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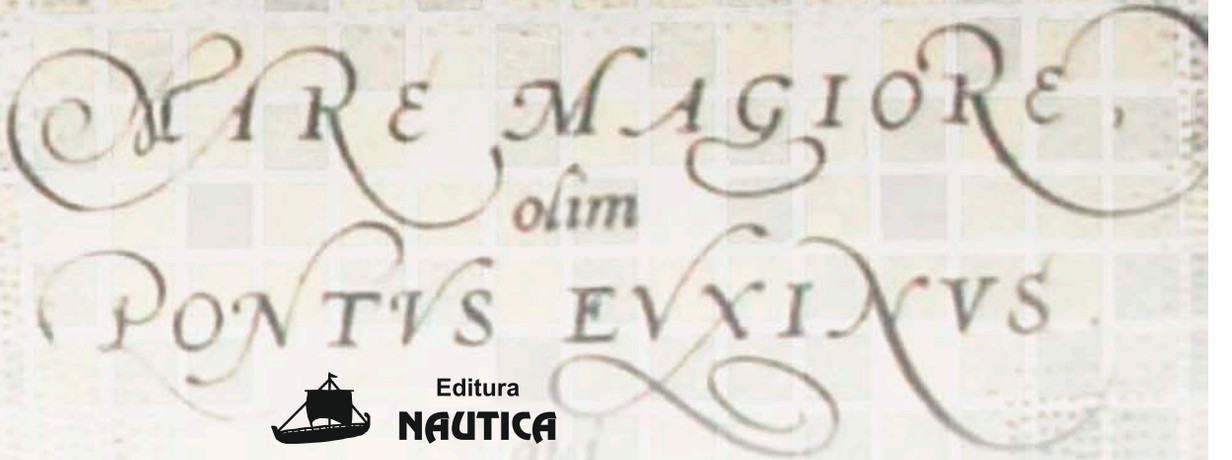

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THE INTERNATIONAL MARITIME ENGLISH CONFERENCE

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CONSTANTA MARITIME UNIVERSITY, ROMANIA

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Contents

Papers

Workshops

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ON SOME ASPECTS OF MOBILITY IN TEACHING MARITIME ENGLISH

Abstract

This paper is an account of the circumstances and conditions encouraging and affecting the ever increasing requirement for mobility as an invaluable process in the modern approach to teaching Maritime English. The idea of mobility in general and professional education and training has gained a great deal of importance in the Bologna process and therefore places special requirements on teaching Maritime English in the countries where the Bologna process has been implemented. Mobility can be regarded as a process of free movement of students, teachers, researchers and administrative staff. Comparability of the learning outcomes among ME courses offered across the MET institutions internationally seems to be the first prerequisite for mobility in this specific area of higher and vocational education and training. This also implies that the degrees should be easily readable in form and uniform in application, which directly raises the issue of the number of hours assigned to teaching Maritime English within an MET BSc course (details of the curricula). Also vital for mobility are the degree of match with the IMO STCW 2010 requirements concerning (maritime) English, the details of the syllabus for Maritime English across various MET degree programmes and institutions, etc. Another issue discussed is the place of maritime English within the overall BSc degree programmes of study (principally deck and marine engineering). Other problems may be attributed to legal, financial and some issues of a more 'technical' nature. Also, the possible role of accreditation will be discussed in facilitating mobility.

Key words, abbreviations and definitions: *mobility, MET, the Bologna Process, comparability, BSc degree courses, Maritime English, syllabus*

1. Key issues of mobility

Mobility is a catchword in modern society for movement of individuals or social groups within or between classes and occupations. In terms of MET it means movement of students and teaching staff within mutually compatible programmes of study offered by the MET institutions across the world. Sometimes it may also involve technical staff of MET institutions, course planners, designers etc.

Mobility of students involves studying for a period in a country other than that of permanent residence or education (completed or ongoing) for a period of study or a full degree. Mobility of

teaching staff refers to a working period in a country other than that of permanent residence or for a limited or extended period.

It has positive consequences for the quality of higher education and the higher education institutions as well as for society and, in our case, shipping industry as a whole. (cf. http://www.ond.vlaanderen.be/hogeronderwijs/bologna/documents/WGR2007/Socialdimensionandmobilityreport.pdf)

More precisely, student mobility refers to a study period taken mainly abroad and returning home afterwards. Usually, three main aspects of student mobility are usually practised:

- Horizontal Mobility - students spends a period of their studies in another country.
- Vertical Mobility - students take a full degree abroad.
- EU Programmes - During recent years, the European Commission has initiated various student, post graduate and teacher mobility schemes. These are open not only to EU citizens, but also to citizens of EU candidate countries and countries of the European Economic Area.

Some authors also mention the fourth aspect - brain mobility. This is the negative aspect of mobility in the globalized world and involves the process whereby a country loses its most talented and educated people to other countries because there is a lack of opportunities in their own.

Under the requirements of the Bologna process, Maritime Education and Training systems in Europe and beyond must also prove that the degree programmes in MET:

- are easily readable and comparable - the tools for achieving this are ECTS (European Credit Transfer System) and the Diploma Supplement and ECVET (European Credit Transfer System in Vocational Education and Training)
- have uniform degree structures - the degree structure will be mainly based on a two-cycle model. The first cycle, lasting a minimum of three years, ends in a Bachelor-level degree. The second cycle consists of Master's degrees and postgraduate degrees are third cycle degrees
- ensure increased mobility - free movement of students, teachers, researchers and administrative staff.

In EU the mobility programmes on the university level are arranged within the Socrates/Erasmus Exchange Programme. Currently more than 4,000 higher institutions participate in Erasmus across 31 countries involving over 2.2 million students. Here are some main features of the programme:

- in order to enrol students must be studying for a degree or diploma at a tertiary-level institution and must have completed their first year
- students spend/study for a period of at least 3 months up to an academic year in another European country.
- Erasmus Programme guarantees that the period spent abroad is recognised by their university when they come back
- students do not pay extra tuition fees to the university that they visit. They can also apply for an Erasmus grant to help cover the additional expense of living abroad.

- in order to reduce expenses and increase mobility, many students also use the European Commission-supported accommodation network,
- in addition to an academic exchange, for many students the Erasmus Programme is their first time living and studying abroad and has therefore become a cultural phenomenon.
- The Erasmus experience is considered both a time for learning as well as a chance to socialize.

Along with the obvious success of mobility, its attractiveness and effectiveness of education and training, there are also some problems related to student mobility. The main issues related to mobility are questions of recognition. Recognition issues in horizontal mobility may mainly be resolved by implementing credit transfer systems (e.g. ECTS and VECTS in EU) and its tools properly. However, the problems of recognition in vertical mobility predominantly lie in the recognition of qualifications. These should be addressed by a proper implementation of the Lisbon Recognition Convention and the Diploma Supplement

(cf. http://www.esib.org/index.php/issues/Mobility/95-student-mobility.html).

Why would a student decide to study a period of time abroad? In order to make the study period academically meaningful

(a) the student must be assured of the academic value of a study period abroad (quality, accreditation)

(b) study periods taken abroad must be fully recognized, and

(c) the cost of such a venture must be subsidised or funded under reasonable conditions.

Therefore a number of tools and solutions for recognition problems have to be found. This is why the European Students' Union (ESU) demands that (EU and accession) governments sign and ratify the Lisbon convention of recognition. ESU advocates the possibility of students to build up their degree independently: „Access to high quality education in all levels must be an option for all regardless of their citizenship, country or area of birth“.

In addition, one of the main reasons for low mobility rates is the insufficient funding for students. The substantial obstacles to mobility may be found in the economic and educational background of a student and in excessive administrative regulations. ESU also emphasises the need to guarantee „equal access for foreign students to all social services offered to domestic students“. Beside funding, another problems is access to the welfare systems abroad.

Therefore, problems of recognition, financing, information-sharing and language barriers must be determinedly addressed in the context of both horizontal and vertical mobility. The introduction of the two-tier degree structure must not hinder horizontal mobility. ESU further maintains that mobility must be a „genuine option, not a requirement, and degree structures must allow students to be able to choose when to study abroad“. At the same time students should not face the negative consequences if a study period abroad prolongs studies.

http://www.esib.org/index.php/issues/Mobility/95-student-mobility.html

Let us therefore look at the key points of recognition as set out by Lisbon Recognition Convention and the Diploma Supplement[1]

- *Holders of qualifications issued in one country shall have adequate access to an assessment of these qualifications in another country.*
- *No discrimination shall be made in this respect on any ground such as the applicant's gender, race, colour, disability, language, religion, political opinion, national, ethnic or social origin.*
- *The responsibility to demonstrate that an application does not fulfil the relevant requirements lies with the body undertaking the assessment.*
- *Each country shall recognise qualifications – whether for access to higher education, for periods of study or for higher education degrees – as similar to the corresponding qualifications in its own system unless it can show that there are substantial differences between its own qualifications and the qualifications for which recognition is sought.*
- *Recognition of a higher education qualification issued in another country shall have one or more of the following consequences:*
- *access to further higher education studies, including relevant examinations and preparations for the doctorate, on the same conditions as candidates from the country in which recognition is sought;*
- *The use of an academic title, subject to the laws and regulations of the country in which recognition is sought;*
- *In addition, recognition may facilitate access to the labour market.*
- *All countries shall develop procedures to assess whether refugees and displaced persons fulfil the relevant requirements for access to higher education or to employment activities, even in cases in which the qualifications cannot be proven through documentary evidence.*
- *All countries shall provide information on the institutions and programmes they consider as belonging to their higher education systems.*
- *All countries shall appoint a national information centre, one important task of which is to offer advice on the recognition of foreign qualifications to students, graduates, employers, higher education institutions and other interested parties or persons.*
- *All countries shall encourage their higher education institutions to issue the Diploma Supplement to their students in order to facilitate recognition. The Diploma Supplement is an instrument developed jointly by the European Commission, the Council of Europe and UNESCO that aims to describe the qualification in an easily understandable way and relating it to the higher education system within which it was issued.* http://www.coe.int/t/dg4/highereducation/recognition/lrc_EN.asp

To what extent then do the issues above refer to mobility in the area of maritime education and training, and possibly to studying and teaching Maritime English? Some obvious answers come from

- the experience some MET institutions have gained in implementing mobility (e.g. MET academies and universities in EU and US, some Baltic countries, China, Malaysia, etc.)
- an open forum discussion at conferences and chatbox on IMEC website.

Therefore, hopefuly some feedback from experience on the mobility cases already in place and views on the prospects of mobility in the area of Maritime English may also be

[1] The Convention on the Recognition of Qualifications concerning Higher Education in the European Region was developed by the Council of Europe and UNESCO and adopted by national representatives meeting in Lisbon on 8 - 11 April 1997. Most European countries have since ratified this Council of Europe/ UNESCO Convention – usually referred to as the Lisbon Convention.

gathered at IMEC23. For this purpose a questionnaire has been prepared for discussion in groups (see Supplement).

2. Mobility in MET

The following section is a brief account of the cases of mobility in MET as shown on the websites of MET institutions selected for the purpose of this paper.

University of Cadiz, Spain

In the statement on mobility the Faculty of Nautical Sciences, Cadiz, welcomes exchange programme incoming students, visiting students and staff members as „a gate to interchange insights into different educational systems and cultures and to promote international exchange of academic and research activities". http://www.uca.es/centro/1C15/international-office-mobility-programmes

The *EU-funded Socrates/Erasmus Exchange Programme* provides the opportunity for the students to spend an academic period at partner institutions in countries such as Ireland, Belgium, the Netherlands, Norway, Finland, Latvia, Italy and Poland, with a recognised study plan according to ECTS and STCW requirements. The number of incoming students is increasing per year and participate actively in the cultural and social events programmed by the Faculty throughout the year.

Very recently, an agreement has been signed for study exchanges with the *State University of New York Maritime College (SUNYMC)* in the USA.

The staff members of the FNS also coordinate and participate in a broad range of transnational pilot projects.

University of Antwerp, Antwerp Maritime Academy

The Antwerp Maritime Academy (AMA) offers BSc and MSc programmes in Nautical Sciences and Marine Engineering. Information for 'incoming students' lists the following links, of which the second and the third are of interest to this paper:

- *What is Erasmus?*
- *ECTS and the evaluation scale*
- *Courses (in English) at the Antwerp Maritime Academy*
- *Language courses*
- *Practical information*
  - *Deadline for applications*
  - *Academic Calendar*
  - *Before leaving your country*
  - *Accommodation*
- *How to apply & application forms*
- *Useful links*

- *Additional information*

The incoming exchange students are mostly Erasmus students. The following are the elements of the incoming course information, which may at the same time be regarded as the main features of the course study under the mobility programme:

General:

- the courses (nautical and marine engineering) perfectly match the regular study programme of the home country
- incoming exchange students study at the Antwerp Maritime Academy on a temporary basis via an exchange programme (LLP- Erasmus) without paying tuition fees.
- for administrative purposes they are considered as students registered in their home university and have already paid tuition fees there
- incoming students are strongly advised to take an EILC course (Intensive Language Course) in Dutch and/or a French language course.

The credit system

- AMA respects ECTS-credits for international incoming students.
- it is essential that study programmes are comparable and that course grades are officially recognised
- ECTS provides students and institutions with a system that enables them to measure and compare intellectual progress.
- ECTS is based on a system that indicates the study-load (in other words, courses, independent study, seminars, internships, etc.).
- ECTS arbitrarily considers 60 credits (or study points) to be the normal study-load for an entire academic year
- this implies that a student who studies abroad for half a year has to assemble a course programme worth 30 ECTS-study points.

For more info visit:

http://ec.europa.eu/education/programmes/llp/guide/glossary_en.html#34

In the Master's programme in Nautical Sciences, some courses are taught in English. Erasmus students can apply for a free, intensive course in Dutch (EILC-course) or attend an intensive summer course for foreign students. The French course, which is taught at the Antwerp University, is not an EILC course.

What the two cases of mobility in MET have in common is that

a. they are both based on a recognised study plan
b. these plans include the ECTS standards and
c. they meet IMO STCW requirements (1976/1995/2010).

as the principal criteria of programme effectiveness. Also, in addition to promoting international exchange of academic and research activities such an interchange enables insights into different educational systems and cultures.

3. Prospects for introducing mobility into the process of teaching Maritime English

The main stakeholders in international shipping expect a competent modern ship officer (navigational, engineering, or a combined 'maritime officer') to be:

(a) an expert in his own field of study (nautical studies or marine engineering),

(b) an information technology (IT) expert,

(c) a competent communicator,

(d) a culturally-aware maritime expert and manager,

(e) a person of integrity.

His/her command of both general and Maritime English is vital to all these five qualities.

The revised STCW requirements on Maritime English may be used as a reliable guidance but these are insufficient with respect to the needs and expectations of the three main stakeholders in maritime education and training: shipping industry, maritime administrations, and the MET system. Sometimes they are too vague and lack explicitness as far as knowledge and competences in (maritime) English for the three levels of certificates are concerned. The IMO seems to have taken into consideration the views and suggestions made by IMEC. Thus, in respect of the requirements for (Maritime) English, the recent IMO conference in Manila has introduced significant amendments to the existing IMO STCW 1995 Convention as provided in STCW Regulation I/14.7 referring to SOLAS Chapter V, Reg. 14/4 (cf. Cole & Trenkner 2010).

Shipping industry today needs quality deck and engineer officers, who are well beyond the basic STCW standards and who are competent communicators in English and its specialised subset – Maritime English. Mobility of ME courses, as well as students and teachers is a possible way of such needs becoming a reality.

An analysis of a number of EU and IAMU related projects shows that there is no uniform system of Maritime Education and Training (MET). This is primarily revealed in a notable discrepancy of the learning outcomes for various MET institutions (cf. Pritchard & Borucinsky 2010), i.e.:

- a variety of different programmes of study at MET institutions (curricula) across the world and subsequently the impracticability of a reliable comparison of the syllabuses for particular subjects/courses
- no uniform system of accreditation of MET institutions of programmes of study to account for reliable comparison of the typology of MET systems in the world
- different typology of MET institutions and MET facilities, especially with reference to two-fold organisation of MET, the first making a part of BSc degree-based university education and the second as a part of vocational training.

Almost all of these factors affect the design of the learning outcomes expected of a student in terms of competency in Maritime English.

One can therefore talk about three major types of MET systems in place internationally:

- MET starting at the level of secondary education (trainees aged 14/15) conducted at secondary (vocational) nautical/maritime/technical training schools. This is followed by higher education programmes leading to a BSc degree,
- MET starting only at post-secondary or higher educational level (aged 18/19), through either vocational training or academic programmes. This kind of MET is provided by maritime academies, colleges and universities and is on the increase in the EU, etc.,
- MET encompassing periods of school training interchanged with periods of sea service ('sandwich system') – traditionally practised in UK along with the second type.

Though the second type has become dominant over the last two decades, all the three types of MET may lead to highest STCW certificates, differing sometime only in the extent of trade covered (i.e. sea-going *vs* near-coastal trade). In many countries the first two types often coexist, and occasionally the third type may run parallel to the other types. As far as Maritime English is concerned we are especially interested in the second one (the three-year BSc degree courses for nautical studies and marine engineering), seemingly the most widely spread MET system in the world (provided by maritime academies and universities). This choice then has a important bearing on the design and teaching of Maritime English courses and their outcomes, especially with reference to the ratio between maritime English as a sub-set of ESP and English for general purposes (EGP). This implies, for example, that a student enrolling in maritime studies at the age of 18 or 19, say in northern Europe, will need less instruction in EGP, and focus instead on 'technical' English, i.e. Maritime English proper, required for acquiring BSc degrees in nautical studies or marine engineering, and the respective officer certificates of competence (Pritchard 2010). On the other hand, the students starting their MET career at the age of 14 will need a more balanced proportion of EGP and ESP/Maritime English throughout their training. One must also take into account the negative impact of interference of the learners' mother tongue and English.

How can we then arrive at a comparable plan of uniform number of courses, number of contact hours, assessment and evaluation yardsticks, etc. for Maritime English? At first sight it seems that arriving at such a uniform system is a mission impossible. It is hoped however that by offering a number of ideas, exchange of experiences and through a discussion we can design a curriculum and course syllables fro Maritime English eventually.

On the basis of the above considerations related to mobility in the area of education and a few cases of mobility in MET, two questions on mobility in teaching Maritime English are of utmost importance:

- What does mobility in Maritime English imply?
- What are the prerequisites for mobility in Maritime English?

The other issues are mainly of a technical nature (financing, accommodation, etc.) though not of lesser importance than the former ones.

In addition to complying with the STCW standards, harmonization of MET study programmes (curricula) and syllabuses is the basic precondition for mobility of qualified officers. This implies that the undergraduate's BSc degree will be equally (i.e. officially) acceptable throughout Europe or beyond. Though all the Maritime English syllabuses should invariably include active use of IMO SMCP, use of English in ship handling operations, and a number of STCW-related topics for the appropriate level operational or managerial, an analysis of MET programmes of study and their respective syllabuses shows considerable differences among European and other MET institutions, which makes mobility difficult, if not almost impossible to implement. The same holds for Maritime English courses (cf. Pritchard & Tominac 2009). There is almost no uniformity with respect to the number of (Maritime) English courses and the number of classes assigned for each course within the (average) three-year BSc degree programmes of study across the world. The same also holds for the respective Maritime English syllabuses. In some MET institutions the subject of maritime communications (including IMO SMCP phrases) is held throughout the three-year course while in other training establishments this important part of tuition is covered by short intensive courses, either within the course of Maritime English or as a special independent course (Pritchard & Borucinsky 2010).

Three problems need to be addressed in the future if any degree of mobility is to be ensured:

a. low degree of harmonization of the syllabuses for Maritime English courses within the above programmes of study (discussed in many IMEC papers)
b. different position and the role of Maritime English within the BSc degree programmes,
c. QA and accreditation as a way to a solution.

The analysis of the questionnaire responses received at the Szczecin IMEC conference (Pritchard & Tominac 2009) shows a low degree of harmonization in the learning outcomes for Maritime English courses. Though the final competence in (maritime) English should be based on the effectiveness of the implementation of STCW requirements, the learning outcomes should also reveal and express what the BSc undergraduate will be able to know and do on board in terms of effective communication, irrespective of STCW standards.

With respect to Maritime English, the same study shows the following differences among maritime nations and their MET institutions:

- "duration of BSc programmes of study ranging from 2 to 5 years (predominantly 3 years), some include seagoing service of 6 to 12 months, within a single or two-tier system)
- the number of terms assigned to English varies from 1 to 6
- some MET institutions have different ideas and concepts of Maritime English vs. EGP and their interrelation
- therefore in some countries only one term/semester is assigned to ME
- this leads to a significant difference in student week load for English; from 1 to 6 contact-hours per week

- the total hours for ME are distributed differently across individual MET programmes (e.g. 45 contact-hours of 45 mins per term)" (Pritchard & Tominac 2009).

Therefore, mobility in teaching ME can be introduced only if this occurs within three-year BSc degree programmes in MET (say a programme of a minimum of 180 contact hours for ME) and if the outcomes are transferred into comparable credits (e.g. ECTS).

Taking into account the above considerations, here is a possible model of ME course(s) suitable for implementing any kind of mobility with respect to ME students:

- (Maritime) English should be assigned a minimum of 16 credits (4 credits per term;
- one term consists of 45 contact-hours of ME within a total of 240 credits for BSc programmes (i.e. Nautical Studies and Marine Engineering).

