a half with 4 participants.

# CHAPTER V

# DISCUSSION AND CONCLUSION

## 5.1. Introduction

This chapter presents findings, and conclusion obtained from the data analysis, and makes suggestions for further research.

## 5.2. Conclusion

In this study, we tried to reveal the development of cadets' personal constructs on ME in terms of their prospective profession. Marine engineering cadets were the population and impacts of training on the shifted constructs were sought presuming that on board training would be a direct means to perform cadets' profession with utmost transparency.

Highlighting the importance of individual and experience issues, Kelly (1955) located these two among 11 corollaries under the Fundamental Postulate in terms of construct shift. While conducting this study, these two, namely individual and experience corollaries were focused on.

The research questions were:

1. What constructs do engine cadets have prior to starting practicum at sea regarding ME?
2. Were there any changes in cadets' constructs following a period of six months on board? If so, how are these changes perceived?
3. Should there be any observed construct shift, what could the underlying reasons for the shift be?
4. Do marine engineering cadets have difficulty with ME?
5. Does/Did ME cause any problems related to self-efficacy, self-confidence, efficiency of machinery systems and operations?

The practicum period seems to have had a major role in the overall shift of constructs in the form of expansion or reduction / disappearance. Most of the participants agree that English was important and useful in their profession regardless of

training exposure as it ensures their privileged status on board apart from self-confidence. For some, it mattered to work with foreign crew as they worried about language related problems, which may have stemmed from lack of confidence in English, basically speaking. This construct may be due to a lack of speaking practice in the faculty as the class consists of more than 35 cadets. Most of the participants had the construct that they would have difficulty in self-expression via English whereas they did not have such difficulty whilst training. However, some realized that they would not be crew members at all, which can be interpreted as an impact of the practicum period.
From all listed and elaborated on, this experience enabled engine cadets to assess themselves in terms of desire to see themselves as part of this sector or not, and whether they were pleased with their achievement and performance as English language communicators.

Although Turkish seafarers graduating from Turkish faculties somehow cannot work on multinational vessels, working on Turkish crewed vessels does not mean that they will never come across English and language related problems. In fact, they are likely to confront English regardless of their working area either on the deck or in the engine room. Deck crew is to facilitate English while ensuring communication, e/r crew is to deal with the instructions in the manuals – what's more, only English verbatim copies are available. Most vessels are automated which means the manuals are the so called, "Bibles of engine" crew members, and misunderstanding any key word is likely to result in a disaster at sea.

Having to write fulfilled tasks in English in a short paragraph style into training books offers us a comprehensive understanding on the constructs of 'English makes them privileged on board' and 'helps with professional development' which appeared in the post practicum.

In addition to this, two groups of crew members –engine and deck- are to cope with the expression in SMCP, and communication with inspectors, coast guard authorities to board vessels at certain intervals.

Considering these vital circumstances at sea, a contradictory status is observed. Credits of maritime English classes in marine engineering departments are absolutely far from being sufficient. In the very first year of the faculty, cadets undergo only one semester a –two hour- maritime English lectures. Success in maritime English is pre-requisite for a proficiency exam for seafarers. Having no maritime English classes in the curriculum of second year, they have one semester of two lessons a week in the 3rd

year. This success will determine whether they are able to register for highly strategic lessons such as - ERS-Engine Room Simulator, which is a prerequisite for on board training. In the 4th year, they are to get another two hours of ME classes; totally six hours of ME exposure on weekly basis within a four year period.

### 5.3. Implications of the Study

The cadets have the same construct on the importance and usefulness of English. They have worries about their language competence and performance when they are in charge .Having gained self-efficacy and competence on board, they have shifted constructs regarding English after the practicum.

This study has significant implications for program designers, instructors and Maritime English students. First and foremost, the practicum opportunity provided an atmosphere of self-assessment regarding language proficiency and competence. Most constructs which were somehow hidden or not developed at all prior to practicum were surfaced and/or formed following this period. Therefore, designers who wish to make such programs more effective may thus gain significant insight relying on this experience of cadets. Similarly, instructors may shape their teaching styles to become compatible with a more ESP nature, and finally, students, relying on peer experiences, may grasp the true value of being competent in English at rather early stages, much before they are to work, say, on an internationally-crewed vessel.