In addition to week load, credit transfer and accreditation in terms of ECTS implies considering other parameters (attendance, student's involvement in classroom activities, home assignments, periodic tests, presentations, seminar papers, projects, and final exam). We therefore need to create favourable conditions for setting up mobility in the area of Maritime English, which includes:

- comparable BSc programmes of study at MET in the world's MET institutions,
- comparable ME curricula within the above BSc programmes (number of credits, overall number of contact-hours, a reasonable distribution of contact-hours into semesters/terms which would enable student and teacher/instructor mobility)
- comparable Maritime English course syllabuses across the world (shown in the respective course descriptions).

Though the first two requirements are hard to implement, there is a great deal of agreement among ME teachers as to the content of the syllabuses. However, planning of ME courses is often beyond the power of ME teachers. The article "Promotion of European co-operation in quality assurance with a view to developing comparable criteria and methodologies" (cf. The European Network of Quality Assurance in Higher Education) may be a useful guidance to set up acceptable minimum criteria for standardisation, harmonisation and accreditation in the field of Maritime English

Finally, another way of of harmonising the status of ME within the MET programmes of study is a possible accreditation of ME courses in world MET conducted through the policy of quality assurance. Accreditation is regarded as a peer-review process that "assures the quality the postsecondary students receive" (www.abet.org/the_basics.shtml). It principally involves accreditation of programmes of study (specialized accreditation) and entire MET institutions. Accreditation is not a ranking system and MET institutions or programmes "volunteer to undergo accreditation review periodically to determine if certain criteria are being met". We may consider accreditating Maritime English courses within specific MET programmes of study: BSc degree in nautical studies and marine engineering. By means of conferences, workshop, work groups, peer assessors/reviewers, etc., the IMEC community may therefore discuss the possibility of setting up and evaluating the necessary elements for evaluation (self-

assessment of ME syllabuses), quality assurance and accreditation such as (cf. Pritchard and Borucinsky 2010):

- English language requirements on entry into an MET programme
- total work load on the student
- assigning number of credits (ECTS, VCETS or other) to ME courses,
- total number of contact hours assigned to (Maritime) English within the programmes of study (Nautical Studies and Marine Engineering),
- minimum content-based knowledge and communicative skills
- sequencing selected contents of the entire ME curriculum within an MET programme (not only STCW-based) and allocating the same to particular semesters to suit mobility of programmes/syllabi and students,
- coverage of STCW requirements as to knowledge and competence in (maritime) English language,
- student week load,
- resources and materials,
- methods of assessment and application of CBT in assessment and evaluation in Maritime English.
- learning outcomes upon completion of the course

4. Conclusion

The paper is an attempt at starting a peer discussion on the possibility of introducing mobility in the process of teaching (Maritime) English in MET institutions offering BSc degrees in maritime transport. Also accreditation of Maritime English courses is seen as another means of ensuring mobility. The basic prerequisites for this process are:

- comparable and recognized degrees awarded by MET institutions
- comparable BSc programmes of study at MET institutions,
- comparable Maritime English curricula within the above BSc programmes (number of credits, overall number of contact-hours, a reasonable distribution of contact-hours into semesters/terms which would enable student and teacher/instructor mobility)
- comparable Maritime English course syllabuses across the world (shown in the respective course descriptions)
- financial prerequisites (funding of the costs of mobility).

By sharing the various approaches to learning Maritime English experienced in different cultural environments the process of mobility, once started, will definitely improve the communicative competence, increase cultural awareness of future ship officers, and lead to higher competitiveness of high quality seafarers on the world manning market

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Author's Bio-Note

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MARITIME ENGLISH IN VIEW OF STCW 2010

Abstract

Despite a widespread recognition that safety at sea and competency in English are inextricably linked, it is often the technical side of training rather than the acquisition of linguistic competence which is seen as a priority at maritime colleges and institutes.

Today some may argue the importance and necessity of maritime English in view of increased automation of navigational systems, computers which may well speak directly to other computers in order, for example, to bring a ship successfully into port, so eliminating the human element in communication entirely.

STCW 2010 Amendments including mandatory training for BRM, ECDIS, and Leadership as well as other non-mandatory trainings are welcomed by the Industry. New competency requirements such as Ice Navigation, Cargo Handling in Oil/Chemical Tankers, Dynamic Positioning Systems, Ship Safety Officer, Incident Investigation, Engine Resource Management, Energy Conservation, Crises Management, Leadership and Teamwork, Anti-Piracy Measures, etc have also introduced new terminologies along.

This paper intends to discuss whether existing Maritime English standards and curricula are adequate to cover multinational and multicultural competency issues as a ''Lingua Franca'' to develop leadership skills, reveal & develop management styles, achieve efficient communication, produce effective teamwork, understand situational awareness, use standard operating procedures & checklists, understand mental abilities and limitations, e.g. memory, workload, competence, confidence, etc. enhance the quality of decision making, understand health issues: fatigue, stress, nutrition, and human resources challenges for continuity, competence and culture to focus on the significance of human capital in the sustainability and development of the shipping industry in view of STCW2010 amendments.

Key words: *MET, STCW2010, Maritime English, human resources management, leadership*

1. Introduction

Despite a widespread recognition that safety at sea and competency in English are inextricably linked, it is often the technical side of training rather than the acquisition of linguistic competence which is seen as a priority at maritime colleges and institutes.

IMO's Standard Marine Communication Phrases (SMCP) which was adopted by the 22nd Assembly in November 2001 as resolution A.918 (22) IMO Standard Marine Communication Phrases, builds on a basic knowledge of English and has been drafted in a simplified version of maritime English. It includes phrases for use in routine situations such as berthing as well as standard phrases and responses for use in emergency situations under the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW), 1978, as amended.

But, how much longer will it be needed? With increased automation of navigational systems, computers may well speak directly to other computers in order, for example, to bring a ship successfully into port, so eliminating the human element in communication entirely.

And is it only the internal and external (radio) communications we are dealing with? Vangehuchten, et al. (2010) propose that it is not only the multilingual but also multicultural character of crew's leads to miscommunication on board and emphasize that it can also have negative repercussions on the morale of the crew and their working environment. One of the main aims of the shipping industry is to retain the work force by keeping high morale of the crew as well as attracting new ones to the sector. Therefore intercultural contents of communication should be considered in a holistic approach.

Moreover the increasing importance of ICT in communication for maritime purposes is another paradox as oral communication is increasingly being replaced by electronic mail and formatted messages. Initiatives such as automatic speech translation, a technology that combines speech recognition and automatic translation may have adverse effects on language skills, which are vital to overcome cultural and language barriers and interact effectively, harmoniously and productively on board, while enhancing radio communications.

Despite the wide range of methods, all of the automatic translation processes pose problems that are not associated with the technology, but rather with the language. Linguistic problems related to translation are those that deal with lexical ambiguity, syntactic complexity, the difference of vocabulary between languages, and elliptical or incorrect grammar constructions (de la Campa Portela, 2010). Therefore it does not seem very likely that these systems would replace the human element in the near future to diminish the importance of (Maritime) English even for external communications.

The research by The Seafarers International Research Centre on maritime communication (Kahveci, Lane and Sampson, 2002), confirms that language was not the only problem in maritime accidents. Cultural differences in a mixed crew involving, for example, different meanings and emphasis being applied to the same words and ways of communication also cause friction and lead to accidents.

In view of STCW 2010 amendments new questions arose whether existing Maritime English standards and curricula would be able to cover multinational and multicultural issues to develop leadership skills, reveal & develop management styles, achieve efficient communication, produce effective teamwork, understand situational awareness, know to use standard operating procedures & checklists, understand mental abilities and limitations, e.g. memory, workload, competence / confidence, etc. enhance the quality of decision making, understand health issues: fatigue, stress, nutrition, etc., human resources challenges for continuity / competence / culture to focus on the significance of human capital in the sustainability and development of the shipping industry. These sophisticated competencies will definitely require in depth knowledge and very good command of English language which is quite beyond the generally accepted maritime English norms.

2. Mishaps due to communication problems

It is evident from studies of maritime accident reports where, in the chain of causation, 'human error' has been identified as a significant factor. That it is possible to break down this category further and to identify that crew communication failure (human – group) has played a key role in the incidents. Poor communication even between crewmembers from the same culture who are speaking the same language can, through misunderstandings and mistakes, be a threat to the overall safety of a vessel and pose an additional threat if one considers the risk of subsequent pollution

If one adds the additional variables of crews using English as a second language and the cultural differences which may be experienced, then the odds of miscommunication may be

increased. Human Communicative Error can be defined as Human Error which occurs as a result of a failure in communication, be it ship to ship, ship to shore or intra-ship (Pyne and Koester, 2005). Therefore overall command in English which is the working language at sea becomes more important than the maritime English which is generally taken in a limited context. In the incident which occurred on board the M/V Sally Mærsk in June 2000 on a voyage from Hong Kong to Long Beach, a repairman from Poland suffered from pain in his back and fever. Due to poor English language skills he asked his colleague – another repairman from Poland – to act as an interpreter for him during the medical consultation with the chief officer. The sick repairman had an injury in his back few days ago. His colleague was aware about this and assumed that the pain was caused by the injury. The sick repairman explained and asked his colleague to translate that he had pain and felt sick with fever, but the information about fever was lost in the translation and the chief officer got the impression that the problem was the pain assumable caused by the injury. The chief officer prescribed mild pain killers as the only treatment. The Polish repairman paid several visits to the sick repairman in the following two days. The sick repairman complained about his illness and the fever which had become worse. During the last visit the sick repairman seemed to be asleep and his colleague left him without talking to him. Later that day the sick repairman was found dead and the cause of death was pneumonia (Pyne and Koester, 2005).

The recent Sub-Committee (STW 41/6) report on the fire on the fishing factory vessel Hercules also highlights the need for a common working language to ensure effective communication on board among other reasons. A close investigation of casualty analyses considered approved by IMO (sub-committee minutes, 12th session) particularly focusing on the causes of accidents clearly indicates that standards are not applied correctly and when human factor issues are studied carefully there are omissions in the education and training programmes received by the seafarers involved in accidents (Brady, 2008). Therefore, it is believed that, especially in view of new STCW competencies, MET programmes must concentrate on the interface between humans in relation to communication between crew members by enhancing general knowledge in English together with socio-cultural aspects of the multi-cultural environment

3. Factors related to the interface between humans in relation to communication between crew members

Intercultural communicative competence is vital because people's communication styles are inherently culturally bound. The STCW convention and its amendment in 1995 theoretically dissolved such divides as value and culture in training and education which brought in the first inclusion of specific requirements for English Language certification. Communication lapses identified as Human Error in the causal chain of accidents have led to the use of English as the common language under the revised STCW Convention 1995 (Pyne and Koester, 2005). Following the recent “Comprehensive Review of the STCW Convention and the STCW code”, the IMO has also made amendments to the STCW. The amendments, which were approved at the Diplomatic Conference held in Manila, Philippines in June 2010, include some changes and additions of a linguistic nature. The linguistic amendments emphasise the IMO’s desire to focus on communication as the “building blocks” which ensure effective and safe working conditions at sea (Vangehuchten, et.al. 2010).

The need for clear verbal communications between parties in the commercial marine environment is multi-faceted as the ship is the working environment, learning environment and social environment for its personnel. Communication on an intra-ship level takes place daily between personnel during operation of the vessel – when giving and carrying out orders under

”normal‘ or ”emergency‘ situations – and when the multinational crew must interact to maintain ”social harmony‘ in an off duty context and in their everyday ”teamwork‘ to ensure effective day to day operation (Pyne and Koester, 2005).

Metze and Nystrup defined four dimensions of verbal communication in a professional context. Any communication sequence (conversation, statement, order, question, answer) analyzed according to these four dimensions:

1. Cognitive (knowledge and sense, exchange of exact information) – affective (feelings and intuition)
2. Expanding (long conversation or dialogue, questions which lead to comprehensive answers) – limiting (closing the conversation as quickly as possible, short answers, yes/no)
3. Confronting (focus on problems and conflicts) – concealing (hiding problems and conflicts)
4. Listening (paying attention to what is said and showing that by gestures or answers) – not listening (not paying attention, indifferent, no eye contact)

In most professional contexts the communication is preferred to be cognitive, confronting and listening. It whether the communication should be expanding or limiting varies depending upon the context and purpose of the communication. The command/confirm-communication, which is used on the bridge, is an example of limiting communication, which - of course -is appropriate in the given situation (Pyne and Koester, 2005). However, the importance of affective and expanding conversations cannot be ignored when we consider ”social harmony‘ in an off duty context which is equally important to daily routine and teamwork operations.

Pritchard suggests that native speakers are often too complacent about their language use and their role in the conversation. They often expect the other station to be fully situationally, culturally and linguistically ‘integrated’. This is proved by the native speaker’s negligence of standardised forms of communicating or lack of awareness of the existence of SMCP - the language standard for communicating at sea (Pritchard, 2010). Therefore command of general English and possible interference with the mother tongue becomes an important issue even for VHF radiotelephone communication using proper SMCP.

Good communication isn't created by efficiency or influence. It is created by connection, interaction, balance and understanding. Interaction involves both social and personal input, and forms the basis of the vast majority of everyday talking. Interaction involves emotions, creativity, agreement, disagreement, people waiting patiently to get a word in, sighing, nodding, gesticulating and so on. Interaction is not waiting to be asked a question. Interaction is not giving a short, one-word answer to a question. The importance of developing cultural competence in maritime professionals is increasingly being recognized. Seafarers seek knowledge to help them cope with the growing diversity of their employers, leaders and colleagues. However, even though requirements designed to address cultural competence are incorporated into maritime curricula, the institutional culture of maritime education systematically tends to foster static and essentialist conceptions of “culture” as applied to seafarers (Chirea-Ungureanu, 2010).

4. Major initiatives for enhanced Maritime English

What do we want our officers to do tomorrow that they’re not doing today? Why and how? Much more importantly, what does the companies/flag states/industry want people to be doing? And most important of all, what do the officers themselves have to say on the issue?

The cost effective way of operating our ship depends on various issues such as; safety/environmental culture, minimum accidents/incidents, minimum maintenance & repair costs, zero detention from PSC Inspections, Energy Efficiency (EEDI-EEOI-SEEMP) and minimum remarks from vetting and the other inspections which all require usage of general English at varying degrees and competency levels. There is several detention stories around which were resulted from solely miscommunication between ship crew and PSC Inspectors not

because of lack of maritime terminology but due to inabilities to explain the situation in general terms. The shipping companies are required to operate their fleet in a cost effective way by adequate crew on board, cope with the industries endless requirements, rules and regulations, and to handle enormous information explosion. Will existing Maritime English context enable officers to cope with the industries endless requirements and to handle enormous information explosion? Do we have to wait for the translation of continuously updated international regulations and circulars in to national languages and inclusion of the new terminology in to maritime English curricula?

In view of Maritime English, several EU Projects such as MarEng, MarEng Plus and MarTEL have contributed a lot under the existing STCW standards to enhance maritime communications. There is a challenge to keep the materials up-to-date in the future. STCW 2010, MLC 2006, PSC NIR, flag state requirements, environmental requirements, international conventions, circulars, etc., are continuously bringing new requirements on MET. MET Institutions have to follow several implementations of various organizations as well such as OCIMF (Oil Companies International Marine Forum), Vetting Inspections, TMSA (Tanker Management and Self Assessment), Operational Requirements, P & I and class requirements. STCW 2010 Amendments including mandatory training for BRM, ECDIS, and Leadership as well as other non-mandatory trainings are welcomed by the Industry. New competency requirements such as Navigation in Ice, Cargo Handling in Oil/Chemical Tankers, Ship Safety Officer, Incident Investigation, Engine Resource Management, Volatile Organic Compounds, Energy Conservation, Management of Change, Ship to Ship Transfer, Crises Management, Leadership, Anti-Piracy Measures, etc have also introduced new terminologies along which all are believed to be beyond the traditional maritime English standards.

5. STCW 2010 competency requirements

If we go a little more deeply in STCW 2010 we will see that it gives the pre-assessment, training, evaluation, refresher and update trainings to the responsibilities of the shipping companies, highlights the importance of training on board, evaluation of the attitude, knowledge and skills by the senior officers, enforces to create a safety and environment culture fleet wide, gives importance to the social life onboard, and advises the ship specific trainings.

There is huge amount of dynamic information flow in addition to the standard training requirements. Can a junior officer meet the expectations of this highly professional industry with the training he/she had from a standard MET institution? Considering the multi-national and multi-cultural character of the ship crew onboard training duties and social responsibilities will certainly require excellent command of English as well as sound understanding on socio-cultural issues. MET Institutions now need to adopt their curricula to meet the new requirements relating to training in modern technology such as electronic charts and information systems (ECDIS); new requirements for marine environment awareness training and training in leadership and teamwork; new training and certification requirements for electro-technical officers; new requirements for security training, as well as provisions to ensure that seafarers are properly trained to cope if their ship comes under attack by pirates; new training guidance for operating Dynamic Positioning Systems. STCW 2010 emphasizes Leadership and Management which requires planning for leadership and talent development, effective communication, assertiveness and motivation. Additionally; new concepts such as personal development, reflection, culture and gender issues, and core values, team skills, connecting resource management to workforce involvement, situational awareness, decision making, health issues, and professional conduct are becoming vital parts of the MET at all levels.

6. Conclusions

European integration and the creation of a united economic area has resulted in convergence of legislation of EU countries as well as the candidate countries as a first step towards the harmonization of different national conditions and standards that now have to be incorporated into a single environment. Safety at work constitutes one of the EU's most important social policies. The Lisbon European council stressed that Europe was going through a transition to a knowledge based economy, marked by profound changes effecting society, employment and safety at work. European Commission's recent adaptation of "investment in people" and Commission's "investment in quality" are two policies that the proposed programmes are supporting. The EU strategy relating to both policies is based on consolidating a culture of risk prevention as well as on combining a variety of tools, with training and awareness, being the most important ones. For the maritime industry, which is completely in international nature, these core values have utmost importance beyond national/continental borders. The challenge faced by the maritime industry today is less of number of the seafarers but more of continuity, competence, and culture. Continuity relates to retention of human capital within an organization and within the industry which is the key for sustainable fleet operational performance. Safety, reliability and sustainability of the maritime business rely on a stable and competent workforce who is committed to their career and to their employers. It is our collective responsibility in the industry to attract and retain the smartest and the brightest through focused human resources initiatives to realize the full professional and personal potential of the seafarers' competence. Some progressive institutes have already taken note of the importance of lifelong learning based on needs and all-round development to provide tailor-made training programs. The recent trend towards competency based model of human resources developments is a step in the right direction. Culture relates to inculcation of a sense of identity with a company / the industry, and involves extensive communication and leadership in action which reflects a set of shared values and practices. In summary, the culture is effectively the character of a company / the industry as it relates to from a seafarer's perspective. To encourage the sense of identity and belonging in the heart and mind of seafarers, it is important to:

– ensure a sense of togetherness with them
– align the organizational values, mission, vision, and key principles at all levels from shore to ship with the internal process, policy, and strategies
– integrate sea side with shore side operations to enhance seafarers understanding of the entire value chain and reduce their sense of isolation and deepen their level of involvement in the value chain

The industry has to work hard towards building an image for its seafarers as highly professional, intellectually challenging, and emotionally satisfying and to encourage the pride in the seafarer's job, and make the youngsters dream of becoming a seafarer. Today development of Maritime Education and Training (MET) system is a dynamic process under the pressure of rapidly improving maritime technology. Technological developments will almost certainly continue to create the potential for innovation in international shipping, but creating the conditions required to capitalize on that potential is likely to demand new ways of thinking, new ways of working, and a new framework for understanding reality.

Seafarers intending to come ashore to work find that they need additional skills to adapt to the shore working environment and competency for the job requirement. The training received by seafarers in most country is still limited to the need of the marine environment and in most country training is on the seafarer own initiatives and expensive. Thus resulted they only acquired certain type of trainings that only related to the job concerned but no other soft skill such as business savvy, accounting and financial, communication and interpersonal skill and many skill that were not incorporated during their earlier involvement in the maritime sector. Most of those who came ashore have to learn on the job and risk losing out or some may just

give-up and return to sea. This effect would later on discourage those who are intent to choose the sea as their career to shy away as there is not career alternative later in live. The maritime sector is facing a lack of well trained maritime business managers. There exists significant new and rising demand for education and qualifications which enhance the innovation capacity within the sector so as to benefit from the predicted growth rates in the maritime transport sector. In future, maritime business managers need to be better prepared by possessing multidisciplinary knowledge and skills set to cope with growing maritime traffic, port development, and rising environmental challenges, all within an intermodal environment.

More generally, a perspective on education would suggest the importance of looking beyond excellence in specific competencies, to include openness to other cultures, a capacity for self-expression and reasoned discussion, tolerance for other people's views etc. MET Programmes must provide some basic information for cadet officers to identify the differences between individuals and countries in competencies believed to underlie both personal and social success; assess the impact of these competencies at individual and collective levels; measure the performance of education and training systems in generating required competencies; and help to clarify the measures that could contribute to enhancing competencies.

To meet these goals, programmes must measure the interest, attitude and ability of individuals to appropriately use socio-cultural tools, including digital technology and communications tools; to access, manage, integrate and evaluate information and construct new knowledge; and to communicate with others. This should also give way to assess competencies in the fields of literacy, reading, numeracy and problem-solving. During the programme development phase at the new established Piri Reis Maritime University the main discussion point was whether to cover these learning outcomes in national language and support the outcomes with basic English and maritime English units or completely in English to integrate the international spirit of maritime environment into foundation and vocational teaching by employing international staff and lecturers.

Piri Reis Maritime University, giving special emphasize to internationalization, became involved in graduate and post graduate programmes fully in English in order to prepare young people for life as well as work under the rapid developing globalisation, focusing on young well educated and trained graduates with a clear sense of direction, judgement and wisdom to meet the requirements of the today’s maritime industry which is completely in international character. It is assessed that having all units in the curriculum in English will provide a holistic approach to enhance language skills together with socio-cultural abilities in order to meet demanding and challenging requirements of the maritime industry. Although all units are taught in English there are still Maritime English units in every semester. These are in fact to be considered as Maritime Turkish units those are designed to support vocational units in respective semesters. These are also taught by professional captains as to provide free discussion ground in national language to support vocational subjects as cadets are subject to National Seafarers Exams for CoC in Turkish. A proposal was made to national maritime administration for the conduct of seafarers exams in English for English programme graduates. Intention is to carry out sample exams both in English and in Turkish to determine the success levels and bring the results to the attention of IMEC members in the next conference.

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MARITIME ENGLISH AND THE VTS[2]

Abstract

This article largely draws upon data from the audio recordings of the working channel of the Mumbai VTS in India. The article is an exploration of the language used in ship-shore VHF[3] communication. This article examines the workplace talk of VTS operators as they communicate with ships in the channel and how the language used by VTS operators to fulfill their organisational and operational role, corresponds more with regular English than with standardised Maritime English. The article examines the standard information sought/key questions asked by the VTS from ships at the time of entering or departing the channel and the interaction at key stages of a ships movement in the channel. The data reveals that although the VTS operators of Mumbai are not trained in Maritime English and have not heard of the SMCP[4], it is being used in ship–shore VHF communication in a limited manner. The use of closed loop communication, repetition, brief standard questions and the use of the radio alphabet helps communication to run on familiar expected lines, however when faced with non standard communication, the response of the VTS is more likely to resemble, 'plain, simple English'. The article also discusses issues pertaining to the international standardisation of training and certification for VTS operators. This article is based on the ethnographic research fieldwork undertaken by the author in two major Indian ports[5] in Mumbai for her Ph.D. from Cardiff University.

Keywords: *Maritime English, SMCP, VTS, VHF, Ship–Shore Communication*

1. Introduction

More than a hundred thousand ships move in and out of ports worldwide (UNCTAD, 2010). This ocean going traffic needs to be monitored for the safety of navigation and the environment. Competent authorities establish a Vessel Traffic Service (VTS) in busy shipping lanes, channels and port and harbour approaches to aid the safe movement of marine traffic. The work of a VTS operator can be seen as akin to the work of an Air Traffic Controller (ATC)[6] in aviation. As the ATC tries to keep the skies free from incident, similarly the VTS operators strive to keep the waters under their purview free from navigational incident for the safety of

[2] Vessel Traffic Service
[3] Very High Frequency
[4] Standard Maritime Communication Phrases
[5] There are 13 major ports in India which are directly administered by the shipping ministry of the central government.
[6] The two industries of Shipping and Aviation differ greatly on the issue of 'Remote Pilotage'.

life, property and the protection of the marine environment. The VTS monitors the developing traffic situation in its area and talks to ships on VHF radio. This study focuses on *'talk'* in the performance of the organisational roles of VTS operators and the role of language in the achievement of the professional task of safe navigation of marine traffic. Clear communication is vital for the safety critical and the time critical nature of navigating in coastal waters, especially when ships are increasingly manned by multinational crews and English is used as lingua franca in the shipping industry.

English is not the first language for the VTS operators who are locally recruited in non English speaking countries and at times English may not be the first language for any of the ship's crew onboard (Kahveci et al., 2001, Sampson and Zhao, 2003). Over a million seafarers comprise the global seafarer labour market and a mixed nationality crew serving onboard is characteristic of approximately 66% of merchant vessels that trade internationally (Lane et al., 2002). Shipping sources seafaring labour from a host of countries worldwide and with the ratification of English as the international language of operation at sea by the International Maritime Organisation (IMO), seafarers find themselves in a situation in which they need to know English in order to live and work at sea. The same is true for the shore based VTS operators as they should be able to use English when requested. To promote communication along standard and predictable lines at sea, the International Maritime Organisation developed Maritime English (IMO, 2000) along with the key instruments of Standard Maritime Communication Phrases (SMCP)(IMO, 2002) (that replace the former Standard Maritime Navigational Vocabulary (SMNV)) and SEASPEAK - a technical and standardised form of English for a specific purpose, task and context. Research on 'Transnational Seafarer Communities' by Kahveci et al. (2001) points out that the use of Maritime English (IMO, 2000, IMO, 2002) was not observed onboard on any of the ships researched as part of their project. This paradox between the language prescription provided by the industry and the linguistic reality (un)observed onboard merchant ships helped locate my research in this identified gap. Seafarers have not been observed using Maritime English onboard (Kahveci et al., 2001) and VTS operators are advised to use it 'where practicable' (IMO, 2002) and when requested, hence it is safe to assume that both the communicating groups – VTS operators and seafarers would not be using Maritime English all the time for ship–shore communication.

Clear Talk is imperative for Traffic Management in high reliability industries like aviation and shipping where safety issues are paramount and irreparable loss to life and property can ensue should things go wrong. Accidents in the global industries of aviation and shipping have heralded the development of communication standards and ushered in reform. Use of non standard phraseology in pilot – controller communications stood out in the CVR (cockpit voice recorder) transcript of the 'Tenerife airport disaster' and was identified as detrimental to aviation safety. A Pan Am and a KLM flight were involved in a collision in 1977 at Tenerife that claimed 583 lives and is regarded as one of the worst in aviation history and is considered the precursor to standardisation in aviation talk. Mell (2001) argues that expressing language training in terms of common English is inadequate; it needs to address the context specific standard language to accomplish a given task in an industry. In shipping, the *Scandinavian Star* disaster with 158 fatalities exposed the language and communication barriers between the crew and the passengers that impacted their evacuation in the event of a fire onboard, and along with other factors exacerbated the dire situation onboard. This high profile accident could be regarded as the catalyst for the development of the SMCP by the IMO.

On the use of SMCP there are varying opinions ranging from the 'unworkable' to the 'important' as given below.

> "…the use of the SMCP is becoming unworkable because of its current complexity. There are also indications that, despite similarities of style, the SMCP is meeting resistance from mariners that its air equivalent did not." (Hadley, 1999)
>
> SMCP utilises "the simplest possible phraseology that out of context, would perplex native English speakers". (Sampson and Zhao, 2003)
>
> Peter Trekner (2010) advocates for greater use of SMCP and to consider them as "a sort of Maritime English communication survival kit".

Prior to the conduct of my research in the Mumbai VTS office, I undertook three site visits to VTS offices in the UK. Semi structured qualitative interviews with the VTS operators in the UK revealed that they felt that the SMCP/ Maritime English was somewhat restrictive.

> "Who speaks like that 'over'? Once you get the stamp on your ticket, it is okay" (field notes – interview with VTSO 3, I[7])
>
> "If we hear someone speak proper, then we comment, 'he's just been on a course'". (Field notes – interview with VTSO 1, II)

The VTS operators interviewed during the site visits in the UK were all native speakers of English and that could, in part account for their responses given above. The number of years of experience and having English as the first language could influence the use of the SMCP at work. The decision to conduct research in Mumbai, India was borne out by the UK site visits as Mumbai would accord me the opportunity to study ship shore VHF interaction across a diverse range of contexts between non-native speakers of English

2. Mumbai VTMS[8]

Situated on the west coast of India, the city of Mumbai is home to two of the thirteen Major Ports of India – the Mumbai Port Trust (MBPT) and the Jawahar Lal Nehru Port Trust (JNPT). This article draws upon research fieldwork in the VTS offices of both these major Indian ports.

Mumbai is vital for trade between India and the rest of the world and the Mumbai harbour is extremely busy with oceangoing traffic as it services two of India's major ports. 'JNPT port handles nearly 60% of India's total containerised cargo' (JNPT, 2004) and Mumbai port catering to a diverse range of cargo is also a very busy major Indian port. The Mumbai harbour is the only one route for vessels calling at any one of the two ports. In addition to the traffic for the two ports, the Mumbai harbour is also used by the Indian Navy, the Coast Guard, the Oil and Natural Gas Corporation of India, Shipping Corporation of India, barges, small supply boats, dredgers et cetera. The Mumbai harbour is a hub of activity. Nearby there are several prominent installations vital for defence and the economy like the Bhabha Atomic Research Centre

[7] The VTS operators have been anonymised and coded. The code 3,I refers to the first VTS operator at the third VTS site office.

[8] Please note that the call sign 'Mumbai VTMS' or 'Mumbai VTS' refers to the VTS of MBPT (Mumbai port). However here it is used to refer to the common VTMS system installed in Mumbai to service both the ports of MBPT and JNPT.

(BARC) and Bombay High (offshore oil and gas exploration) etc. Accidents have a direct impact on the VTMS office – as any investigation into the cause of the accident would require access to data recorded in the VTMS system as well as to the VTMS operator(s) on duty. There have been a few accidents in the Mumbai harbour that have endangered life, property, the environment and have adversely impacted the economy. In recent times, two prominent accidents have taken place in the Mumbai harbour within six months of each other. The MSC Chitra collision with MV Khalijia III on 7 August 2010 lead to the closure of the channel for more than a week (Jain, 2010). Great environmental concerns were raised when hundreds of containers some with dangerous cargo on board tumbled overboard. Another prominent accident took place on 30 January 2011 near Sunk Rock Lighthouse when an inbound Indian naval frigate INS Vindhyagiri caught fire and sank subsequently in the naval docks after a collision with the outbound MV Nordlake. VTMS was mentioned by a former port official who was quoted by an online newspaper article in the Mumbai Mirror.

> "The Vessel Traffic Management System, which monitors the movement of all ships from port, should have jumped in and sorted out the confusion. A lot of streamlining of traffic is needed on the Mumbai coast. MbPT should try to strictly enforced lane discipline." www.mumbaimirror.com(2011)

The VTMS operators for both the two major ports in Mumbai have access to the same VTMS system and can choose to display input from any one of the three shore based radars. The common harbour channel is about 12 nautical miles after which the JNPT channel begins. The common Mumbai harbour channel is monitored by VTMS Mumbai. Whilst the ships are in the common channel they are required to monitor VHF channel 12 which is the main working channel for MBPT and VHF channel 16[9]. JNPT vessels are required to monitor channel 13 when they are in JNPT limits and change to channel 12 when they are in the common channel.

A VTS can provide any one or more of the three types of services – Information Service (INS)[10], Traffic Organisation Service (TOS)[11] and Navigation Assistance Service (NAS)[12]. The website of MBPT does not mention the VTMS. In contrast, the website of JNPT does mention the VTMS system as a Marine service provided by the port. However it does not specify the levels of services (INS, TOS, NAS) provided by the port.

Even though the MBPT website does not mention the VTMS system, one is aware of its existence as the researcher has seen it in operation and interviewed VTMS operators and senior port officials about it. However there is no knowledge of the levels of services it provides. The VTMS operators of both the major ports in Mumbai had not heard of these three levels of service. An analysis of the contents of the ship–shore VHF interaction reveals that all the three levels of services are being provided by the ports, however they lack the awareness of the terms referring to the services they are already providing, raising issues about the international standardisation of training and certification of VTMS operators in the global shipping industry. There could be issues pertaining to the legal status of the services being provided for which the ports may or may not have been designated.

[9] VHF Channel 16 is the international channel for distress communication. After initiating and establishing contact on this channel, the channel can be switched to a suitable working channel in order to leave VHF Channel 16 free for use by others.

[10] INS=Information Service: A service to ensure that essential information becomes available in time for on-board navigational decision making. MCA (2006)

[11] TOS = Traffic Organisation Service: A service to prevent the development of dangerous maritime traffic situations and to provide for the safe and efficient movement of vessel traffic within the VTS area. MCA (2006)

[12] NAS= Navigational Assistance Service: A service to assist on-board decision making and to monitor its effects, especially in difficult navigational or meteorological circumstances or in the case of defects or deficiencies. MCA (2006)

2.1 The Work of the VTS Operators

The blueprint of the day's movements is made available to the VTS office. The schedule is prepared by the relevant department in the port office after a combined traffic check of all the docks and the berths available. In order to prepare for the day's work ahead of them, the VTS operators go through the program for the day. In addition to monitoring traffic and speaking on the VHF, the VTS operators answer the telephone, update the electronic log and manually enter information in several log books. The office of the VTS is embedded in and integrated with allied port operations and the language used by the VTS operators reflects their emic rationality and the embedded/situated nature of their purposeful utterances. Interaction on the VHF radio requires the VTS operators to 'penetrate accents' (Sampson and Zhao, 2003, Tagaki and Stone, 2010, Takagi, 2011) and an awareness of the existence of several Englishes (Butler, 1999). This article explores the use of English language in ship shore communication when the communicating individuals are spatially removed and temporarily connected via a radio interface. From the noise of the incessant VHF radio broadcasts, the VTS operators have to filter and respond to the communication meant for them.

2.2 Ship–Shore VHF Interaction

There are several key stages in ship–shore communication when the vessel transits the Mumbai channel. An analysis of the data reveals that inbound ships call the VTS prior to anchoring or after dropping anchor outside the port limits. Depending upon the day's docking program/schedule, the VTS operators call the ships in good time. Once under way the vessel could call the VTS upon entering port limits. Thereafter the vessel could call again when nearing the pilot station. At this juncture the vessel would also communicate with the pilot and subsequent to pilot boarding, the pilot would take on the VHF communication with the VTS until he would disembark after berthing/anchoring the vessel as the case may be. Outbound vessels communicate with the VTS from their berth or anchorage position within the port prior to the pilot boarding subsequent to which the pilot would take over the communication with the VTS. Thereafter the pilot would communicate with the VTS upon disembarking the vessel. If the vessel in question is a JNPT vessel then she would communicate with the Mumbai VTS upon entering or exiting BPL[13]. In addition to this, a lot of ship–shore VHF interaction takes place communicating the real-time and developing traffic picture/movement in the channel for the benefit of vessels plying in the channel.

A set of questions are asked from the vessels being called to the pilot station like the name, call sign, eta, draft forward and aft, cargo on board, the last port of call, gross tonnage, flag and crew composition et cetera. It is at this juncture that the VTS makes most use of the SMCP especially the "Phrases for acquiring and providing data for a traffic image" – "acquiring and providing routine traffic data" given in AI/6.1 of the SMCP (IMO, 2002). The transcript extract below demonstrates the same.

VTS – What is your vessel name, vessel name?
Four Bay – My name, vessel name is *Four Pay, Four Pay*. Over.
VTS – *Four Pay*. What is your destination port?
Four Bay – My destination port is (disturbance) and berth shall be Jam Nagar Dweep zero
VTS – Can you spell out your vessel name?

[13] Bombay port limit

Four Bay – My vessel name is, Foxtrot Oscar Uniform Romeo. This is the first word and the second word is Bravo Alpha Yankee. I repeat one more time Foxtrot Oscar Uniform Romeo and Bravo Alpha Yankee. Over
VTS – *Four Bay*, what is your eta to pilot station, eta to pilot station?
Four Bay – My eta pilot station is one three zero zero. One three zero zero. Over
VTS – What is your maximum draft?
Four Bay – One two decimal two. One two decimal two.
VTS – What is your GRT, gross tonnage?
Four Bay – Gross tonnage is five two one seven six. I repeat five two one seven six. Over.
VTS – What is your last port?
Four Bay – Last port is Rastanura, Rastanura, Saudi Arabia. Over
VTS – What is your flag nationality?
Four Bay – Flag is Italy, Italy.
VTS – What is your crew nationality?
Four Bay – Crew nationality is mixed Bulgarians, Italians, Russians, Ukrainians Over.
VTS – Your cargo, cargo?
Four Bay – My cargo is mixed, Arabian light crude oil ... and Arabian heavy crude oil ... both cargo are mixed.

In the following extracts MV Chong Ming reports upon entering the port limits, confirms that she will call back again once 15 miles from pilot station and confirms eta and instructions regarding pilot boarding .

VTS – *Chong Ming Chong Ming*, VTS
Chong Ming – good morning Sir Chong Ming, now inbound, inbound passing the reporting line. Report to you over.
VTS – ... how far you from pilot station now?
Chong Ming – About twenty miles from pilot station
VTS – Okay, copied. When you fifteen miles from pilot station call VTS again.

VTS – Okay Chong Ming you can arrive pilot station one three three zero, one three three zero you should be at pilot station. Confirm, copy.
Chong Ming – Yes, one three three zero, I will arrive pilot station
VTS – Correct and pilot ladder on starboard side, 1 metre above water level

A standard set of questions would also be asked from ships ready to depart like their ETD, port clearance number et cetera. Information would also be provided regarding the pilot boarding.

Juliet – VTS, Juliet

VTS – Juliet VTS

Juliet – VTS boarded *Enchanter* 0950, draft 6.9, 7.2, next port Asdot port clearance Foxtrot 965, dated 17/12 valid till 23/12

In most interactions, the language used in ship shore VHF interaction would be similar to normal English as the following extracts show. A vessel, Albatross 19 had been trying to contact the VTS and the second extract shows a non standard interaction in which a vessel is coming with a dead body onboard.

Albatross 19 – VTMS, VTMS *Albatross 19*
VTS – *Albatross 19*, what is the problem? Where are you now?
Sam 11 – Sir, one two three zero, one two three zero, eta to pilot station

VTS – Okay one two three zero pilot station, okay, please inform your agent that you are coming with a dead body. Over.

After disembarking the pilot MV Mikaeel was going out to sea. The VTS called her several times and asked her to come back into the channel by turning more to starboard. Despite the repeated calls, the VTS operator could see on the screen that the direction vector for Mikaeel was moving out of the main channel where the depth was less and hence the VTS gave MV Mikaeel a course to steer, which can be considered a provision of NAS. The extract of the transcript is given below.

VTS – *Mikaeel*, VTS
VTS – *Mikaeel*, *Mikaeel*, VTS
Mikaeel –VTS, *Mikaeel*
VTS – Yeah *Mikaeel*, what is your course now?
Mikaeel – Two nine zero, two nine zero
VTS – Alter to two five zero
Mikaeel – Two five zero okay
VTS – Yeah steer two five zero

There can be issues regarding the legal status of the VTS instructions as mentioned above. In the following extract the VTS asks the mentioned vessels to drop anchor.

Mikaeel – good afternoon Sir

VTS – yeah Mikhail note down the position ... keep safe distance from other vessels within that area you can drop anchor

This is in contrast to what I learned from my site visits in the UK. For advising a vessel regarding anchoring, the VTS operators in the UK said that they would couch their utterances in non-committal phrases and tell the Master to use his discretion and say that, "vessels of your size usually anchor about there" (field notes: interview with UK VTS1). One former UK VTS operator told me that he would, "throw everything back at the old man[14] and let him decide" (Field notes; interview with former UK VTS5).

A lot of inter–ship communication takes place in the Mumbai channel for the prevention of collisions and the VTS considers it useful if the ships have confirmed between themselves regarding how to pass as the following transcript extract demonstrates.

Enchanter – VTS this is *Enchanter* I will keep this *Kamal forty* on my port side. I will keep this *Kamal forty* on my port side

VTS – you can speak directly *Kamal forty*. Channel twelve stand by

This is antithetical to COLREGS (IMO, 1972, Consolidated Edition 2003) however inter–ship communication is considered a part of navigating in US inland waterways (Stitt, 2003).

There can be miscommunications in ship shore VHF interaction as mentioned below –

VTS – Can you confirm your call sign? Call sign of your vessel

Chong Ming – This is a general cargo vessel, general cargo vessel. Over

The VTS operators do not make use of any of the eight message markers as given in the SMCP (IMO, 2002) in the VHF interaction which ships. The Mumbai VTS and the JNPT VTS do not

[14] Referring to the ship's Captain

make use of the phrases given in AI/6.3 "Handing over to another VTS" (IMO, 2002). The confirmation of targets between the two adjacent VTS is achieved by the pilots reporting each time they exit/enter the reporting limit of the concerned VTS and thereafter the concerned VTS monitors the vessel. The following transcript extract demonstrates this.

JP2[15] – VTS, VTS, JP2
VTS – JP2, VTS
JP 2 – Coming out on *APL Sharjah,* BPL one zero one five
VTS – okay, copied

3. Conclusion

There is limited use of Maritime English in the form of SMCP, however, it can be argued that the particular set of questions/phrases used are similar to normal questions in English but interspersed with nautical vocabulary. English is used almost all the time by the VTS operators. The language used is also influenced by the entity being addressed. In the case of small barges, Hindi is used and while interacting with mooring launches, tugs, pilot launches et cetera, the local language Marathi may be used. The VTS operators speak slowly, repeat, use phonetics, use closed loop communication[16] and use brief standard phrases/sentences especially useful when they encounter challenges in communicating with vessels with foreign crews, mostly from Europe, China and Southeast Asia. This helps streamline ship shore VHF communication and serves to maintain clarity and dispel confusion. The interaction of the MBPT VTS on VHF is purposeful and directed towards helping safe navigation in the channel. They have not been trained in Maritime English; however they are conversant in the English language and felt that by and large they did not face any challenges in communicating with vessels. The VTS operators considered themselves comfortable in using the English language for work and followed standard international procedures for radio telephony.

4. Recommendations

The VTMS operators recruited into Mumbai and the JNPT ports are mostly from two separate streams - ex-defence and ex-merchant Navy. The ex-defence personnel have been trained by the Signal corps of the armed forces and the ex-merchant Navy radio officers have the relevant certificate in radio communication from an Indian Maritime College. The VTS operators in Mumbai have a clerical grade. They are trained and have extensive experience, however the training received by them is not the V–103 (IALA-AISM, 2005) as understood in the UK. Even though SMCP may not lend itself to every VHF interaction, training in the same is recommended for international standardisation. A clear understanding of the legal issues pertaining to the services/instructions they provide would help them to appreciate the legal aspect and the roles and duties expected of them. To help them understand their role from the point of view of a navigator, an understanding of ‘The Rules of the Road’ and ‘COLREGS’ is recommended. Adequate and appropriate training at par with international standards would benefit them to perform their roles to the best of their abilities.