### 5.4. Limitations of the Study

There is a sharp rise in the number of vocational schools, faculties offering maritime studies in Turkey in recent years. Unfortunately only few can offer their service receiver sstandard required facilities; various simulators, specifically experienced staff as seafaring is highly specific in nature.

Focusing on our current topic this study is conducted in the leading maritime faculty of Turkey (1773). However some significant difficulties and troubles are inevitably experienced.

As this study is focused on marine engineering cadets, number of participants is limited to only 50 cadets. Data collection naturally took almost a year due to their on board training period.

### 5.5. Suggestions for Further Research

This study could be conducted with both deck and engine cadets regardless of their department so that the data could be compared and contrasted to observe whether there would be any significant differences.

Classes in Maritime English should be kept to a maximum 25 cadets as they will be given more opportunity to practice, and weekly lecture hours should be increased in view of the rising importance of maritime English, as highlighted and proposed by the organizations of IMO and IMLA.

## REFERENCES


Ajzen, I. (1988). *Attitudes, personality, and behaviour*. Chicago: Dorsey Press.

Albrow, M.& Elizabeth K. (eds.) (1990). *Globalization, Knowledge and Society.* London: Sage. ISBN 978-0803983243 (p. 8)

Arnold, J. (1999). *Affect in language learning*. Cambridge: CUP

Atherton J S (2013). *Learning and Teaching; Personal Construct Theory* [On-line: UK] retrieved 9 June 2015 from http://www.learningandteaching.info/learning/personal.htm

Bada, E. (2004). English Language Education: A Reminder from Service Receiver to Service Provider, *Proceedings of Interchanges and Exchanges: Current trends in ELT.*

Baştürkmen, H. (1998). Refining procedures: a needs analysis project at Kuwait University. *English Teaching Forum*, 36 (4), 2-9

Breen, M.P. (Ed.. (2001). *Learner contributions to language learning: New directions in research.* Harlow, Essex: Pearson Education Limited.

Cherry, K. (2014). '*What is Personal Construct Theory-Geprge Kelly's Theory of Personality' http://www.psychology.about.com retrieved in February,2014*

Cole, C., Pritchard, B. & Trenkner P. (2010). Maritime English Instruction – ensuring instructors' competence 123-148 , *Proceedings of 22nd IMEC Conference, Alexandria,Egypt*

Couper, A., Walsh D, Christopher,J (eds) (1999). *Communication problems in the operation of merchant ships.* Manuscript.SIRS, Cardiff University

Crystal, D. (2003). *English as a Global Language. (2nd ed.),* p 69. Cambridge: CUP

Cui, Z. (2010). On the Applications of Modern Educational Technology in Maritime English Teaching from the Perspective of Constructivism *English Language Teaching* 3, 3, 244. Retrieved August 10, 2012, from www.ccsenet.org.elt

Davies, F., Forey, G. & Hyatt, D. (1999). Exploring aspects of context: selected findings from the effective writing for management project. In F. Bargiela-Chippini & C. Nickerson (Eds.), *Writing business: genres, methods and language* (pp 293-312). London: Addison Wesley Longman

Donnell, A. M., Reeve, J., & Smith, J. K. (2009). Social Learning Theory, Complex Cognition, and Social Constructivism. *Educational psychology: reflection for action*(3rd ed., pp. 254–289). Hoboken, NJ: John Wiley & Sons.

Everitt, S., & Landau, S. (2004). *A Handbook of statistical analyses using SPSS,* Chapman & HALL/ CRC, USA

Fishbein, M. & Ajzen ,I (1975). *Belief, attitude, intention and behavior: An introduction to theory and research.* Reading, MA: Addison-Wesley

Forey, G. & Nunan, D. (2002). The role of language and culture in the workplace. In Barron, C., Bruce, N. & Nunan, D. (Eds.), *Knowledge and discourse: Language ecology in theory and practice* (pp. 204-220). Singapore: Longman.