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[16] Wherein the communication is repeated and acknowledged.

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A FURTHER STUDY OF THE FEASIBILITY OF THE GLOBALIZED EXAMINATION OF MARITIME ENGLISH (GEME)

Abstract

At IMEC 22 which took place in October, 2010 in Alexandria, Egypt, an acronym GEME, that is, the Globalized Examination of Maritime English , manifested itself, which has invited some well-meant interest ever since. GEME is intended to choose the right seafaring candidates equipped with the aptitude of Maritime English for undertaking international voyage with a purpose to ensure safety at sea which has been a recurring issue at every International Maritime English Conference that irks not only the shipping companies but also frets the maritime English teachers. The present paper, a follow-up of the author's paper A Pilot Study of the Feasibility of the Globalized Examination of Maritime English (GEME) , will further delve into the GEME. The author's view is clear-cut: only by holding the international maritime English examination will the right seafarers with the best aptitude of language communication competence be selected and those be eliminate who may pass some national standardized maritime English proficiency assessments or tests and join the international vessels armed with a multilinguistic crew but cannot communicate effectively in English thus to the prejudice of human life and property.

Key words: *GEME globalized Maritime English feasibility examination*

1. Introduction

Nobody will deny the important role maritime English plays in the safety at sea because as much as 80 % of sea perils are attributable to human factors, of which English insufficiency or ineffective communication is the main cause. It should be appreciated that the IMO has never ceased to endeavour to improve or tackle the insufficiency of maritime English among seafarers, especially ratings. The Standard Marine Communication Phrases or the IMO SMCP is one of the well-applauded product from which the position of English can be read:

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 communications on board between the pilot and bridge watchkeeping personnel. (IMO SMCP 2004)

Indeed, no other language, be it Chinese, which claims to have the largest population to speak it, or Esperanto which has never been a secondary official language of any recognized country, or even French, which once claimed to be a more polite language than English, can

replace English. There is no national patriotism but the naked fact that English doubtless is the internationally recognized language, maritime English is no exception. Furthermore, in the 2010 Manila Amendments of the STCW, maritime English has been given unparalled position. The wording of effective communication, clear and unambiguous, oral and written form are tough requirements of maritime English. There are four changes in the Manila Amendments(P. Trenkner & C.W. Cole 2010)

Apart from the non-specified requirement of effective communication, at least four issues in the amendments are of great significance:

Firstly, besides the use of the SMCP, English in written and oral form has to be taught/learnt and mastered. In this way the communication skill of "writing" is given much higher priority than in previous Conventions.

Secondly, communication with VTS centres is now fortunately accommodated in the Convention.

Thirdly, that effective communication ashore is also mentioned is a further plus in the amendments as the communicative mastering of the interface "ship x shore" is now on the agenda

Fourthly, the clear reception of communication is furthermore mentioned thus emphasizing the development of another communication skill, listening, the importance of which has been somewhat underestimated in the past.

Then , Model Course 3.17Maritime English is another contribution to the improvement of seafarers' English. *It is designed to help trainees develop their communicative competence in English to a level that will enable them to satisfy the competences relating to English language set out in the STCW 1995 Code. The concept that underpins the specific requirements of the STCW 1995 Code is that seafarers need to be competent in using English for professional purposes.*(Maritime English Model Course 3.17)

Besides the contributions made by the IMO to maritime English , some testing companies or organizations do their share in the standardization of or testing maritime English in an objective and quick way so as to propel maritime English ahead, among them are well-recognized MarTEL and Marlins.

MarTEL is the standardised test of Maritime English for safer seas. It is acknowledged by all concerned that effective knowledge of English at sea and in ports is a must for all seafarers responsible for safety and security of the ship, its crew and its passengers.

MarTEL offers the tests at three different phases. Phase 1 is based on upper intermediate/advance level of English, Phase 2 is for Officers of Watch for Deck and Marine Engineers and Phase 3 is for senior officers such as senior deck and senior marine engineers. Each test will be based on key skills of English language and take approximately 145 minutes.

Marlins is the leading provider of English Language Testing and Training solutions to the maritime industry. It is among the most widely known and used tools for assessing English proficiency in maritime context. It is computer-based and delivered which makes it suitable for individual testing. The test of spoken English is distinctively shipping oriented but does not test subject knowledge. It is conducted as an interview using visual prompts to elicit natural

spoken English. The interlocutor evaluates proficiency at three levels – elementary, lower and upper intermediate focusing on spoken fluency, spoken accuracy and listening comprehension. The tasks involve description of job routine procedures, comparison, narration and discussion.

While lots of efforts have been made and achievements scored in maritime English teaching and learning, there still remains a plethora to be done to satisfy ever-increasing demands on the effective communicative ability for seafarers. For example, SMCP is meant to simplify English structures so that those without much knowledge of English can understand and use it on board. The intention is well meant, but in practical work or in some cases, SMCP is not so well practised or has not yielded the results the compilers originally desire. What follows is an ME survey regarding the SMCP conducted by Ulf Georg Schriever, a master and compass adjuster with a PhD diploma from Australian Maritime College.

The SMCP was previously described as the most prolific publication currently used in the attempt to establish common linguistic ground at sea. However, almost two thirds (64.2%) claimed that they never or rarely made use of the publication.

The finding shows that 73.3% of native English speakers never or rarely used the SMCP, while only 45% of non-native English speakers said they made use of it never or rarely. Or, to put a positive slant on it and disregarding the participants who answered the question with "sometimes" (19% overall), there were only 10% of native English speakers who always or often used the coded language as opposed to 31% of non-native speakers.

The explanation for the above result may at first glance be surprising. Native English speakers should after all be in their element: The SMCP is compiled in the English language and by speaking that lingo as a mother tongue would, on the face of it, make it comparatively easy for a native speaker of English to use the terms and phrases from the publication.

What would happen if the SMCP escapes the seafarers, and this is normal and may occur sometimes due to a variety of reasons. First, somebody who claims to be good at English may not be willing to study or memorize the SMCP; second, some less linguistically able seafarers may forget the SMCP for being nervous or not so familiar with them or just cannot keep these useful phrases long hours in their memory. So for the former, they just switch to other ways to make themselves understood, anyway, there is more than one way to verbally pass their points if not including non-verbal ways like gesturing, drawing, using body languages, etc. However, for the latter, they have not any way to help themselves out, because they are trained to use the SMCP only, and what's worse, they have not the language aptitude, in other words, SMCP may not help them but kill them, because they are SMCP-dependent.

It should be noted although MarTEL and MARLINS have been toiling their respective way to push their ME test forward to cover more areas and won high prestige among shipping companies. Still, until now, they are not international, not global, not compulsory. As put by Professor Reza Ziarati, *there are no international or European standards yet for the evaluation, assessment and testing in Maritime English to measure students' competence and performance in this very important subject (*Taner Albayrak, Reza Ziarati 2009*).*

Taking into account of the fact that ME plays more and more decisive roles in the safety at sea, and further we shall not close our eyes to the limitations of the IMO SMCP or other well-established quasi-international ME tests and finally, the ultimate problem with ME, the present author asserts, lies more with the man rather teaching methodology or textbooks. If the right persons have been picked out, problems with English may be smoothed out. This can be

explained why TOFEL, GRE, or IELTS keep thousands of disqualified out of the borders of the United States or the Commonwealth countries. Similarly, if we have the same kind of internationally standardized ME examinations, then many unqualified seafarers will be kept off the board. This is the basic principle of the GEME, the way to choose the right persons with good aptitude to learn English who can have the ability to learn English in an autonomous way. Next will be discussed why is GEME needed, what is GEME, How is GEME, Who organizes GEME, Where is GEME and When is GEME.

2. Why is GEME needed?

The principal reason why the GEME shall be necessary and critical is that: of all the professions, international seafaring may be the most globalized. Although it is already legalized by the IMO that English is the only common language to be used on board the international ocean-going vessel, the IMO-based statistics has indicated more than 80% （IMO, 2005）sea accidents arise from lack of adequate command of English. It is true that English proficiency differs from continent to continent and from country to country. But English requirements for any international seafarer from any country shall be the same. Therefore, there should be an internationally approved or IMO-based unified ME examination. The second reason is that by means of the GEME, we can choose the best candidates, those who have the aptitude to go on with the study of Maritime English and eliminate whoever lacks the potential to learn English. The third reason is that if this is an international test, there is only one benchmark, one organization responsible for the designing, writing and editing questions and paper authenticity and confidentiality will be much more ensured. Further, there is another devastating possibility that we cannot close our eyes to: forgery. According to the Project, Leonardo da Vinci Programme GETQUALITY

The presented project touches upon a very sensitive subject – safety at sea. One of the most important components of safety is the human factor. No safety can be secured without competent seafarers. Certificates are evidence of competency and seafarers' certificates are internationally recognized. Unfortunately, there are seamen who do not hesitate to use fraudulent certificates. The framework of this project covered just a small part of the problems caused by the forgery. The project was aimed at improving the awareness of the situation regarding fraudulent seafarers' documents, the development of an anti-fraud tool package and the safeguard which would protect ships from seamen without genuine documents. An anti-fraud measure system, which protects vessels from falsifiers, can contribute a great deal to the safety at sea. Falsification jeopardises the national and trans-national trust in seafarer certificates' transparency.

3. What is GEME？

As far as what is to be tested in the GEME, both the IMO SMCP and COLregs can serve as good testing materials. The former is good for the sections of listening and speaking while the latter can be used to test reading comprehension ability. To add fun and avoid knowledge-biased questions, maritime magazines and newspapers can be referred to in designing questions.

Besides, a GEME-based vocabulary shall be compiled so that candidates can be more oriented and motivated to work hard to get good scores.

I agree with the three phases of the MarTEL, but I do not quite agree with the weight ratio of each Phrase and also propose increasing the ratio of objective questions so as to encourage solid learning and dampen wild guessing. Here is my tentative proposal of the future format of the three phases of GEME and their weight ratio:

Phrase I：	Listening 40%，	Structure 10%，	Reading 20%，	Writing 10%, Speaking 20%;
Phrase II:	Listening 40%，		Reading 30%，	Writing 10%, Speaking 20%;
Phrase III	Listening 25%，		Reading 30%，	Writing 25%, Speaking 20%;

Of the four ME language skills(translation is not included in the international testing, as candidates are from different countries, but in my opinion, translation is an effective way to check one's language accuracy, so I always hold in a national ME test, translation shall be allotted at least 20%.), listening is the most difficult one, especially for the international seafarers who are exposed to working with colleagues with different accents. So it is proposed that listening section shall be given higher weight ratio for Phases I and II. It is further recommended that different accents, environmental noise such as the howl of the waves, the jarring noise of chipping, scaling and scraping on deck and rattle of machinery, etc. shall be recorded to test the genuine understanding of seamen's working setting. As for Phase III which tests the ME proficiency of captains or chief officers, writing ability is more required. They are required to write reports, note sea protests, even file lawsuits, etc..

4. How is GEME?

Like the IMO model courses, if the GEME is to take place, on the agenda are as follows:

4.1. The syllabus shall be designed and developed. Syllabus is the guideline both for the teachers and students. Teachers can develop the textbooks of their own based on the syllabus and students can prepare for the test based on the framework of the syllabus.

4.2. The syllabus-based vocabulary. The words can be selected from the required SMCP, Colregs, sections of the other IMO-adopted conventions and the required textbooks. As we have three different levels of the GEME, there shall be three different classes of word lists.

4.3. The sample test papers for different levels. The sample paper is intended to show the candidates what the test is, the scope of the tests, and how to prepare for the test.

4.4. Sampling tests shall be conducted in some typical navigation institutions so that analysis of the difficulty level may be made to adjust the level difficulty before the official examination takes place.

5. Who organizes GEME?

Who can be the organizer of GEME? The answer can be optional: IMO's own testing department or the world's most renowned ETS(Educational Testing Service) or Cambridge ESOL(English For Speakers of Other Languages). ETS develops, administers and scores more than 50 million tests annually — including the TOEFL and TOEIC tests, the GRE General and Subject Tests and The Praxis Series assessments — in more than 180 countries, at more than 9,000 locations worldwide while Cambridge ESOL offers the world's leading range of certificates for learners and teachers of English --taken by over 3 million people in 130 countries. They help people gain entrance to university or college, improve job prospects or

measure progress in English. More than 10,000 employers, universities and government bodies around the world use the results to find right persons. IMO, as an international organization under the UN, which has so many missions to implement, perhaps is not the right choice to do this job. In the opinion of the present author, Cambridge ESOL is the best candidate for this role. The reasons are as follows: first, it is the developer of other international professional English examinations such as ILEC and ICFE and has gained experience of setting occupation-based examinations. Secondly, for multi-ethnic and multi-linguistic seamen, the most important part of language testing is focussed on the communicative competence which is well embodied in the IELTS. Third, from the perspective of geographical location, Europe stands for the apex of international shipping. IMO is in London, the World Maritime University is in Sweden. IMO's received pronunciation is British type instead of the currently more popular American pronunciation.

6. Where does GEME take place?

It shall be conducted on a national basis, that is, like TOFEL, officially approved GEME testing centre shall be set up and must pass the required evaluation and assessment before the formal GEME takes place. Any violation of the authenticity of testing shall forfeit the right to conduct the GEME test.

7. When is GEME?

It shall take place at least 10 times and frequency may be increased if the test is conducted on line. Consideration shall be given to holding the test on board the vessels as, from a practical perspective of view, some seafarers cannot leave their post until somebody joins the vessel to relieve them. Also, the GEME can be recommended to have its testing centers set up in the world's famous ports, such as ports of Rotterdam , Singapore or Shanghai. In a word, seafarers work on board and at sea, not on land, sometimes, they cannot decide when to disembark, but the rights to take the GEME shall not prejudiced but be well safeguarded so that they will find the motivation to study for better life.

8. Conclusion:

GEME is only the author's personal idea which has not been put to any practical evaluation and assessment owing to a variety of reasons. First, the author is not so much scholastic or influential. Second, the author does not go out of his own way to get support or funds or any sponsorship for this GEME. Third, it seems a bit naive to have a GEME as even such a powerful commercially smoothly run MARlins cannot do the job on a global scale in its true sense. How can the GEME be implemented? It is true that the GEME involves not only the IMO, but the shipping companies and educational institutions alike, but there is a western proverb: nothing is impossible to a willing heart and in Chinese there is an old saying that goes: hurl a cheap brick so as to hook a valuable jade. So my GEME is merely a brick, a concept which needs the determination of the IMO to turn it into a true jade.

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COMMUNICATION AND PRACTICAL TRAINING APPLIED IN NAUTICAL STUDIES

Abstract

Communicative language training set in the context of real-life situations at sea has hardly been part of any curriculum for training merchant navy officers. It is found that English language skills of the ships' crew is at a very low level, resulting in ineffective communication and it has also been identified that ineffective communication is the major cause of the many accidents. This fact along with the cultural diversities of multi-national ship crews creates a major current problem.

The CAPTAINS project (EU Leonardo Captains Project, 2010-2012) intends to create a knowledge base of real-life scenarios on linguistic and cultural diversities with respect to effective communication in English among seafarers on ships and ashore. The CAPTAINS project (ibid) will develop a software based maritime English tool in which the scenarios developed will optimally drive the definition of proper learning approaches, virtual collaboration and learning spaces as a medium of novel learning platforms deploying 2D/3D simulations. This will be incorporated with educational content and be bundled as online learning through an advanced e-learning platform. The knowledge base of real scenarios is intended to be included in the curriculum of Maritime English in maritime education and training institutions. Industrial and vocational training would benefit from the existence of a software training tool for its sea-going and port personnel which focuses on effective English language communication, as an essential ingredient in safe and efficient ship operations.

This paper also includes the needs analysis element of this project, in which many seafarers and maritime English teachers were consulted. The methodology followed for this needs analysis involved the creation of a cadet level questionnaire, which was piloted on the cadets at TUDEV Institute. This was followed by the development of two 'main' questionnaires, (one for seafarers, and one for maritime English teachers) which were made available online through the project website, and promoted widely throughout the partnership's network of contacts. These questionnaires remain online for additional data collection for future use. Following the elaboration of the questionnaire results, workshops and round table discussions took place in order to gather the opinions of the target groups. The following is an account of the results of the surveys for maritime English teachers and seafarers, and a summary of the workshop reports.

Keywords: *Maritime English, communication, maritime education and training*

1. Introduction

English has been set as the language of the sea at an international level and it is used in all situations such as ship-to-ship, ship-to-shore and between maritime personals; however it is not always non-problematic since nowadays ship crews are multi-national instead of being from a single nation. Linguistic, paralinguistic and cultural and discourse formation issues act as a barrier to the safety of the ships at sea (Ziarati, 2006). A careful study identified that 80% of maritime accidents are down to human factors (Verbek, 2011), of which failure of communication represents one third (Ziarati, 2006, Trekner, 2007). The IMO has also underlined the importance of effective communication in an International Seminar as a crucial issue for Marine Safety (Winbow, 2002). Therefore, it is very necessary to remedy those accidents caused by human factors contributed by communication failures. The problem is not only in the partner countries but worldwide (Loginovsky, 2002).

The CAPTAINS project (ibid) can help reduce the communication failures, once it sets and develops standards on scenarios based learning approaches and respective courses on communicative English learning. Already, it has prepared a knowledge base of scenarios simulating real-life situations of effective communication that includes sets of real accidents, incidents and near misses that will then be incorporated in the existing MET programmes in the partner countries, Europe and later-on world-wide.

The CAPTAINS project (ibid) intends to develop an environment for learning English by means of 2D/3D simulations and is expected to reduce communication related issues at sea. This will be purely scenario based extracted from the past accidents, incidents and near misses which will enable to demonstrate the wrong and right ways to communicate and potential critical situations may lead to and train those maritime personnel on what action to take to avoid them. While developing the course, the standards will transfer innovation from existing English model courses such as the International Maritime Organisation's (IMO) Model course 3.17 and the IMO's Standard Maritime Communication Phrases (SMCP).

This paper is structured as follows: where section one has provided a brief introduction to the rationale, aims and objectives of the CAPTAINS project (ibid). The next part (section two) includes the analyses of the questionnaire, which was handed out to lecturers, professors, and seafarers whom have sea experience. In section three, the results of the workshops that were carried in the partner countries to support the outcome of the questionnaires will be provided. Finally, section five presents the conclusions of the paper.

2. Analysed result of the questionnaire

2.1 Demographic

A total 109 seafarers from 12 different countries completed the questionnaire for seafarers. Over two thirds of participants were under the age of 35. Over half had more than 6 months of sea service, with almost a quarter having between 5 and 10 years at sea. The majority had served on bulk carriers, and tankers. There were responses from 25 senior officers, 18 officers, 65 officer cadets, and 1 rating.

The questionnaire for maritime English teachers was completed by 64 lecturers and professors from over 30 maritime academies and universities worldwide. 39% of responses came from

participants who had prior seafaring experience. Around half of the participants told us that they prepare their students for formal English language exams or tests of maritime English.

2.2. Proficiency levels

Maritime English teachers told us that 41% of their current students were at B1 level, and 34% were at B2. 75% of the students covered by the survey were at either B1/B2 level (intermediate) with their English. This is a significant finding, as it clearly indicates where learning tools and maritime English tests should aim in order to make a significant impact and address user needs. 24% were at A1/A2 level (beginner), and only 1% was at C1. We asked them what English proficiency level they think is required for certain jobs on board. The most frequent answers for these categories were:

- Ratings: B1
- Cadets: B1/B2
- Deck Officer: B2
- Engineer: B2
- Pilot: C1
- Chief Engineer: C1
- Master: C2

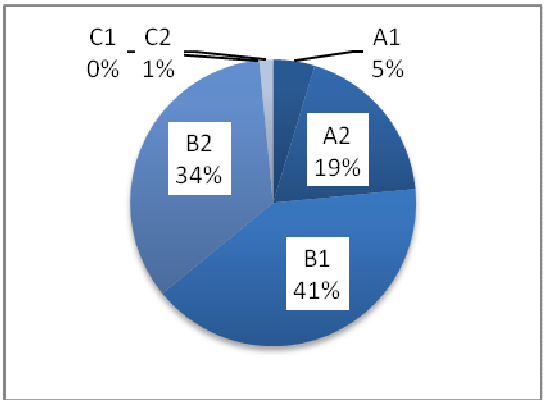

Figure 1: Language level survey participants' current students

While the average cadet graduating from maritime academy, and passing an appropriate test of maritime English, will be sufficiently competent in English to fulfil the role of a deck officer or engineer, those intending to progress to a senior position should, (in the eyes of the maritime English teachers surveyed) advance their level of English.

2.3. English Language training

Approximately one third of the seafarers possessed a formal English language qualification, such as IELTS, FCE, or TOEIC. The seafarers told us that of the four language skills (reading, writing, listening, and speaking) they were, in general, stronger in reading than in the other skills in English (question 10). 59% of the seafarers had received more than four years of general English instruction, but half that number had received the same amount of maritime English instruction. Only a very small minority (less than 5%) said they had received no English instruction at all.

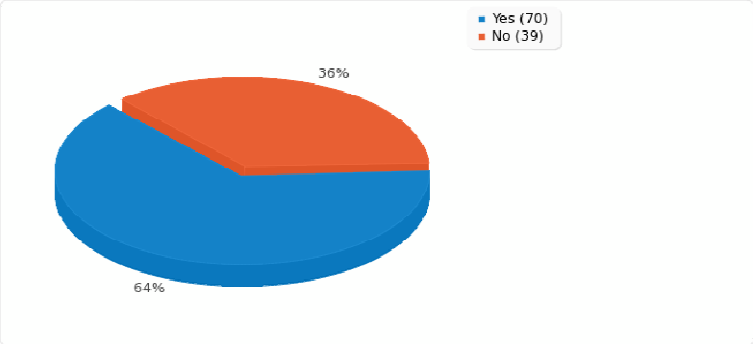

Figure 2: Questionnaire for seafarers: were you ever taught any nautical subject matter with English as the language of instruction?

Most of the survey participants were taught nautical subject matter with English as their language of instruction. This method appears to be very successful (only 5% of participants said that it wasn't) and is used at several institutions within the CAPTAINS partnership. The main benefit of this method is that cadets learn nautical terminology in context.

2.4 On board communication

72% percent of the seafarers said that more than one language was spoken on board during their current of most recent service on board. Most participants agreed that communicating in one language in emergency situations was very much affected by this fact. One participant stated that there were times when, because of his interlocutor's pronunciation, he had to leave his station in the cargo control room and go to the deck to speak to the person face to face and 'watch his hand movements' in an attempt to communicate.

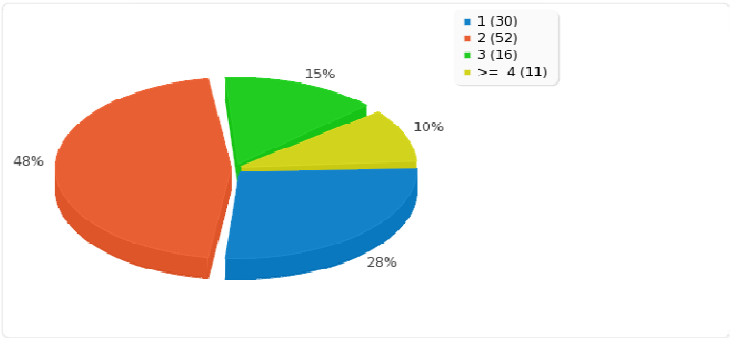

Figure 3: How many languages were spoken on board during your current or most recent service?

Most the seafarers said that they often use English to communicate with their fellow crew members, in particular when speaking with the ratings (45% said they use English 'all the time' when speaking with ratings).

2.5 Cultural differences on board the vessels

Nearly three quarters of the seafarers agreed that cultural differences have an affect on the level of communication on board. One participant stated that 'crew members of different

nationalities react and report differently' when faced with emergencies. Paralinguistic elements such as hand gestures and silence have varying significance across cultures.
Another salient point, which was echoed in the open responses, was the idea that people can say that they have understood something, but in actually, they have not. This clearly underlines the need for communication to be made using standard vocabulary, and for seafarers to be able to give the correct feedback (as documented in SMCP) to confirm that they have understood an order. Another participant stated that some native speakers of English sometimes do not use SMCP all the time, and variations in their use of grammar can be confusing (for example, many native speakers of English use double negative forms when speaking). The issue of people from different cultures using different hand gestures was raised.

2.6 External communication

When asked how often they use English for VHF communications in international waters (Q17.4), 81% answered 'all the time'. 28% of the seafarers thought that it was 'very difficult' to understand incoming messages from non-native speakers of English. The issue of pronunciation was the most common reason for not understanding in incoming message.

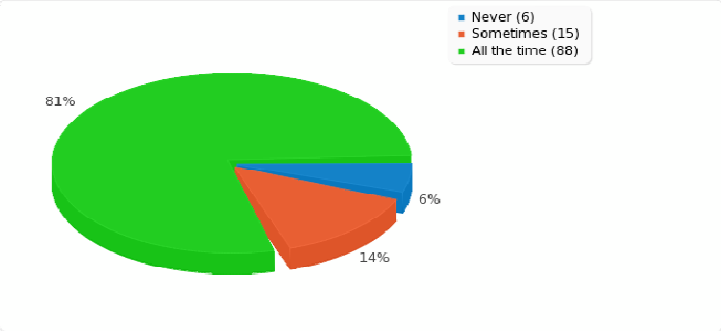

Figure 4: How often do you use English when speaking with Ship-to-ship/Ship-to-shore in international waters?

The seafarers were asked to rank the importance of using English in several situations on board. In general, questionnaire the seafarers ranked VHF communications (ship the ship / ship to shore) and 'emergencies on board' slightly higher than the other choices provided. Other suggestions provided by participant included 'communication with pilots', and 'communication with port workers'. This is an interesting point, as ships in entering ports in foreign countries will often encounter pilots and port officials who speak a different language to those on board. This point is reinforced by the answers to the question: 'which activities require you to speak in English?' The four that were marked 'most important' were:

1) Communications with pilots
2) Communications with coastguards
3) VHF communication (ship / ship, ship / shore)
4) Communication with cargo handlers

Seafarers were asked what they found most difficult about communicating their message in English using the VHF. The most popular answer (after noisy / distorted transmission) was related to accent and pronunciation. Similarly, when asked what the found most difficult about comprehending a VHF message, the most common answer was: 'because the sender does not pronounce words like you do'. This shows that even when using SMCP, the issue of pronunciation is still present.

2.7 Teaching contexts

The two most popular methods of teaching provided by the maritime English teachers are 'communicative approach' style lessons, and lectures with audio recordings, pictures and videos. They said that they seldom use distance learning, and online learning methods using 2D and 3D animations. When asked to rate certain types of activities as to how appropriate they would be in the proposed new e-learning software, the maritime English teachers almost unanimously marked 'simulations and games' and 'interactive activities' as being appropriate. They mostly also marked '2D / 3D animations' and 'self learning CDs' as being extremely useful. This shows that there is demand, and room for, a solution to provide these things.

Maritime English teachers told us that they would very much like to see contexts relating to 'safety and security' and 'emergencies on board' in the new e-learning software. Other contexts such as VHF communications and anchoring / mooring operations were also popular, although one participant suggested that the e-learning software might contain a section relating to the engine room department.

Seafarers told us that they thought practical training on board was the most appropriate way to learn maritime English, followed by conventional classroom lessons. Following these two essential elements were interactive scenario based applications and self learning. These categories were broken down into the four skills. Participants told us that these methods are a good way for them to practise their reading and listening skills.

2.8 PREVENTING FUTURE ACCIDENTS

The group of seafarers were asked if they had been on a ship which was involved in an accident or near miss due to a communication failure. 74 answered 'no', 32 had been involved in a 'near miss', and 8 had been involved in accidents.

The most communication failures were during 'ship to ship' and 'ship to shore' communication. Many accidents also fitted into the category of cargo handling failures. The nature of the communication failures was fairly evenly spread between vocabulary, grammar, pronunciation, fluency, and the use of SMCP.

Both groups of participants were asked which language functions would contribute to a reduction in the number of future accidents. These were classified into four main groups: speaking, listening, reading, and writing. The most popular two choices for each group are as follows:

	ME Teachers	Seafarers
Speaking	• Describe / locate safety equipment • Interacting with the pilot	• Giving orders • Answering questions for clarification
Listening	• VHF exchange procedures • Obtain VTS (vessel traffic service) data or any other external source data	• VHF exchange procedures • Receiving orders
Reading	• Consulting operation manuals and ship's documentation • Vocabulary acquisition: SMCP for VHF communications	• Consulting operation manuals and ship's documentation • Vocabulary acquisition: SMCP for VHF communications
Writing	• Making entries in the log book • Writing a damage report	• Making entries in the log book • Writing a damage report

Table 1 – Suggested training methods in teaching/learning Maritime English

The results were comparable. Both groups more or less agreed on the choices provided in the questionnaire for most categories as a means of preventing future accidents.
Survey participants considered speaking and listening skills to be more important in preventing future accidents than reading and writing skills. This was the expected response, as most communication at sea is made by speaking and listening, especially in critical situations, which are immediate.

3. Summary of workshop

3.1 About the workshops

Workshops were organised by the University of the Aegean, the University of Cadiz, TUDEV Institute of Maritime Studies, 1st Evening Vocational Senior School (Athens), and Centre for Factories of the Future (UK). There were a total of five workshops, four of which were held in person, and one final international workshop, which was hosted online, via Skype video conference. The workshops were attended by people from the following groups: Maritime English teachers, maritime lecturers, English teachers, cadets, managers and representatives of shipping unions, supervisors of VET, directors of maritime academies, academics, master mariners and other seafarers (such as officers, engineers, and ratings), VTS operators, and specialists in applied linguistics.The workshops varied slightly in style, but in general, all workshops used the questionnaire and accompanying results as input for the discussions. Additional key knowledge was gained by consulting the target groups and stakeholders, who

were also asked for their opinions on the shape that the proposed e-learning software should take.

3.2 Content of the software: level

Positioning the software at the appropriate level is an important consideration. The TUDEV cadet questionnaire showed that the cadets mostly considered themselves to be of intermediate (or 'competent') ability. The results of the main questionnaire showed that most of the cadets at the academies of the maritime English teachers questioned were also at intermediate level (75% B1 and B2), with a few A2 level, and hardly any at the upper or lower thresholds. The Greek workshop discussed the issue of levels, and produced conclusion that B2 would be a suitable level for ordinary seamen, and C1/C2 would be appropriate for officers. This was supported by the Turkish workshop, which found that ratings should speak at A2 level, cadets at B1, officers at B2, masters at B2-C1, and pilots at B1-C1. The Skype workshop participants reported that most of their cadets were at around B1 level, and it was suggested that cadets would be the most likely users of this software, at least initially. It was agreed by all at the Skype workshop that beginner level learners (A1) do not have enough knowledge of English to be able to command maritime English, as technical vocabulary is often best learned through Content Language Integrated Learning, as mentioned in the Spanish workshop report. The workshops in Turkey and Greece both noted that the English language level among Ratings is very low.

3.3 Content of the software: areas to include

The discussions in the workshops mostly focused on active skills. VHF communication was a topic discussed in many of the workshops. The Turkish workshop emphasised the point that most accidents are caused by problems with external communication, such as collision, as pointed out in the Spanish workshop. In the Spanish workshop, it was noted that VHF communication by VTS operators was required to be fluent and masterful in its use of SMCP.

The Greek workshop reported that VHF operators try to guess the nationality of the person who is trying to communicate with them from their accent. All workshops reiterated the need for the issue of pronunciation to be dealt with, and this reflected the results of the questionnaire, which highlighted the fact that most of our survey participants felt that pronunciation was a major factor in whether or not they were understood. The issue of seafarers providing feedback was mentioned as an important issue in the Greek workshop. According to regulation, seafarers must repeat an order that they have been given to confirm that they have received it. The Turkish and Spanish workshops put forward the suggestion that through Content Language Integrated Learning was an effective way for people to learn Maritime English.

3.4 Content of the software: practical content

The type of learning activities to be presented generated much discussion. A member of the Greek workshop 'underscored the necessity of practical content'. This was echoed in the other workshops, including the Turkish one, which stated that a good first step towards communication on board was the ability to read instruments. The Spanish workshop report pointed out that ratings often used maritime English in relation to their tasks. Many of the seafarers who completed that questionnaire stated that their best learning experiences in maritime English were on board. There is a compelling need for vocation specific English

language training material. The Spanish workshop report pointed out that 'it was significant to see that the audience would agree on practical training on board as being the most accurate and efficient learning method'.

3.5 IT Considerations

The subject of the physical limitations of the software was brought up at the Turkish, Greek, and Skype workshops. It was noted that the software could not be interactive unless it was online, but could not be taken to sea unless it was stand-alone. 'Individual learning via the internet will not work for seafarers on board', states the Greek workshop report. The issue of seafarers being fatigued from working hard and not having time for study was mentioned. The suggestion from the Turkish workshop was to reduce the amount of time needed for the software to connect to the internet (in order for it to update) so that a synthesis of benefits could be achieved.

5. Conclusions and discussions

The CAPTAINS projects' intention is to develop a scenario based training programme using 2D/3D simulations which aims to reduce the problems associated with the use of communicative maritime English at sea. The other focus point of the CAPTAINS project (ibid) is to train maritime personnel purely from the past accidents, incidents and near misses that are directly related to communications such as ship-to-ship, ship-to-shore and between maritime personals. Through this study, the human factors leading to ineffective communication in maritime English have been identified and suggestions from lecturers, professors and seafarers have been noted through the questionnaires and workshops. Similarly, the most frequent occurring accidents related to communicative failures have been found. One of the results of the questionnaires in the eyes of the maritime English teachers is that the average cadets graduating from a maritime academy, and passing an appropriate test of maritime English is competent to carry out the duties of Deck and Engineer officer. However, those intending to progress to a senior position should advance their level of English. The other issue identified within this questionnaire is that seafarers in general, do better in reading rather than writing, speaking and listening. Therefore, the CAPTANS project (ibid) will focus on creating scenarios to develop those skills that need improvement.

There is a remarkable conclusion from the questionnaire that internal and external communications are not very clear, which usually leads to issues becoming time consuming, especially when responding to emergencies and performing the daily operations of the ship. It is also validated within the questionnaires that "crew members of different nationalities react and report differently" when faced with emergencies. It seems apparent that when panic sets in, the problems are exacerbated with their lack of maritime English. This can be seen as one of the reasons why one third of the accidents are due to communication failures. Also, it should be stated that the improper use of Standard Maritime Communication Phrases (SMCP) as well as the improper use of grammar plays a part too. Most importantly, the questionnaire had identified the most useful and effective scenarios that lecturers, professors and seafarers think will be useful. Those inputs will help to create a useful and interactive training platform for maritime personals. From the result of the workshops, it is clear that the stakeholders would like

to see maritime English training software that is directly related to the real life tasks associated with working on board ships. According to the Greek workshop report, there is much need for VHF communications training, including the use of accents. This was echoed in other workshops, and also in the questionnaire results. It is hoped that the CAPTAINS Project can improve communications at sea and help to improve the maritime English of seafarers.

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PILOTING THE MarTEL STANDARS

Abstract

The MarTEL projects (MarTEL and MarTEL Plus) aim at creating a series of innovative Maritime English language tests and learning materials. The MarTEL Project created the first international Maritime English standards for Cadets, Deck and Engineering Officers, and Senior Deck and Engineering Officers and also for Port Officials in the Merchant Navy. The MarTEL project's aims at widening the user group of the existing e- learning platform by providing a series of tests and learning materials. The projects are supported by the European Union through its Leonardo da Vinci programme.

The MarTEL Phase 1 test, targeting the cadet level for assessing their English has already been through the piloting period. This report introduces this test, its contents (Structure, Reading, Listening, Speaking, Writing test sections), and the marking scheme of the MarTEL Phase 1 Test. We present the feedbacks from the pilot study and make several specific recommendations to improve the existing version of the test. Also, based on the feedback from the pilot study, we make some recommendations on the marking scheme to improve the validity and reliability of Phase 1 MarTel test.

Keywords: *Maritime English, Assessment, Maritime English Testing, MarTEL*

1. Introduction

Mackay and Mountford (1978) emphasized the need of English for international communication. The language of the sea is English; thus, ESP courses are designed for seafarers who must communicate without error with other sea personnel. The MarTEL Phase 1 Test aims to assess the English language proficiency of those wishing to enter maritime training institutions as officer cadets. It is designed to test general English, and is set in a maritime context. However, because test takers will, at this stage in their career, have had little or no experience of working at sea, knowledge of vocation-specific vocabulary is not required. Where such vocabulary is used, the test taker will be able to deduce the meaning through the context of the question.

The test is designed for learners who have had the underpinning knowledge of a nationally recognised high school diploma or equivalent, and is designed for test takers who possess an intermediate level of English.

The test consists of five sections:

Structure:	One part, 20 questions, 20 minutes, 20% of the total score.
Reading:	Two parts, 10 questions, 30 minutes, 20% of the total score.
Listening:	Two parts, 10 questions, 20 minutes, 20% of the total score.
Speaking:	Three parts, 3 questions, 15 minutes, 20% of the total score.
Writing:	One part, 1 question, 30 minutes, 20% of the total score.

The MarTEL Phase 1 test responds to the International Maritime Organisation's (IMO) regulations.

2. Developing the questions and structure

The MarTEL Phase 1 Test is computer based. It is executed in one sitting and has a total duration of approximately two hours. While taking the test, it is possible to go back and forth through the questions of each part of a section, but once a part has been completed and submitted, it is not possible to return. The test taker can choose which section to start with, but a section cannot be quitted until all of its parts are submitted. No section may be re-visited. Test takers are advised to be sure of their answers before moving on to another part.

3. Structure

3.1 Introduction

English grammatical structures are tested in the MarTEL Phase 1 Test. Elder and Davies (2001) classified grammar testing into explicit testing and implicit testing. Explicit testing refers to a separate component in which grammar is directly assessed while an indirect measurement of grammar is where it is integrated within a test of language skills, for example, grammatical accuracy as one of the marking criteria in a writing task. Alderson (1993) reports considerable support from the profession for including a test of lexis and structure, which agrees with Elder and Davies (2001) on that explicit grammar testing in separate subtests is favoured at entry level. In MarTel Phase 1 Test, both explicit and implicit grammar will be tested. Thus a deliberate attempt was made to develop a separate grammar component and to differentiate this construct from that of the four skills (reading, listening, writing, and speaking) in the MarTel test. As we can see, grammar forms the core of language proficiency, and solid knowledge of the grammatical structures of English is needed for cadets to express themselves clearly. Grammar plays an important part in the four skills assessed in other sections of the MarTEL Phase 1 Test.

3.2 Content of the structure section

The section consists of 20 multiple choice questions. For each question, the test taker must complete the sentence by choosing from the options provided. In this section, the test taker must apply logic to choose the correct word to fit the sentence, and deduce the correct form of the word. One question appears at a time. The test taker has 20 minutes to complete

this part, and may go back and forth through the questions using the 'back' and next' buttons on the screen.

4. Reading

4.1 Introduction

During the course of their studies at their maritime academy, cadets will need to read English language texts on a range of nautical topics. Professional mariners need to be able to read and understand a range of texts relating to their work, such as reports and manuals. These texts will contain specialised maritime vocabulary, which the cadets will learn in their Maritime English lessons at their academy. According to Laufer (1997), readers must comprehend a certain percentage, which is 95% of a text to infer meaning of unknown words. The MarTEL Phase 1 reading section assesses the ability of the test taker to comprehend two straightforward texts, which contain general English vocabulary. These texts are drawn from a variety of sources. There are with five multiple choice questions for each text.

4.2 Content of the section

The reading section lasts for 30 minutes. Test takers have 15 minutes to read each text and answer the five questions. The text will remain on the screen for test takers to refer to as they answer the questions, which appear one after another. Test takers can cycle through the questions to check their answers by clicking 'back' and 'next'.

5. Listening

5.1 Introduction

The importance of listening for second or foreign language acquisition has been underlined by authors such as Feyten (1991). "Comprehensive listening", "critical listening" are two of the very important described five kinds of listening by Wolvin and Coakley (1982). Comprehensive listening helps a listener to understand a message; critical listening allows a listener to evaluate and then to accept or reject a message. These two kinds of listening are vital for maritime workers and there is no place for ambiguity in the maritime working environment. Therefore it is vital to have the ability to comprehend the commands and given tasks precisely. Lack of clarity in communication may result in safety failures and jeopardise the safety of the vessel and the crew. Listening is an integral part of effective communication and execution of tasks on board.

5.2 Content of the listening section

The listening section consists of two independent parts. Each part contains a recording, which is around one minute long. There are five multiple choice questions for each part. Part one of the listening section is a recording of a dialogue between two or more people. Part two is a recorded monologue on a maritime related topic, such as a lecture. In keeping with the rest of the test, although the recordings are on a maritime topic, vocation specific vocabulary is not included. All information needed to answer the questions is in the recording itself. No prior knowledge of the subject matter is required.

6. Speaking

6.1. Introduction

Speaking is one of the four macro skills to be developed as means of effective communication in any language, particularly when speakers are not using their mother tongue (Boonkit, 2010). On a vessel crewed by people from many different languages, major communication problems can occur if people do not understand each other's speech. Officers must be able to communicate not only in ship-to-ship, ship-to-shore, bridge-to-engine room, but also during daily tasks on board or ashore. Many work related situations necessitate vocation specific vocabulary and structures, such as Standard Marine Communication Phrases (SMCP). SMCP is normally taught on dedicated maritime English courses and are tested in MarTEL Phase 2. The speaking section in MarTEL Phase 1 is designed to evaluate test takers' competence in general spoken English.

6.2. Content of the speaking section

The MarTEL Phase 1 speaking section requires non-interactive speaking, which is recorded by the computer and sent away for assessment. The section consists of three independent parts, which are designed to provide three different types of input for the test taker to respond to.

7. Writing

7.1 Introduction

Professional mariners need to be able to present information in a clear, organised, and systematic way. Thus, the accurate use of syntax (sentence structure) and the appropriate use of transition signals are essential in guiding the reader effectively. A mariner's ability to communicate well in writing is of major importance. MarTEL Phase 1 assesses general English writing skills.

7.2 Content of the writing section

The MarTEL Phase 1 writing section consists of one integrated reading / writing task. In this section, test takers must write an essay in response to a text, or a reply to a letter, and support their answer with reasons and examples. The answer is typed into the on-line testing software. In their written response, test takers must refer to the question and text, and give reasons for their answer. This tests their ability to identify the main points of an argument, and give reasons for their opinions. The answer is marked on, communicative quality, lexical accuracy and range, grammatical accuracy and range, reference to the task, and the effective organisation of the answer.