Friedman, Thomas, L.(2008). '*The Dell Theory of Conflict Prevention'*. Emerging: A Reader. Barrios, B. (Ed.), Boston: Bedford, St. Martin

Giddens, Anthony. (1991). *The Consequences of Modernity Cambridge: Polity Press.* p. 64. ISBN 9780745609232

Gunder, Andre, F. (1998). Re-Orient: *Global Economy in the Asian Age*. Berkeley: University of California Press. ISBN 978-520214743

Harri- Augstein, E.S. (1985). Learning to learn languages: New perspectives for the personal observer. In D. Bannister (Ed.), *Issues and approaches in personal construct theory* (pp 47-65). London: Academic Press.

Held, D., et al. (1999). *Global Transformations Cambridge: Polity Press.* ISBN 9780745614984

Hitt, M., Tihanhi ,L., Miller,T., Connelly, B.L. (2006). International diversification :antecedents, outcomes and moderators. *Journal of Management* 32(6)(6) 831-867pp doi: 10.1177/0149206306293575

Hughes, T. H. (2000). *The use of English as a standard marine language in ship to ship and ship to shore communications*. The Second International Conference on Maritime Terminology. Turku, Finland. Centre for Maritime Studies - University of Turku. 17-23.

Jablonski, F , J & Lester, D. (2008). *Incorporating Development into Personal Construct Theory' An Internet Journal Devoted to Personal Construct Theory* PC T&P Vol 5 www.pcp-net.org (retrieved in December 2013)

Jia, Q. (2010). A brief study on the implication of constructivism teaching theory on classroom teaching reform in basic education. *International Education Studies,* 3(2), 197-199.

Joseba, M. (2005). Student engineers, ESP courses, and testing with cloze tests. *ESP world.* 2 (10)

Joshi, R.M. (2009). *International Business.* Oxford University Press. New Delhi & New York. ISBN 0-19-565909-7

Kassim, H, & Ali, F. (2010). English communicative events and skills needed at the workplace: Feedback from the industry. *English for Specific Purposes, 29*, 168–182.

Kelly, G. A. (1955). *The Psychology of Personal Constructs*. Volumes 1 &2 New York: Norton.

Kelly, G. A. (1963). *A theory of personality*. Norton, New York.

Lane, T. ,Obando- Rojas, B, Wu, B., and Taşıran, A. (2002). *Crewing the International Merchant Fleet.* Red hill: Lloyds Register-Fairplay Ltd.

Larsson, Thomas. (2001). *The Race to the Top: The Real Story of Globalization Washington,* D.C.: Cato Institute. p. 9. ISBN 978-1930865150

Maritime Faculty of ITU. (2005). *Marine Engineering Department*, Sea Training Record Book. Tuzla,İstanbul

McKay, S. L. (2002). *Teaching English as an International Language: Rethinking goals and approaches.* Oxford: Oxford University Press.

Mertens, D.M. (2nd Ed) (2005). *Research and Evaluation in Education and Psychology: Integrating Diversity with Quantitative, Qualitative and Mixed methods.* Sage Publications, London.

Özkan, Y. (2011). Construct shift of trainee teachers in English language after practicum experience. *Social behaviour and personality*, **39**(5), 607-614

Pendergrass. N., Kowalczyk, R., David, J., & Laulache, R. (2001).Improving first year engineering education. *Journal of Engineering Education, 90(1), pp33-41*

Pritchard,M., Nasr,A. (2004). Improving reading performance among Egyptian engineering students: principles and practices. *English for specific purposes.* 23 (4),425-445

Pyne, R. & Koester, T. (2005). Methods and means for analysis of crew communication in the maritime domain. *The Archives of Transport (17),* 3-4. fromhttp://www.healert.org/documents/published/he00640.pdf Retrieved in July 10,2010

Robertson, R. (1992). *Globalization: social theory and global theory and global culture* (Reprint.ed.) London : Sage ISBN 0803981872

Sageev, P.& Romanowski, C. (2001). A message from recent engineering graduates in the workplace: Results of a survey on technical communication skills. *Journal of Engineering Education ,90*, 685-693.

Sagen, A. (1999). *The ISM Code in Practices.* Oslo, Norway: TanoAshehoug, AIT Otta, AS, Norway

Sampson, H., Zhao, M. (2003). 'Multilingual crews: communication and the operation of ships' *World Englishes* 22(1), 31-45.