8. Developing Marking Scheme of the Test

8.1 Draft Marking Scheme for Writing and Speaking Tasks

'To report on proficiency, the assessment should not be primarily concerned with any one particular performance, but should rather seek to judge the generalisable competences

evidenced by that performance.' *(CEFR)*

'Subjectively marked tests need to be pretested to see whether the items elicit the intended sample of language; whether the marking system is usable; and whether the examiners are able to mark consistently. It is usually impossible to try out such tests on large numbers because of the time needed to mark the scripts or run the interviews, but students with a wide range of backgrounds and levels should be tested in order to ensure that the sample of language produced contains most of the features which will be found in the examinations themselves. Once the papers or interviews have been administered, there should be trial marking sessions to see whether the test item prompts have produced the intended kinds of responses, and whether the marking guidelines and criteria are working satisfactorily. These trial marking sessions should follow the general pattern described in chapter 6 and should lead to amendments to the item prompts, the marking guidelines, and criteria.' (Alderson et al, 1995).

8.2. Calculating the score

The writing section is marked in the analytic way, where marks are given for performance on individual standards. According to Huot (1990), an analytic or "profile" type of scale, which assesses each composition according to multiple dimensions as opposed to a holistic scale giving only one score. It has proved to be more reliable than other types of scales (e.g. holistic scoring, primary trait scoring) (Jacobs et al., 1981) and provides useful diagnostic information not found in other methods (Jacobs et al., 1981; Raimes, 1990; Hamp-Lyons, 1991). Select the mark (0-5) for each construct being assessed. Add these together and multiply by five. This will give the percentage grade. For example:

Structure and organisation	3
Communicative quality	4
Lexical accuracy and range	4
Grammatical accuracy and range	3
Total mark	**14**
Percentage grade	**70%**

Note: Draft marking scheme presented here is based on the Edexcel IGCSE marking scheme.

9. The Evaluation of the Test

A MarTEL test guide has been produced for test writers and markers who must construct language tests and also evaluate, or use the results of language tests. These include a number of steps below, as well as a number of questionnaires.

(1) Drawing up specifications of the test
(2) Writing individual test items, their assembly into whole tests, and editing;
(3) Piloting the test and analysing the draft test;
(4) Recording test scorers of different test takers
(5) Examining the reliability and consistency of the test;
(6) Setting standards of performance and reporting results;

(7) Testing the appropriateness and the validity of the test;
(8) Writing reports of performance on the test as a whole for setting test standards;
(9) Improving the test using feedback and research;
(10) Preparing a checklist of the main issues for future tests.

10. Comments of the Students

Alderson (1995) mentions that gathering feedback from test takers is one of the very important aspects of test monitoring.

> *'The candidate can provide test developers with very valuable insights: what they think about the test items, test methods, the clarity of instructions, the timing of the various sections, the relevance of the content in the light of their learning experiences or their purposes for learning the language, the relationship between how they perceive their language abilities and their performance on the test in question, and so on.'*

Student comments have been obtained through questionnaires. This feedback is useful for making any improvements to the MarTEL Phase tests.

12. Conclusion of Piloting MarTEL Phase 1 Test

The quality of the students is one of the important issues in any teaching and learning system. Good standards for exam questions and the marking scheme are very important to maintain the high level of quality of the test material and also the standard of marking. Therefore, the performance of instructors to maintain a standard of good marking is very important. For better achievement and good output from students in the exam, the validity and reliability of exam questions must be ensured. From the outcome of the pilot test, it was concluded that some of these factors can differ among different instructors in terms of their marking where subjective views could differ.

The speaking and writing tests consider structure and organisation, communicative quality, lexical accuracy and range, and grammatical accuracy and range.

It is also important that the instructors need to be assessed and evaluated during their teaching process to ensure of the quality and the standard of their performance as well.

Since the test is taken on-line, there may be a wide range of potential problems with candidates' answers which is not apparent in their answer of piloting the MarTEL Phase 1 test. For example, due to a candidates' lack of language skill may be unable to express their ideas clearly or because of a lack of knowledge or their interpretation of a question can be markedly different from that of the expectation of the test setter. A candidate's lack of knowledge can lead to answers that are difficult to comprehend, and excessively lengthy answers can mask this lack of knowledge. Spelling and typing errors may occur frequently, making the recognition of phrases difficult. Candidates sometimes use their own abbreviations, which often leads to incomprehensible phrases. Therefore, it is important for several examiners to agree questions,

specimen solutions, and marking schemes. This was done prior to launching the MarTEL Phase 1 pilot test.

13. Recommendations

1. Even though marking is undertaken and managed through the central MarTEL examination board, it is important that student's tests are marked by someone other than the course tutor.
2. To avoid ambiguity, two tutors taking different views on marking, should mark a set of scripts jointly.
3. A second marker must make an independent judgment on the difficulty, length and anticipated average score. In case of disagreement, both the markers should work together to produce an acceptable version.
4. A feedback on student's work may be given to students in their grading reports.
5. The marked scripts should be moderated by MarTEL project partners and advisors to ensure reliability and to establish marking standards.
6. Skimming through several answers of the same question should take place to get a sense of the range of answers/standards and a comparative perspective before starting to award grades.

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THE MARITIME SIMULATOR: AN INSTRUMENT FOR MET ASSESSMENT?

Abstract

The last two decades Dutch maritime education on managerial (bachelor) level has shifted from transfer of knowledge towards a way of learning based on competencies. This process of change evolved from the general need of the professional environment for competent graduates who take well-considered actions in context of their occupation. For education that wants to practise competency-based learning, the quest for an appropriate way of assessment is an actual and essential assignment.

It is, of course, no replacement for real life experience, but ship simulators at maritime colleges and training courses around the world are providing an incredible instrument for competency based learning and assessments. In the Dutch situation the assessment of all students, nationwide studying to obtain their Certificate of Competency, is organized by the Maritime Simulator and Training Centre (MSTC) on Terschelling. However, at the MSTC, it was felt a missed chance the simulators were not used to assess the, compulsory, Standard Maritime Communication Phrases (SMCP), as required by the International Maritime Organisation.

This paper is about the search for an assessment instrument that could be integrated in the standard exercises of the MSTC. Even more important was the provision that the MSTC-instructors had to be able to score the language used. Another issue was the validity and reliability of the results. To achieve the mentioned goals exercises were screened and to some extent adapted to serve the purpose. Several groups of students conducted the exercise and their results were independently scored by various instructors and the lecturer of English.

First findings are the instrument worked. Separate instructors reached the same conclusions and after some alterations the score-sheet was adapted for evaluation purposes during 2011-2012.

Key-words*: Integrated simulator training, Scoring SMCP, Competencies in assessments*

1. Introduction

Next to Maritime Institute Willem Barentsz on the island of Terschelling in the Netherlands the Dutch Maritime Simulator and Training Centre (MSTC) can be found. This MSTC assesses all levels of Dutch maritime students for their Certificate of Competency when they want to qualify for sea time reduction. The MSTC is the only institute in the Netherlands qualified to issue these certificates. Although the centre was rated the highest quality level at its last accreditation even the slightest improvement is always welcome.

At the request of several MSTC instructors the assessment of English or, to be more precise, the Standard Marine Communication Phrases, was examined. The instructors thought the quality of the students' English not up to standard and the lack of an assessment instrument was strongly felt. As assessments should reflect the educational system the 'new' competency-based theories had to be reviewed.

A literature exploration was carried out as a method of research to obtain answers to some general questions regarding competency based learning as there are:

1. *What is the impact of competency-based learning on daily teaching?*
2. *Which competency-based means of assessment have been developed?*
3. *What point of view on learning and assessing has Maritime Institute 'Willem Barentsz' developed?*
4. What criteria should an SMCP assessment meet?

The goal of this exploration was to gain insight in recent and relevant literature about competency-based learning and assessing and underlying ideas. Findings have been summarized in chapter 2. In chapter 3 the development and execution of some basic procedures, products and research are explained. Unfortunately at this stage the progress was hampered by practical problems so as a result the findings only can be called preliminary and the research has to be extended with the academic year 2011-2012

2. Theories behind competency-based learning and testing

2.1 Introducing competency-based learning

2.1.1 Cause of change

In the Netherlands many educational changes in in-company and vocational/applied science institutes these days are about competency-based learning. There are a number of reasons to explain this focus on competency-based learning. These reasons are connected with changes in society which play a role in the development of education. In the first place society more and more develops in the direction of an information and knowledge economy. Secondly, trade and industry and society as a whole ask for employees who are multi-employable, and able to act purposeful in varied, new and unfamiliar situations. As a third development the change in education itself has been a catalyst for adjustment. In traditional education subjects were taught in fragmented bits and pieces, whereas the professional practise requires an integrated learn and work environment. So the situation in the street does not ask for structured content and split up subjects, but for a combined system of knowledge, skills and attitude. To meet these requirements from the labour market, education needs to be organized accordingly. Another requirement for educational institutions is the need to improve the skill to maintain and develop competencies.

2.1.2 What are competencies?

As there are more than a number of explanations of the notion 'competency', it was important to find one that would fit the context of this research. The following seems suitable:

Een bekwaamheid (of vermogen) die een (aankomend) beroepsbeoefenaar nodig heeft om in de beroepspraktijk naar behoren te kunnen functioneren.
(Dekker en Dercksen, 2004).

[Translation: A capacity (or ability) that is required of a (future) professional to function appropriately in a matching professional environment.]

Key notions in the above mentioned are 'individual' and 'integrated' (ability). Integration points to the fact that knowledge, skills and attitude should not be addressed separately as this will hamper the development of integral professionalism (Korenhof, 2006). A competence is also personal as it is influenced by individual reference, the underlying ideas, standards, values and views of the educated. This last point resulting in every individual being responsible for the development of a personal learning strategy.

2.2 Consequences of competency-based learning

The attempt to establish a connection with a dynamic society to improve the transfer of educational content was one of the reasons to introduce competency-based learning. When preparing individuals for this complex society, the most important responsibility of education, not only professional knowledge but also responsible and adequate skills and attitudes are required. This implies that employees will not only have to be able to use the correct professional knowledge and skills but will also have to be capable of generating new knowledge which has effectively to be adopted to the context (Baartman et al., 2004).

The starting point of competency-based education is a realistic professional situation in which general skills, knowledge and attitudes are integrally offered as if it were the professional reality. In a competence-based curriculum the competencies a graduate has to acquire, form the basis of that education. Professional issues and dilemmas are the core content in life-like practical situations. When we want education and profession to form a strong bond, also the structure of education will have to change. Core tasks, questions and assignments the professional meets when at work, have to be the starting point for the development and organization of educational activities (Dekker en Dercksen, 2004). This emphasis on learning competencies in an authentic environment is an essential aspect of transfer and usage (Dekker and Dercksen, 2004)

2.3 Competency-based assessment

As well as the learning context, the assessment context has to reflect the context of the professional situation. This, to offer the learner the opportunity to prove he is able to function adequately in a professional environment in which problems ask for actions that require matching knowledge, skills and attitudes. As with competency based learning, competency based assessing, as opposed to traditional testing, has to be focused on the integration of knowledge, skills and attitudes.

Another thing to point out is that the learner will adapt his learning behaviour to the method of assessment, so when this method is reproduction focussed, the learner will strongly adjust his learning behaviour to this (Baartman et al., 2004). It is obvious he does not want to invest in acquiring competencies when the assessment is still built round reproduction of knowledge. This is how criticism on existing assessments leads to a search for assessments suitable for competence-based learning.

2.3.1 Characteristics of competency-based assessments

Assessing based on competences gives the learner and the ones close to him an idea of the existing competences and offers the educational institute to monitor the development of the learner. Onstenk (2004) points out that in this way the assessment of competencies should be focused on acquisitions instead of on deficiencies. For this research we are interested in the characteristics of this new way of assessing. In Korenhof's study (2006) we read that assessments need, among others, to be:

- *Authentic*: tasks from a professional situation dealt with in a professional and realistic setting.
- *Integrated*: knowledge, skills and attitudes have to be assessed jointly.
- *Criteria related*: assessment by using criteria which are related to previously set quality standards.
- *Independent*: learners should be able to reach competency via different educational routes.

2.3.2 Competency-based methods of assessment

Under influence of competence-based learning the assessments to monitor results also had to change. Gradually competency-based methods of assessing gained ground (Korenhof, 2006). In competency-based learning the assessment should not primarily be the final product of the educational process, but also the starting point for new ones. Another issue is that this method of assessment should not only be used for qualification purposes (establishing a final level/grade) but also for development of the learner. During or before the qualifying (formative) assessment(s), summative (aiming at development) activities, such as tests, (criterion centred) interviews, questionnaires and simulations could have been undertaken (Baartman et al., 2004). Another difference compared to traditional testing is the variety of persons who could be asked to act as an assessor. Next to the usual (objective) assessors as lecturers and instructors, the learner self and his colleagues could be part of the assessment process. Also professionals from the work floor could be asked to act as assessor (Dochy and Struyven, 2002).
In the following table all kinds of competency-based assessing methods are linked to their status, way they work and who could be responsible for the appraisal of it.

Table 2.1 Review of assessments and characteristics

ASSESSMENT INSTRUMENT	STATUS	METHOD	ASSESSOR
Assessment centre	qualifying	practical assignments in a simulated reality environment	trained assessors
Development centre	developing	practical assignments in a simulated reality environment	lecturer or trained assessor(s)

Portfolio - formative	developing	final interview about the portfolio with emphasis on reflective skills	student self lecturer multiple assessors
Portfolio - summative	qualifying	'proof' content in relation with competencies	lecturer multiple assessors
Competence test	qualifying	a representative 'trial' in a 'as realistic as possible' situation	several lecturers or experts
Self-, peer-, co-assessment	developing	as part of one of the previous instruments	student self student colleagues lecturer

From: Korenhof, 2006

2.3.3 Assessment of competencies and quality control

Quality is an important aspect of assessments and examinations. The way assessments are conducted control the learning process and indicate the quality of the learning environment. Therefore assessments are subject to high quality requirements. By collecting results and evaluations and using them as part of a transparent quality care system these results contribute to insight in quality issues and so a just and fair assessment will be guaranteed (Jaspers and Heijmen-Versteegen, 2005). The previous asks for a related, qualitative sound assessment policy with the right instruments and procedures. Below a list of criteria which will be able to inform us about the quality of assessment. According to the test policy of the NHL Hogeschool (Toetsbeleid NHL, 2005) assessments should be:

- *Valid:* it assesses what it is meant to assess. For competency-based assessments it also means it has to be related with the professional practise.
- *Reliable:* a competency should be measured objectively, at least several times in different situations with different methods and assessors.
- *Practical:* the assessment should be manageable (personnel, space, means) and it should not be too complicated to organize.

- *Transparent:* the learner has been familiarized with the various assessment methods, assessors and criteria.
- *Fair:* the learner should have a fair chance to show his or her abilities and competencies.
- *Open:* learners should previously be informed of goal and competencies to assess.
- *Related:* the judgement of the assessors should be directly related to the observed behaviour.
- *Consistent:* is important for all conditions.
- *Reproducible:* decisions made during assessment should be accurate and constant at different moments and with different assessors.
- *Integrated: t*he assessment has to offer recognisable situation which are connected with the learning process.
- *Cognitive complex:* by, for instance, asking for solutions of complex problems.
- *Significant:* for learner and coach/assessor the assessment has to have added value.

2.4 Point of view on assessing at Maritime Institute Willem Barentsz

Concerning assessment(s) Maritime Institute Willem Barentsz operates within the framework of the assessment policy of NHL University. In this view assessment(s) having to correspond with the offered education is leading. Other key features are that quality of assessments and the organization of them has to be well covered.

At MIWB it is assumed that the programme of assessment will secure the goals of the courses. These goals are put down in a profile of competencies and a body of knowledge and skills. Students demonstrate they dispose of certain competencies. Being competent (of the student) will be checked via professional products and tasks. MIWB also finds it important to pay attention to the student's (professional) attitude. This professional attitude comes to the student via lectures (e.g. Voyage Management 2, Bridge Resource Management), at Campus and via interaction between the student and others (students/lecturers). Knowledge and skills are gradually more integrally assessed. When knowledge and skills can not fully be guaranteed by an integral assessment, separate knowledge and skills tests will be used. The following key words are used in the MIWB assessment policy (Van Leunen, W. (Ed.) et al., 2010).

- *Feasible*

The institute distinguishes tests per module and assessments of a more integral nature, called milestones. Milestones offer the possibility to assess qualifications from several modules in one assessment. In table 2.2 the position of these milestones in the curriculum is indicated.

Table 2.2 MIWB's educational structure and position of milestones

Propedeutics		Main phase			Graduation phase		
	milestone 1 ↘		milestone 2 ↘	milestone 3 ↘		milestone 4 ↘	milestone 5 ↘

				Sea time 1		Minor	Sea time 2
1	2	3	4	5	6	7	8

From: Van Leunen, W. (Ed.) et al., 2010

- *Qualifying*

All tests and assessments should be sufficiently discerning. Clear criteria and standards are required. Testing and assessing guarantee the competences of the individual student are covered.

- *Development focussed*

Assessing not only has to have the function of short term stimulation of learning activities, but should also focus on the broader perspective of the student's development. Assessments should stimulate students to study and reflect. Feedback and feed-forward have to go hand in hand. This is why the institute works with formative and summative tests and assessments accompanied by the possibility for the student to be informed about the results after a test or assessment. The student is responsible for his own study and has to learn to assess himself. This can be done by self-reflection or self-assessment.

- *Authentic*

Assessments have to be connected with specific features of the professional context. Attention should be given, not only to knowledge but also to social skills, ethical aspects, values and standards. Competent behaviour has to be shown in as realistic a setting as possible. Working professionals may be used as assessors, the institute, however remains responsible.

- *Varied*

MIWB strives after a rich variety in forms of assessment to do justice to as many students as possible.

- *Type defined*

Competencies will be assessed by (portfolio) assessments. Providing evidence concerning accomplishment of professional tasks and products plays a big role. To check knowledge special knowledge tests with open and multiple choice questions will be conducted. Skills will be tested in a way appropriate with the type of skill. Communicative skills via reports and presentations, electronics skills by performance tests, etc. etc. It is the intention that with all of the above mentioned assessments the simulator will play an important role as assessment / testing / evaluation tool.

- *Inter-subjective*

Oral examinations/assessments will always be conducted by two assessors one of them being an independent one. In sea-time/practical situations the on-board mentor takes part in the assessment. The final responsibility however, lies with the institute.

- *Transparent*

MIWB informs students in time about programme, assessments and specific testing. Module descriptions and guidebooks/lines offer information about testing and the used criteria.

The test and assessment schedule will be published in time for students to prepare themselves. Lecturers elaborate on their way of testing/assessing during lectures. They explain whenever necessary. Results have to be communicated with the student within 15 (workable) days.

- *Independent (of study route)*

A student will be offered the opportunity to test/assess his competencies, knowledge and skills, irrespective his study route. Because of the leading STCW framework MIWB is tied to a strict time-line in executing the subjects of tuition.

2.5 Summary

We have looked at the theoretical background of competence-based learning and assessing. Criteria for competence-based assessments have been determined. The challenge now is to develop a method of assessment of IMO-SMCP English that will meet the mentioned requirements. This being said, an IMO-SMCP assessment should at least be; authentic, integrated, valid, reliable, practical and fair.

Another striking matter is that there is literature supporting the thought that competency based assessments could be administered by professionals from the work floor. As simulator instructors are already assigned to 'the job' this could reduce the hours lecturers of English have to put in testing. For them this would mean more time for their core task of lecturing.

3. Research and development

3.1 Introduction

Faculty of MIWB and instructors of MSTC chose, conform Klarus (in Korenhof 2006) and *NHL Toetsbeleid* (2005) the next criteria as most important to be researched/looked into and confirmed: Transparent, Fair, Authentic, Valid, Reliable, Development focussed, Qualifying. In order to find the answers, faculty, students and management were interviewed, documents were studied and a new assessment instrument was tested. This resulted in the following.

3.2 Selected criteria

As mentioned not all criteria were to be scrutinized. The following were brought up. Mind these criteria were meant for assessments of IMO-SMCP.

Assessments should be:

- Transparent
- the learner has been familiarized with the various assessment methods, assessors and criteria.
- Development focussed
- assessing not only has to have the function of short term stimulation of learning activities, but should also focus on the broader perspective of the student's development
- Authentic
  tasks from a professional situation dealt with in a professional and realistic setting.
- Fair
  the learner should have a fair chance to show his or her abilities and competencies.
- Valid
- it assesses what it is meant to assess and for competency-based assessments it also means it has to be related with the professional practise.
- Reliable

- a competency should be measured objectively, at least several times in different situations with different methods and assessors.
- Qualifying
- all tests and assessments should be sufficiently discerning. Clear criteria and standards are required.

3.3 Results

3.3.1. Results acquired by interviews

Via interviews with students it could be established students find the system of assessments transparent, they know what is expected of them and are also familiar with the criteria and assessors. They also indicated they felt the assessments were development focussed because the experience during the exercise (using the VHF in a near lifelike situation was more stressful than expected) and the discussions at debriefing put the acquirement of SMCP in a new perspective.

Faculty and management had a clear opinion about authenticity. “This is the most authentic situation you can get next to the real thing!” All exercises are developed by maritime professionals from all areas of expertise. When new instructors are required equal distribution over these areas is strived after.

3.3.2. Results acquired by documents

From documents used at the training centre we can find that an average exercise takes one hour in which the student has a fair chance to prove his or her competency (in SMCP). The documents also show that the language material used is authentic and relevant thus making the exercises valid

3.3.3. Results acquired by using a new assessment instrument

To proof the reliability of the assessments a new score rubric was developed. This rubric was tested on 6 groups of 4 simulator students. For this their simulator session was taped and this tape was shown to two other instructors and the lecturer of English. All were asked to fill out the new form and results were compared. Unfortunately, end of term meant that no more extensive trials could be held. As a result of this it was decided to repeat this test in 2011-2012 with a substantially larger and more diverse population. Preliminary results point in the direction of independent scores of different instructors giving the same final result.