Seidlhofer, B. (2011). *Understanding English as a Lingua Franca.* Oxford: Oxford University Press

Sendan, F., & Roberts, J. (1998). Orhan: A case study in the development of a student teacher's personal theories. *Teachers and Teaching,* 4(2), 229-244

So-Mui, F. L., & Mead, K. (2000). An analysis of English in the workplace: The communication needs of textile and clothing merchandisers. *English for Specific Purposes*, 19, 351-368. English Language Centre, The Hong Kong Polytechnic University, Hung Hom, Kowloon, , Hong Kong

STCW requirements for marine engineers concerning Maritime English. Retrieved in February 12, 2012 from www.imo.org

Stever, H, G (1972). Science,Systems and Society. *Journal of Cybernetics,* 2(3), 1-3 pp doi 10. 1080/01969727208542909

Swain, S. (2011). *Social Issues of India.* New Delhi: New Vishal Publications ISBN 9781257094547

Taylor, P. C., Dawson, V., & Fraser, B. J. (1995). *Classroom learning environments under transformation: A constructivist perspective*. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA, USA.

Taylor, P. C., Fraser, B. J., & Fisher, D. L. (1997). Monitoring constructivist classroom learning environments. *International Journal of Educational Research*, **27**(4), 293-302.

Trenkner, P. (2000). "Maritime English. An attempt at an imperfect definition" in *Proceedings of the Second IMLA Workshop on Maritime English in Asia*, 1–8.

Trenkner, P., Cole, C. W. (2010). Raising the Maritime English Bar: The STCW Manila Amendments and their impact on Maritime English. *In the proceedings of IMEC* 22 (pp 3-16), Constanta, Romania

Verbek, E. (2011). *That dreaded 80 percent.* Seaways, 24-26, June.

Viacheslav, A, C (2008). 'The Problem of the Caucasian Sprachbund' in Peter Mysken (ed.) *From Linguistic Areas to Areal Linguistics* (p 31) ISBN 90-272-31001

Weeks,F. (1997). 'Whither Maritime English?' paper presented at the 9th International IMLA Workshop on Maritime English ,(WOME9), Malmö,Sweden.

Winter, D. A. (2003). The constructivist paradigm. In: Woolfe, R. et al. (Ed) (2003). Handbook of counselling psychology. London: Sage.

Ziarati, R. (2006). "*Safety At Sea – Applying Pareto Analysis"*, Proceedings of World MaritimeTechnology Conference (WMTC 06), Queen Elizabeth Conference Centre.

Zuber-Skeritt,O.(1988). Eliciting personal constructs of research,teaching and/or professional development. In J.Steele and J.G.Hedberg (Eds) *Designing for Learning in ındustry and Education*, 126-135. Proceedings of EdTech '88. Canberra:AJET Publications .www.aset.org.au/confs/edtech88/zuber-skerritt.html

www.changingminds.org (Retrieved in May, 12,2014).

www.ethnologue.com–(Retrieved in August ,15,2014).

www.psychology.about.com (Retrieved in February.2, 2014).APPENDICES

# APPENDICES

## APPENDIX 1

### Pre Practıcum Questionnaire/ Intervıew

1-Do you think knowing English will be useful in your profession, if so point out the reasons why?

2-Which part of the sector you would like to work after graduation, why?

3-Do you mind if you work on Turkish /multinational crewed vessel in the future? Explain.

4-Do you think English is of importance in terms of marine engineering profession?

5-Do you think you are likely to have communicational problems based on language with the senior officers and other crew members on training?

6- In what form of English do you think you will come across during your on board training (i.e. reading, speech, orders, reporting, orders etc)

7-Do you expect you are able to communicate in English effectively and actively (oral /written) with the crew members on board?

**APPENDIX 2**

**Staj Öncesi Anket/GörüşmeSoruları**

1-Sence İngilizce bilmek mesleğinde faydalı mı?

2-Mezuniyet sonrasında sektörde nerede çalışmak istiyorsun?

3- Çalışacağın geminin Türk /yabancı mürettebattan oluşması sana sorun olur mu, açıklayın?

4- Çalışacağın sektörde İngilizce önemli mi? Neden?

5-Sence gemide üstlerinle ve diğer mürettebatla olan iletişiminde dilsel (İngilizce )kökenlisorunlaryaşayacakmısın? Bu sorunlar ne olabilir.