The rubric as mentioned above was also developed to improve criteria and standards. Set criteria (>70% = pass) were welcomed by the instructors on the other hand the decision sufficient/insufficient was still felt a hard one.

4. Conclusion and recommendations

4.1 Conclusion

We have determined the exercises on the simulator of the MSTC go with the assessment of a competency centred curriculum as they meet the relevant criteria. They meet the general

requirements of testing and test instruments, and the assessments are, as preferred conducted by maritime professionals.

Regarding assessing IMO-SMCP there are some issues, mainly organizational. Not enough language has been integrated in the exercises and the assessment instrument has been proven too elaborate and should be adapted.

It is safe to say the question: “Is the Maritime Simulator suitable to be used as a MET instrument” can be answered with a cautious: “yes”, the following recommendations provided.

4.2 Recommendations

From my findings I would recommend the following:

- Check all exercises for IMO-SMCP language (and preferably other English as well) and use professionals from the field to complete and improve them.
- In the same way develop new exercises which also focus on use of language.
- Adjust the assessment instrument to the instructors’ requirements.
- Repeat the tests with more students from all levels and several institutes and check again.
- When the tests prove the assessment instrument and system suitable, integrate them in the final assessment of the MSTC.
-

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PORTFOLIOS, CHECKLISTS AND RUBRICS AS FORMS OF PERFORMANCE ASSESSMENT

Abstract

During their work, English teachers at Kherson State Maritime Institute have been facing difficulties concerning assessment. Some of these are:

- determining the sufficient frequency of class-room based assessment within the requirements of communicative approach;

- coordinating the principles of the communicative approach with the requirements of the Institute Authorities regarding assessment;

- establishing criteria for fair assessment of students' communicative skills;

- making these criteria visible for students.

The purpose of this article is to show that performance assessment can become a good alternative helping to overcome the difficulties mentioned above. The article is also aimed to introduce the main scoring instruments used for this type of assessment.

Portfolio is a systematic, organized collection of student's works, giving others a direct evidence of student's efforts, achievements and progress within a definite time period.

Performance assessment is assessment in which students create an answer or a product that demonstrates their acquisition of knowledge or skill.

Rubrics are scoring guides, consisting of specific pre-established performance criteria, used in evaluating student work on performance assessments.

A check list differs from rubrics in that it indicates the presence or absence of specified characteristics. A check list is basically a list of criteria upon which a student's performance or end product is to be judged.

Key words: *communicative approach, performance assessment, rubric, checklist, portfolio.*

1. Introduction

Since the year 2007 Kherson State Maritime Institute which was given the title of Academy on October 8th 2011 has been introducing Communicative Approach into teaching English in professional sphere / direction.

Teachers have mastered (been mastering) communicative approach techniques and introducing its principles into different spheres of teaching. Having mastered the peculiarities of teaching language skills and, we still find some significant problems in coordinating communicative approach principles with particular demands of our Institute, its rules and educational process. It is agreed among most of the KSMI teachers that one of the biggest difficulty has been the choice of the appropriate assessment system.

Research has shown that improved assessment practices at the classroom level can have powerful, beneficial effects on the learning process and measures of achievement. New understandings of the learning process indicate that assessment and learning are intimately linked. These new understandings of learning need to be applied to class-room based assessment practices. Among these practices, performance assessment appears to hold promise for improving the educational attainment of English language learners.

During their work, English teachers at KSMI have been facing difficulties concerning assessment. Some of these are:

- determining the sufficient frequency of class-room based assessment within the requirements of communicative approach;
- coordinating the principles of the communicative approach with the requirements of the Institute Authorities with regard to assessment;
- establishing criteria for fair assessment of students' communicative skills;
- making these criteria visible for students.

Last year some teacher of KSMI encountered another problem, let's call it the cultural awareness problem, i.e. the necessity to make the assessment system clear and justified for the foreign students who were the newcomers enrolled to KSMI in September 2011. The author of this paper was one of those teachers. The problem was that the teachers and the foreign students evidently had different assessment experience and consequently different understanding and vision of assessment. The need of introducing fair and clear assessment system became more urgent than ever.

This paper is aimed as a summary of the search, investigation made in the sphere of assessment theory, experience obtained as a result of introducing some assessment techniques and conclusions made so far.

2. Performance Assessment

Classroom-based assessment may be of two broad types: selected-response and constructed-response formats. Selected-response formats provide response items for students to choose from (such as multiple-choice, true-false, and matching items). Constructed-response formats, on the other hand, ask students to develop a response, create a product, or conduct a demonstration [Pierce]. These types of assessment allow more than one correct answer to a problem and typically involve higher-order thinking skills.

"Performance assessment, which uses a constructed-response format, can be viewed as assessment in which students create an answer or a product that demonstrates their acquisition of knowledge or skill" (Arends 1998). Performance assessment involves learners demonstrating their ability to perform a real-life task, for example, calling in sick to work, reading a bill and writing a cheque for the correct amount, or writing a note regarding a student's absence from school.

Teachers using performance assessment in the classroom have three types to choose from: products, performances, or process-oriented assessments. *Products* are works produced by students that provide concrete examples of their application of knowledge, for example, writing samples, projects, art or photo exhibits, and portfolios. *Performances* allow students to demonstrate application of their knowledge and skills under the direct observation of the

teacher. Students may engage in tasks that are useful outside of school, such as asking for directions by telephone, demonstrating a process, or arguing a position. All of these can demand high levels of language skills. Examples of performance tasks include oral reports, skits and role-plays, demonstrations, and debates. *Process-oriented assessments* provide insight into student thinking, reasoning, and motivation. They can provide diagnostic information on how well students use learning strategies and may lead to independent learning when students are asked to reflect on their learning and improve it. Some examples of process-oriented assessment are think-alouds, self-assessment check-lists or surveys, learning logs, and individual or pair conferences.

3. Portfolios

3.1. What Is a Portfolio?

Portfolio is one of the most popular forms of performance assessment. Most effective portfolios contain a reflective element, where the student has in some form contemplated her or his own strengths and weaknesses as a learner. A portfolio is a purposeful collection of student work that exhibits the student's efforts, progress, and achievements in one or more areas of the curriculum. The collection must include the following:

Student participation in selecting contents.

Criteria for selection.

Criteria for judging merits.

Evidence of a student's self-reflection.

It should represent a collection of students' best work or best efforts, student-selected samples of work experiences related to outcomes being assessed, and documents according growth and development toward mastering identified outcomes. A portfolio in the context of the classroom is a collection of student work that evidences mastery of a set of skills, applied knowledge, and attitudes. The individual works in a portfolio are often referred to as "artifacts."

3.2. Why Use a Portfolio?

In this new era of performance assessment related to the monitoring of students' mastery of a core curriculum, portfolios can enhance the assessment process by revealing a range of skills and understandings one students' parts; support instructional goals; reflect change and growth over a period of time; encourage student, teacher, and parent reflection; and provide for continuity in education from one year to the next. Instructors can use them for a variety of specific purposes, including:

Encouraging self-directed learning.

Enlarging the view of what is learned.

Fostering learning about learning.

Demonstrating progress toward identified outcomes.

Creating an intersection for instruction and assessment.

Providing a way for students to value themselves as learners.

Offering opportunities for peer-supported growth.

3.3. **Types of Portfolios**

There are many different types of portfolios, each of which can serve one or more specific purposes as part of an overall school or classroom assessment program. The following is a list of the types most often cited in the literature:

Documentation Portfolio: This type is also know as the "working" portfolio. Specifically, this approach involves a collection of work over time showing growth and improvement reflecting students' learning of identified outcomes. The documentation portfolio can include everything from brainstorming activities to drafts to finished products. The collection becomes meaningful when specific items are selected out to focus on particular educational experiences or goals. It can include the best and weakest of student work.

Process oriented portfolios: Process oriented portfolios tell a story about the growth of a learner. They document the processes of learning and creating, including earlier drafts, reflections on the process, and obstacles encountered along the way. They may be organized into skill areas or themes, yet each contains a student's work from the beginning, middle, and end of a learning unit. For example, there may be three drafts of a short story: a preliminary draft, a reworked draft reflecting teacher and peer feedback, and a final draft. The student can comment on the ways one is better than the other. In this manner, the artifacts can be compared providing evidence about how the student's skills have improved. In any number of ways, in writing or perhaps during a students conference, the student would reflect on the learning process: identifying how skills have changed, celebrating accomplishments, and establishing present and future challenges. There are many number of ways to facilitate this process. Students can be left completely to their own devices to choose. A teacher can also establish parameters of what a portfolio must contain and the quality an artifact must achieve to be included. The teacher may also stipulate that these artifacts must have earned a certain score to be accepted into the portfolio. In this way, product oriented portfolios can be quite effective in holding students accountable for producing quality work. Finally, it is very common for each artifact in a product oriented portfolio to be accompanied by self-reflection, usually in writing, on why and in what ways the artifacts represent best work.

Showcase Portfolio: This type of portfolio is best used for summative evaluation of students' mastery of key curriculum outcomes. It should include students' very best work, determined through a combination of student and teacher selection. Only completed work should be included. In addition, this type of portfolio is especially compatible with audio-visual artifact development, including photographs, videotapes, and electronic records of students' completed work. The showcase portfolio should also include written analysis and reflections by the student upon the decision-making process(es) used to determine which works are included.

Public exhibition

One final element common to all the kinds of portfolios is the public exhibition. Before a panel consisting of any combination of peers, teachers, parents, or other community members, students are often asked to formally present all or parts of their portfolio. In some cases, students defend their work, much like a graduate student might defend a thesis. In other cases, groups of students exhibit their portfolios in a more celebratory manner, much like a museum exhibition. Still other cases have students develop a part of their portfolio more in depth, reflecting a

student's individual academic or career interests.

However a portfolio exhibition is structured, the importance of this element lies in forging a connection between student and community. When a student's portfolio will be viewed by others critically, it lends the whole process more validity and higher stakes; students will pay closer attention to quality.

4. Rubrics

Although performance assessment, and in particular, portfolio assessment, has significant advantages in communicative approach, most measurement experts agree (as do teachers who have tried to devise and use performance assessment) that performance tests take a great deal of time to construct and administer. Furthermore, the creation of good performance assessments requires considerable technical knowledge. Many experts in authentic assessment argue that for authentic assessment to be effective, the criteria and standards for student work must be clear, known and nonarbitrary. Scoring rubrics is one technique assessment experts have derived to make criteria clear and nonarbitrary. *Rubrics* are scoring quides, consisting of specific pre-established performance criteria, used in evaluating student work on performance assessments. Rubrics are also used to communicate criteria and standards to students before a performance. Students might be supplied with videotapes or other examples showing superior performance.

There are two types of rubrics: holistic and analytic. “A *holistic rubric* requires the teacher to score the overall process or product as a whole, without judging the component parts separately. In contrast, with an *analytic rubric*, the teacher scores separate, individual parts of the product or performance first, then sums the individual scores to obtain a total score” (Meertler 2001).

4.1 Holistic Rubric

Holistic rubrics are customarily utilized when errors in some part of the process can be tolerated provided the overall quality is high. The use of holistic rubrics is more appropriate when performance tasks require students to create some sort of response and where there’s no definite correct answer. At most, only limited feedback is provided to the student as a result of scoring performance tasks in this matter.The focus of a score reported using a holistic rubric is on the overall quality, proficiency, or understanding of the specific content and skills-it involves assessment on a unidimensional level (Mertler, 2001). Use of holistic rubrics can result in a somewhat quicker scoring process than use of analytic rubrics. This is basically due to the fact that the teacher is required to read through or otherwise examine the student product or performance only once, in order to get an "overall" sense of what the student was able to accomplish (Mertler, 2001). Since assessment of the overall performance is the key, holistic rubrics are also typically, though not exclusively, used when the purpose of the performance assessment is summative in nature. At most, only limited feedback is provided to the student as a result of scoring performance tasks in this manner.

4.2 Analytic Rubric

Analytic rubrics are usually preferred when a fairly focused type of response is required, that is, for performance tasks in which there may be one or two acceptable responses and

creativity is not an essential feature of the students' responses. Furthermore, analytic rubrics result initially in several scores, followed by a summed total score – their use represents assessment on a multidimensional level (Mertler, 2001). As previously mentioned, the use of analytic rubrics can cause the scoring process to be substantially slower, mainly because assessing several different skills or characteristics individually requires a teacher to examine the product several times. Both their construction and use can be quite time-consuming. A general rule of thumb is that an individual's work should be examined a separate time for each of the specific performance tasks or scoring criteria (Mertler, 2001). However, the advantage to the use of analytic rubrics is quite substantial. The degree of feedback offered to students-and to teachers-is significant. Students receive specific feedback on their performance with respect to each of the individual scoring criteria-something that does not happen when using holistic rubrics. It is possible to then create a "profile" of specific student strengths and weaknesses (Mertler, 2001). A template for analytic scoring rubrics is presented in Table 2.

5. Checklists

A *check list* differs from rubrics in that it indicates the presence or absence of specified characteristics. A check list is basically a list of criteria upon which a student's performance or end product is to be judged [Moore]. You use the check list by simply checking off the criteria items that have been met. The type of response for each entry on a check list can vary. It can be as simple as check mark indicating that a listed action has occurred. For example, a check list for observing student participation in group work might look like this:

1. Starts work promptly.
2. Displays interest in work.
3. Cooperates with others.
4. Makes worthwhile suggestions. [Moore]

The rater would simply check the items that occurred during group work.

Another type of check list requires a yes or no response. The yes is checked when the action has been performed in a satisfactory manner; the no is checked when the action has been unsatisfactory. An example of this type of check list used to check the speaking competence of a student is shown in Figure 3. The rater would check the appropriate column on each item to indicate if the performance level has been met.

The development and use of check lists sensitizes the observer to the various parts of desired actions. By getting reliable data on the component parts, the observer is able to evaluate the overall performance.

6. Conclusion

Use of portfolio, rubrics and checklists in assessing speaking competence of students from groups 112 and 114 of KSMI has significantly facilitated and improved the process of the class-room based assessment of students. The criteria had been defined in advance and they were presented to the students. Being acquainted with the criteria, the students had a chance for a better preparation, and when speaking they showed a better competence, more confidence and poise. n conclusion, it seems highly desirable for teachers working within

the frame of communicative approach, to implement performance assessment tasks on their lessons since performance assessment gives students the opportunity to show what they know or can do in real situations. To be able to assess their students accurately and fairly, teachers should learn how to develop and use portfolios, rubrics and check lists – the principal forms of performance assessment. This will help them to design and use assessments that can considerably improve their student's achievement.

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EFFECTIVENESS OF JIGSAW TECHNIQUE

ON READING COMPREHENSION ABILITY OF NAUTICAL STUDENTS

Abstract

Cooperative learning (CL) refers to small groups of learners working together as a team to solve a problem, complete a task, or accomplish a common goal. It refers to a method of teaching in which students are organized in groups of 2 to 6 in that they can work together to obtain a common goal. To test the effectiveness of the method, using Jigsaw technique, a study was conducted to find out how it can improve reading comprehension ability of first year students of Chabahar Maritime University (CMU). Administering a Nelson English Language Proficiency test (NELPT), two homogenous groups of students were selected. Selecting a quasi-experimental design, two groups of 30 students based on the result of the NELPT were assigned as Experimental and Control groups. After that, as a pretest, a Michigan reading comprehension test was administered to ensure students' reading comprehension ability prior to the study. The first group received instruction using Jigsaw technique and the second one was taught using traditional teacher-fronted method toward teaching reading comprehension (RC). Finally, the same Michigan Reading comprehension (MRC) test was administered as a posttest and the results were analyzed by means of Spss software. Conducting two independent and paired t-tests, the mean score of the control group on the posttest was 15.23 while that of the experimental group was 18.03. The mean difference of the two groups, was 2.80 and since the p value was p=.000 < p= .05, it can be concluded that the experimental group has performed significantly different from the control group on the posttest.

Key words: *Cooperative Learning, Jigsaw technique , Reading Comprehension, Home group, Expert group*

1. Introduction

Experience suggests that in Iran not only Universities but also different kind of schools follow the traditional instruction of teaching RC. In the traditional method of teaching RC, the teacher manages the class from the beginning to the end. He/she introduces the book and the procedure of the presentation of the course. Then the teacher presents new words, comments, grammatical structures, and other important points. After that, students are asked to answer the proposed questions by the teacher. In such a situation, students are constantly competing with each other to get ahead of other classmates. Moreover, those students who cannot answer the questions gradually become frustrated. Knowing about these negative points of competitive and individualistic way of teaching, there should be a change in the way of teaching language skills. As Nunan (2001) puts it:

"…. Our greatest challenge now is not to throw out well-established practice, as so often happen in the past, but to incorporate new ways of doing things into existing practice. In this sense, change will be evolutionary rather than revolutionary p. 69)".

Many researchers in the teaching profession have cited the importance of CL. However, within the last decades, a remarkable change in the teachers' viewpoint has happened. Some of them have started to change their viewpoint toward language teaching methodology in a way to promote group work in their classrooms. They have come to the point that in a CL situation when students interact with each other to get out of a problematic situation of learning or doing a task it seems more authentic.

Recently, with the growth of the people's knowledge level in Iran, increase in the number of different universities, and specifically increase in the quantity as well as the quality of English institutions, people have started to develop different skills of English such as speaking, listening, writing, and importantly reading. The phrase "importantly reading" implies that nowadays with the growth of globalization and the incredible numbers of articles in English all over the world, we all have to master the skill of RC to understand academically what is going on in the other parts of the world. To do that, different courses are added to the current syllabi of different universities to make up the lack of this important skill of English. The interesting aspect of the problem is that, although the majority of universities are presenting different courses to enhance the student's RC ability, the lack of mastery in this ability is observable through attending these classes. Knowing about the problem, it is intended to consider the effect of CL using Jigsaw technique on the RC ability of first year students of CMU and to see differences between the traditional teacher-fronted method of teaching RC and the Cooperative one and find a way to help them develop this vital skill.

As Slavin, (2006) asserts One of the most important principles of educational psychology is that teachers cannot simply give students knowledge. Many studies have been done to see how it is possible for teachers to deal with the problem of rendering knowledge and skills to their students. Recently many researchers have used CL methods and techniques to promote learning within their students. One of the outstanding techniques of CL through which many scholars have gone to see its effectiveness on RC ability is Jigsaw technique. In many studies, it has been proven useful in teaching Language skills.

Moreover, the subjects who were taken in consideration throughout the research were a sample of 60 male students studying a course in general English at CMU. There were one experimental and one control group each including 30 subjects. They all were the researcher's students studying English as a foreign Language. In order for the results to be more reliable, the researcher tried not to allow students know about the study, because it is believed that if

students are aware of the purpose of the study in their class, the results may be negatively or positively influenced. The students of this study were tested to determine the level of their language proficiency using a NELPT (1976), test 450 part C, which is claimed to be standard with regard to the portion of its reliability. By chance, the two selected classes consisted of almost students of the same language proficiency level.

Therefore, this study aimed at discovering an objective and tangible way of teaching RC using Jigsaw technique.

1.1 Research Hypotheses

The following hypothesis was to be tested at the end of the present research:

1- Jigsaw technique does not enhance students' RC ability.

1.2 Method

In order to investigate the three research questions, the research was carried out using a quasi-experimental design because it was not possible to randomly assign students to their groups.

2. DESIGN OF STUDY

Groups	Pretest	Treatment	Posttest
G1	O1	X1	O2
G2	O1	X2	O2

As the above table suggests, G1 and G2 stand for the two groups engaged in the study. O1 refers to pretest, and O2 refers to posttest, and X1 and X 2 stand for the different programs used, including the traditional method and Jigsaw technique.

1.3 Variables

The independent variable for this research was the use of Jigsaw technique as one of the Cooperative techniques for learning and teaching English. The dependent variable was the RC ability of first year students. It was hypothesized that, Jigsaw technique does not enhance students' RC ability of first year students of CMU.

1.4 Materials and Instruments

The textbooks covered throughout the research were developing reading skills by "linda markstein and louise hirasawa (1981)," concepts, and comments by "patricia ackert (1999) at intermediate level of proficiency.

Three testing instruments were used throughout the research to answer the following questions: Can Jigsaw technique enhance students' RC ability. Is CL method applicable in Iran? The first of which was the NELPT that as its writer claims it is reliable. The second testing instrument was Michigan RC test that is claimed to be standardized and reliable. This test was used both for pretest and for posttest. The third instrument was the quizzes administered at the end of each session. They were different reading tests adopted from different books. They helped the teacher to check the progress and to see if they were doing their job appropriately or not. Moreover, they were expected to encourage students for further actions.

3. Review of the Related Literature

The theoretical base of the present study is based on the well-known theory of learning called Constructivist theory. As Slavin (2006) asserts One of the most important principles of educational psychology is that teachers cannot simply give students knowledge. He continues that learners must construct knowledge in their own minds and teachers have just the duty of facilitators. This theory views learners as working in cooperative and student-centered classrooms. In addition, the scope of CL as stated by Schmuck (1997) is built upon the belief that CL is applicable to both academic excellence and affective development of people. Johnson and Johnson (1990) maintain that the learning environment of all classrooms around the world generally fits into three social categories the first of which is competitive, the second one is individualistic, and the last one is cooperative. As the name implies, in the competitive classrooms just one clever student can stand at the top point of the classroom. Therefore, they are constantly finding a way to get ahead of one another. In the individualistic classrooms on the other hand, everybody's success depends directly on his/her own actions and there is no link to other's actions. Therefore, there may be one to even more students at the top point of a classroom. At last, in a cooperative environment one's success is directly related to the success of other members of the classroom because the focus on the individual has shifted towards the group.