6-Sence İngilizce stajda hangi şekillerde karşına çıkacak ?(metin, konuşma, raporlama, talimat vs.)

7-Sence, stajda mürettebatla sözlüya da yazılı İngilizce iletişim kurarken kendini yeterince ifade edebilecek misin?

**APPENDIX 3**

**Post Practicum Questionnaire/Interview**

1-Have you observed that knowing English was useful on board training? If so explain.

2- Which part of the sector you have been impulsed after having completed on board training regarding your prospective carreer?

3-Would it make any difference if you are to work on Turkish /foreign crewed vessel after graduation? Explain.

4-Have you observed that English is of importance after the completion on board training. If so explain with a few sentences.

5- Have you experienced communicational problems based on language with the senior officers and other crew members on training?

6- In what forms of English have you come across during your on board training (i.e.reading, speech, orders, reports, orders etc)

7- How did you take part in communication in English effectively and actively (oral /written) with the crew members on board? If you do so, feel free to write your impressions regarding your profession, yourself and English language.

**APPENDIX 4**

**Staj sonrası Anket/ GörüşmeSoruları**

1-Gözlemlediğin kadarıyla stajda İngilizce bilmek sana yararlı oldu mu, açıklayalım.

2- Gemi stajı sonrasında sektörün hangi bölümünde çalışmak istiyorsun? Düşüncelerinde herhangi bir değişiklik oldu mu?

3-Mezuniyet sonrası çalışacağın geminin Türk /yabancı mürettebatlı olması fark eder mi, açıklayalım.

4-Stajdan sonra İngilizcenin önemli olduğunu gözlemledin mi? Bunu birkaç cümleyle ifade edelim..

5-Mürettebatla ve üstlerinle iletişimde dilsel (İngilizce )kökenli yaşadın mı? Bu sorunlar ne şekilde belirdi, detaylandırın.

6-Stajda İngilizce hangi biçimlerde karşına çıktı? ( metin, konuşma, raporlama vs) Bu beklentilerin doğrultusunda mıydı?Olumlu –olumsuz düşünceler varsa aktaralım.

7-Sence, stajda mürettebatla sözlü ya da yazılı İngilizce iletişim kurarken kendini yeterince ifade edebildin mi?

**APPENDIX 5**

STCW Maritime English requirements according to the ranks on board

**Section A-I/1**

*Definitions and clarifications*

1 The definitions and clarifications contained in article II and regulation I/1 apply equally to the terms used in parts A and B of this Code. In addition, the following supplementary definitions apply only to this Code:.1 *Standard of competence* means the level of proficiency to be achieved for the proper performance of functions on board ship in accordance with the internationally agreed criteria as set forth herein and incorporating prescribed standards or levels of knowledge, understanding and demonstrated skill;

2 *Management level* means the level of responsibility associated with:

.2.1 serving as master, chief mate, **chief engineer officer or second engineer** officer on board a seagoing ship, and

.2.2 ensuring that all functions within the designated area of responsibility are properly performed;

3 *Operational level* means the level of responsibility associated with:

.3.1 serving as officer in charge of a navigational or **engineering watch or as designated duty engineer for periodically unmanned machinery spaces** oras radio operator on board a seagoing ship, and

.3.2 maintaining direct control over the performance of all functions within the designated area of responsibility in accordance with proper procedures and under the direction of an individual serving in the management level for that area of responsibility;

4 *Support level* means the level of responsibility associated with performing assigned tasks, duties or responsibilities on board a seagoing ship under the direction of an individual serving in the operational or management level;

5 *Evaluation criteria* are the entries appearing in column 4 of the "Specification of Minimum Standard of Competence" tables in part A and provide the means for an assessor to judge whether or not a candidate can perform the related tasks, duties and responsibilities;

6 *Independent evaluation* means an evaluation by suitably qualified persons, independent of, or external to, the unit or activity being evaluated, to verify that the administrative and operational procedures at all levels are managed, organized,

undertaken and monitored internally in order to ensure their fitness for purpose and achievement of stated objectives.

## APPENDIX 6 Extracts from the training book

| | |
|---|---|
| ***ISTANBUL TECHNICAL UNIVERSITY MARITIME FACULTY*** | **Approved By:** Marine Engineering Department Head- ITUMF<br>**Document No:** ITUMF-MED-0230<br>**Issue Date:** January 12, 2002<br>**Issue Status:** Original Copy |
| ***ON BOARD TRAINING RECORD BOOK FOR ENGINEERING CADETS*** | |

**Section 2.3 Usage hand tools, electrical and electronic measuring and test equipment for fault finding, maintenance and repair operations.**

| | |
|---|---|
| **STCW Requirement** | STCW TABLE III/1 - Specification of minimum standard of competence for officers in charge of an engineering watch in a manned engine-room or designated duty engineers in a periodically unmanned engine-room. |
| **STCW Function** | Marine Engineering at Operation Level |
| **STCW Competence** | Use hand tools, electrical and electronic measuring and test equipment for fault finding, maintenance and repair operations. |
| **STCW Knowledge, understanding and proficiency** | ✓ Safety requirements for working on shipboard electrical systems.<br>✓ Construction and operational characteristics of shipboard AC and DC electrical systems and equipment.<br>✓ Construction and operation of electrical test and measuring equipment. |
| **Assessment Method** | ⇒ Implementation of safety procedures is satisfactory.<br>⇒ Selection and use of test equipment is appropriate and interpretation of results is accurate<br>⇒ Selection of procedures for the conduct of repair and maintenance is in accordance with manuals and good practice<br>⇒ Commissioning and performance testing of equipment and systems brought back into service after repair is in accordance with manuals and good practice |

### 2.3.1-) Interpretation of manuals including electrical and electronic control diagrams

Vessel: Cadet's Name & Surname:

| | |
|---|---|
| **Assessment Objective:**<br>Demonstrate workshop skills training, practical experience and tests | **Action to be carried out:**<br>Locate and interpret manuals including electrical and electronic control diagrams |
| | **Criteria:**<br>Manuals, drawings and diagrams are quickly located and those selected are the most suitable for the task to be performed. |

| Ref No. | TASK/DUTY | Officer's Initials/Date | |
|---|---|---|---|
| 1. | Assist with routine checks and tests on electronic control systems | | |
| 2. | Assist with maintenance on electrical, electronic or pneumatic control systems | | |
| 3. | Demonstrate a knowledge of switchboard and console layout and location of controllers | | |

| ISTANBUL TECHNICAL UNIVERSITY MARITIME FACULTY | **Approved By:** Marine Engineering Department Head- ITUMF<br>**Document No:** ITUMF-MED-0230<br>**Issue Date:** January 12, 2002<br>**Issue Status:** Original Copy |
|---|---|
| ***ON BOARD TRAINING RECORD BOOK FOR ENGINEERING CADETS*** | |

## 2.2.2-) Selection and usage of general and special measuring equipment

Vessel: Cadet's Name & Surname:

| | |
|---|---|
| **Assessment Objective:**<br>Demonstrate workshop skills training, practical experience and tests | **Action to be carried out:**<br>Select and use general and special measuring equipment |
| | **Criteria:**<br>The selected measuring instruments used for operational adjustment, calibration , repair and maintenance of machinery and equipment are relevant for the tasks; correct measurements are taken and checked for compliance with stated tolerances.<br>In the box below list the shipboard plant or equipment on which you have used the following measuring equipment. For example: oddleg callipers, vernier callipers, internal micrometer, external micrometer, depth gauge and vernier height gauge and other specialist measuring instruments. You should also gain experience in using ammeters, voltmeters, multi-testers and electronic measuring devices for testing and fault finding. |

| Ref No. | Shipboard Plant or Equipment | Measuring Equipment Used | Officer's Initials/Date | |
|---|---|---|---|---|
| 1. | | | | |
| 2. | | | | |
| 3. | | | | |
| 4. | | | | |
| 5. | | | | |

# CURRICULUM VITAE

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2011 Certificate of Seafarers' Trainer by İstanbul Port Authority
2001 Certificate of Maritime English Instructors Training Course –approved by IMO
1994 COTE - Certificate for Overseas Teachers of English- by British Council
1987 Çukurova University, Faculty of Education, Department of ELT

## PROFESSIONAL EXPERIENCE

1996 - İstanbul Technical University
2010-12 Bahçeşehir University
2007-09 Galatasaray University
1994-96 Yıldız Technical University
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