Moreover, Johnson and Johnson (2008) state:

"In the mid-1960s, Cultural resistance to CL was based on social Darwinism, with its premise that students must be taught to survive in a "dog-eat-dog" world, and the myth of "ragged individualism" underlying the use of individualistic learning. While competition dominated educational thought, it was being challenged by individualistic learning. … CL is now an accepted and often the preferred instructional procedure at all levels of education. CL is presently used in schools and universities in every part of the world, in every subject area, and with every age student (2008, p. 1)."

Based on what was presented on the side of Johnson and Johnson, it should be mentiond that in situations other than CL learners are more dependent on the teacher than peers. They consider the teacher as the perfect and the only source of learning. In these classrooms teachers are the best model for students to learn from him. However, within the last decades, a remarkable change in the teachers' viewpoint has happened. Some of them started to promote group work in their classrooms. They have come to the point that in a CL situation when students interact with each other to get out of a problematic situation of learning or doing a task it seems more authentic to them. Therefore they become interested and continue the process of learning.

In addition, many researches and studies have found that Jigsaw as a technique of CL can be effectively used across most subjects and grade levels. It not only enhances the motivation and performance of students, but also develops their social skills for group work. Here, it is intended to present some studies that are conducted on the importance and applicability of Jigsaw technique.

Kam-Wing (2004) conducted a research to see the effect of using Jigsaw in Teacher Education Trainnig. He found that the condition gradually improved when CL and specifically Jigsaw technique was used as the main teaching strategy. Later, Jazuli and Jazuli (2009) considered the effects of CL and specifically Jigsaw technique to examine the quality of mathematical communication ability. The population of this study was second grade students. As the results of the study revealed, there was significant difference in mathematical communication ability between students in the experiment class and those in control class. Students

also indicated much more interest for the use of the Jigsaw technique because it provided them with an interactive context of learning. In addition, the research revealed that CL might be useful in other areas of interests rather than language learning. Kilig (2008) also conducted a study about the effects of Jigsaw technique on the learning of the concepts in the Principles and Methods of Teaching course. The participants were the second year students of the Ataturk University. As the fingings indicated, there was a statistically meaningful difference in favor of the experimental group that is the use of Jigsaw technique. Gocer (2010) interested in the learning of literary generes coducted a comparative research on the effectivity of CL method and jigsaw technique on teaching Literary Genres. He take sixty learners as the participants of the study. He set to use both quantitative and qualitative research. He maintained that One of the basic purposes of language and literary education is to maintain a target population and the use of proper attitude, method and technique in proper learning environments. Conducting the research, he found that CL and jigsaw technique to be more effective than conventional teaching methods. Tamah (2011) as her doctoria dissertation conducted a study on the student interaction in the implementation of the jigsaw technique in language teaching. Throughout the work, she set to investigate the following issues. First, wether they involve in the group work. Second, the type of information they used. Third, the way they help each other in group work, and finally, how and when they ask for assisstance, and in what way. Going through all of them, at last she concluded that the Jigsaw technique is applicable in the reading instruction in particular and in the EFL class instruction in general.

The last study conducted on the effectiveness of Jigsaw technique is done by Li (2011). In his MA thesis, he considered 27 college students as the participants of the study. Conducting the research, he arrived at three findings including, first, the participants' RC abilities were improved after eleven-week learning in the Jigsaw method. Second, the interviews with the selected participants revealed that learning in the Jigsaw method indeed raised their motivation for English learning, and they were more active and engaged in the Jigsaw classroom than in the traditional classroom. Third, the participants confirmed that the learning environment in the Jigsaw method was positive, supportive, and interactive.

Up to this point, the three aspects of CL with regard to the domain of usage were taken in consideration. The effects of CL and jigsaw technique were discussed on all language skills and other parameters such as motivation, attitude, academic achievement, and students' performance. Throughout the following part, it is intended to investigate the scene of CL and the need of the study in Iran.

As Jalilifar, (2009) explains, "Despite the growing interest in learning English as a foreign language in Iran, students at college level seem rarely proficient enough to read and comprehend English language texts." Experience suggests that in Iran not only Universities but also different kind of schools follow the traditional instruction of English Language Skills. As far as the subject of the present thesis is concerned, the intended skill across this study is RC. In the traditional method of teaching RC, the teacher manages the class from the beginning to the end. He introduces the book and the procedure of the presentation of the course. Then the teacher presents new words, comments, grammatical structures, and other important points and after that, students are asked to answer the proposed questions by the teacher. In such a situation, students are constantly competing with each other to get ahead of other classmates. Moreover, those students who cannot answer the questions gradually become frustrated.

As the literature indicates, CL is one of the famous practices in the field of education. Throughout many studies, it has been proven that CL is helpful in teaching RC. Therefore, based on this statement, the present research was about to investigate the effectiveness of CL using jigsaw technique on RC ability of first year students of CMU.

4. Procedures

Slavin (1996) introduces ten easy steps in using Jigsaw technique:

Divide students into 5- or 6-person jigsaw groups. The groups should be diverse in terms of gender, ethnicity, race, and ability.
Appoint one student from each group as the leader. Initially, this person should be the most mature student in the group.
Divide the day's lesson into 5-6 segments.
Assign each student to learn one segment, making sure students have direct access only to their own segment.
Give students time to read over their segment at least twice and become familiar with it. There is no need for them to memorize it.
Form temporary "expert groups" by having one student from each jigsaw group join other students assigned to the same segment. Give students in these expert groups time to discuss the main points of their segment and to rehearse the presentations they will make to their jigsaw group.
Bring the students back into their jigsaw groups.
Ask each student to present her or his segment to the group. Encourage others in the group to ask questions for clarification.
Float from group to group, observing the process. If any group is having trouble (e.g., a member is dominating or disruptive), make an appropriate intervention. Eventually, it is best for the group leader to handle this task. Leaders can be trained by whispering an instruction on how to intervene, until the leader gets the hang of it.
At the end of the session, give a quiz on the material so that students quickly come to realize that these sessions are not just fun and games but really count.

Based on the previous steps introduced by Slavin (ibid), throughout the study, all classes were held at CMU located in Chabahar, Iran. The class lasted for 16 weeks. Choosing texts, the technique was developed. Throughout developing this technique, at first, home groups were formed. Then, in order to develop the group accountability they were assigned a role in the group. This helped them to monitor each other's job and not to lose any time. After that, they were sent into their expert groups to work on the intended portion of Reading material divided by the teacher. Mastering the assigned portion, they came back to their home group from which they were sent to their expert groups. Then, they taught whatever they learned in the expert groups to the members of their home groups. They were also asked and encouraged to present their segment to the home group. The teacher observed the process carefully and went through group to group to check if the process was being done correctly or not. At last, a quiz ensured whether learning happened or not.

5. Result

As far as the hypothesis of the research was concerned, throughout the data analysis, it was intended to statistically analyze the results of the two proficiency tests. To do this, the Statistical Package software for Social Sciences (SPSS) was used in this study. At first, two independent t-tests were conducted to compare the results of the pretest for the two groups to make sure that there was no significant difference between the groups before they engaged in the experiment. Then, two paired t-tests were conducted to compare the results of the pretests

and posttests for the two groups to see whether there was any difference between the performance of each group on the pretest and posttest. In the end, two independent t-tests were conducted to compare the results of the control group with those of the experimental group.

4.1 Comparison of Control and Experimental Group Prior to the Experiment

To see whether the two groups were at the same level of ability, a 30-items Michigan reading proficiency test was administered to both Control and Experimental groups. As the results clearly show, the two groups were almost at the same level of proficiency. The results of the analysis are shown in the following Table.

4.1 GROUP STATISTICS

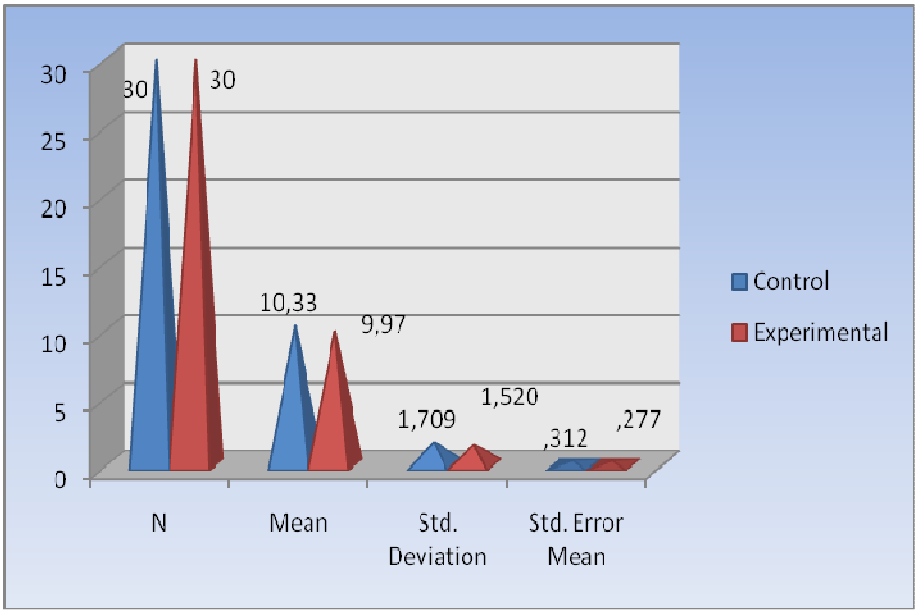
	Group1	N	Mean	Std. Deviation	Std. Error Mean
Scores	Control	30	10.33	1.709	.312
	Experimental	30	9.97	1.520	.277

4.2 INDEPENDENT T-TEST FOR CONTROL AND EXPERIMENTAL ON PRETEST:

		Levine's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Scores1	Equal variances assumed	1.322	.255	.878	58	**.383**	.367	.417	.469	1.202
	Equal variances not assumed			.878	57.220	**.383**	.367	.417	.469	1.203

The above tables show the results of the independent t-test for control and experimental group. As it can be concluded from the table, the mean score of the control group is 10.33 and the mean score for experimental group is 9.97. Close consideration toward the mean difference of the two groups (.367) and, of course, the p value (p=.383 > .05) shows that the groups are almost the same or, at most, there is not a significant difference between them. The following graph shows the results in a more tangible manner.

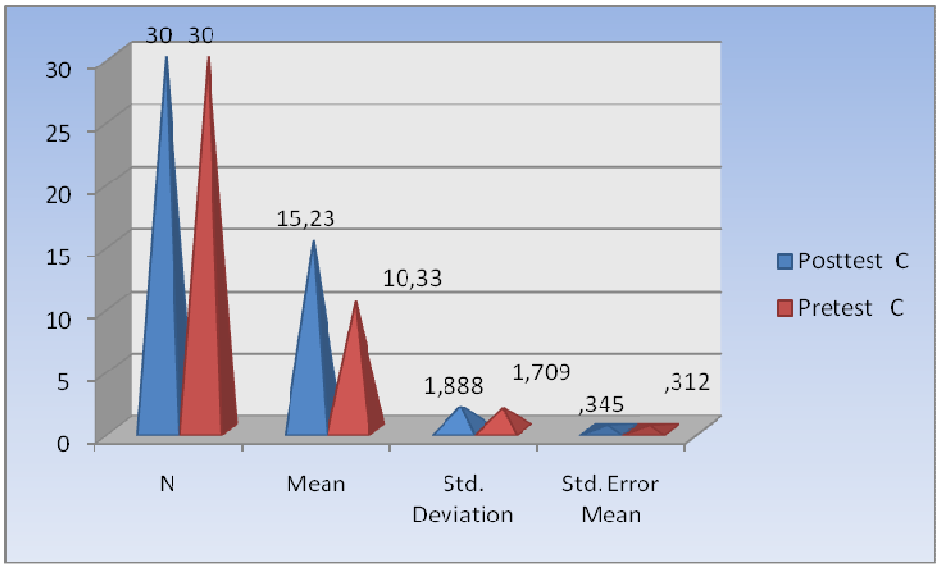
4.1 PRETEST FOR CONTROL AND EXPERIMENTAL GROUP



As far as the findings of the results of the two groups are concerned, the researcher concluded that participants could participate in the experiment since the p value was higher than the level of significance (p=.383 > .05). As a result, it could be interpreted that the two groups were at the same proficiency level.

4.2 Comparison of Pre& Posttest on Control Group

In order to see changes (if there was any) in the control group, a paired t-test was conducted to compare the results of pre and posttest. The results are fully presented in the following table and graph (4.3).



Paired T-test for Control Group on Pretest and Posttest:

4.3 PAIRED SAMPLES STATISTICS

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Posttest C	15.23	30	1.888	.345
	Pretest C	10.33	30	1.709	.312

4.4 PAIRED SAMPLES CORRELATIONS

		N	Correlation	Sig.
Pair 1	Posttest & Pretest	30	.424	.020

4.5 PAIRED SAMPLES TEST

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Posttest - Pretest	4.900	1.936	.353	4.177	5.623	**13.862**	29	.000

As the Table (4.5) indicates, the control group has made a meaningful progress during the course of study. The mean score of this group on pretest and posttest was 15.23 and 10.33 respectively. The p value is smaller than .05 (p=.000 < p= .05); therefore, it can be concluded that the group has made a progress compared with the outset of the study.

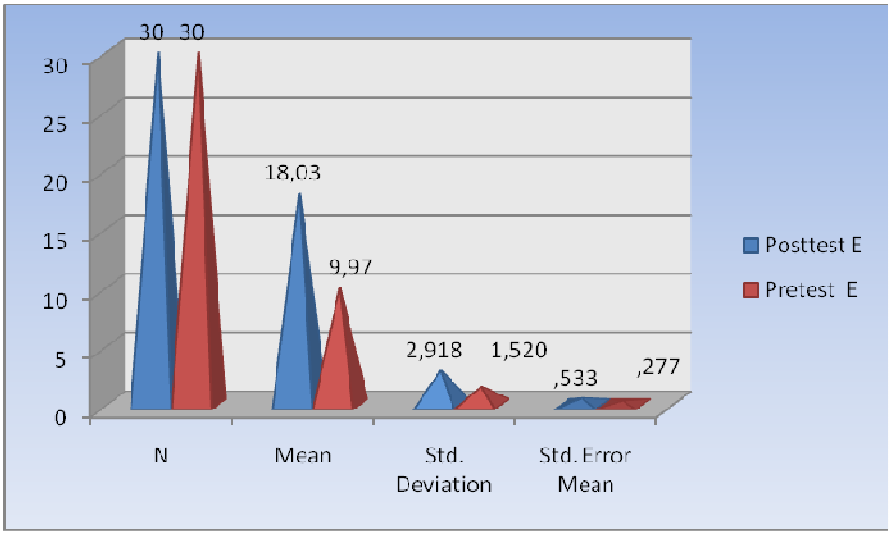
4.3 Comparison of Pre and Post-test for Experimental Group

In order to see changes (if there was any) in the experimental group with regard to pre and posttest scores, a paired t-test was conducted to compare the results of pre and posttest for Experimental group. The results are presented in the following table and graph (4.6, 4.3).

4.6 (PAIRED SAMPLES STATISTICS)

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Posttest E	18.03	30	2.918	.533
	Pretest E	9.97	30	1.520	.277

4.3 COMPARISON OF PRE AND POST-TEST FOR EXPERIMENTAL GROUP



4.7 PAIRED SAMPLES CORRELATIONS

		N	Correlation	Sig.
Pair	Posttest & Pretested	30	.218	.247

4.8 (PAIRED SAMPLES TEST)COMPARISON OF PRE AND POST-TEST FOR EXPERIMENTAL GROUP

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair	Posttest - Pretest	4.900	1.936	.353	4.177	5.623	**13.862**	29	.000

As the above Tables show, the experimental group has made a considerable progress at the end of the course. By looking at the results presented in the table (4.6) it can be found out that there has been a substantial change in the experimental group. The mean score of this group was 9.97 prior to the experiment while it is 19.70 at the end of the course. As it is observable, the significance level of p= .0000 < p= .05 is a witness as to how the experimental group has undergone a significant progress. To summarize, it can be concluded that, according to its pretest/posttest mean difference and the p value (p= .000), the experimental group has performed more successfully.

4.4 Comparison of Control Group and Experimental Group on Posttest (Using jigsaw technique)

In this part as the concluding section of the comparisons, a comparison of the control group and the experimental group on posttest was done to see whether there was any kind of change in the experimental group. In this section, we are about to see which group performed better, and as a result which method, traditional or CL, is more efficient in teaching RC ability to Iranian

students. The results, just like the previous parts, are presented through a table followed by a chart.

GROUP STATISTICS

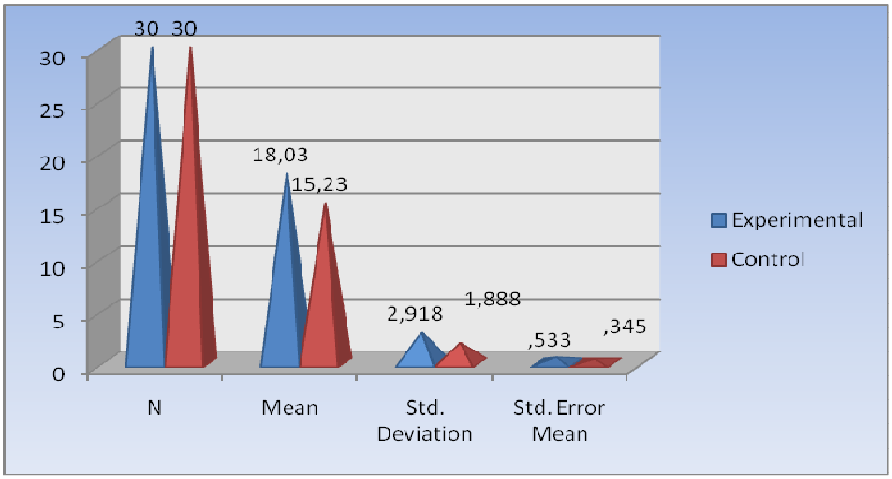
4.10

	Group2	N	Mean	Std. Deviation	Std. Error Mean
Score	Experimental	30	18.03	2.918	.533
	Control	30	15.23	1.888	.345

4.11 INDEPENDENT T-TEST FOR CONTROL AND EXPERIMENTAL ON POSTTEST

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	**t**	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Score	Equal variances assumed	10.057	.002	**4.412**	58	.000	2.800	.635	1.530	4.070
	Equal variances not assumed			**4.412**	49.657	.000	2.800	.635	1.525	4.075

4.4 COMPARISON OF CONTROL AND EXPERIMENTAL GROUP ON POSTTEST



According to the statistics in the table (4.4), the mean score of the control group on the posttest is 15.23 while that of the experimental group is 18.03. The mean difference of the two groups, as the table shows, is 2.80 and since the p value is p=.000 < p= .05, it can be concluded that the experimental group has performed significantly different from the control group on the posttest.

As it can be derived from the just mentioned data, the experimental group that was being taught using jigsaw technique has performed better than the control group, which was taught using traditional teacher-fronted method toward RC. Thus, it can be concluded that the treatment (teaching through jigsaw technique) was more effective. As far as a course of instruction for one semester is concerned, it makes sense that, in the end of the course the control group made some progress. However, the point that should be taken in consideration is that the control group has made little progress in comparison to the experimental group, which is a reliable proof of the effectiveness of the treatment. In the Means and Standard Deviations, the experimental group scored higher than the control groups. For the RC in the experimental group, mean score is 18.03 and, SD is 2.91 while in the control group mean score is 15.23 and, SD is 1.88. Results suggest that Jigsaw technique is more effective than traditional teacher-fronted method in improving RC achievement of first year students at the intermediate level of English. This confirms the findings by Ghaith (2002), Jazuli and Jazuli (2009), Kam-Wing (2004), Kilig (2008), Mengduo and Xiaoling (2010), Gocer (2010), Tamah (2011), who reported similar results with regard to the positive effects of Jigsaw technique in improving RC. However, what makes the present study significant is the effectiveness of this Cooperative method among first year students and among Iranian students with different cultural background with reference to their native language.

5. Conclusions

As this study has demonstrated, simply following traditional approaches toward teaching language skills specifically RC could not satisfy the scholars of the field. Recently with the growth in technology and as a result, an increase in the demand for globalization has convinced many people to start updating themselves to meet the overall requirements of the world. To do so, people should update themselves with the studies conducted and introduced in the world. In addition, the most part of knowledge exists in print and if one is to use it, he/she should be familiar with this skill. As literature shows, the use of traditional approaches toward teaching reading skill was not successful. The fast movement from traditional methods toward Cooperative methods of teaching RC and other language skills proves the claim. As a conclusion, finally, the findings of this study rejected the null hypotheses and confirmed the effectiveness of Jigsaw technique as a reliable way in increasing the RC ability as one of the most important language skills needed for development of the knowledge existed in print. All the observed statistics related to the results of the pretests and posttests proved the effectiveness of CL in general and the use of Jigsaw technique in teaching RC in particular. Since the mean difference of the two groups, as table 4.3 suggests, is 2.80 and because of the p value (p= .000 < p= .05), it can be concluded that the experimental group has made a significant progress compared to the control group, and then the null hypothesis is rejected. Considering the statistics presented in the above tables and to answer the second question of the research, it should be mentioned that Iranian Nautical students attending this study highly enjoyed the aforementioned method of teaching RC. Of course, it cannot be exactly generalized to all Iranian students because as it was stated earlier in the study, the research was done using a quasi-experimental design. Therefore, as far as this kind of research design is concerned, there are no exact systematic methods for sampling of participant and as a result; the generalizability of the obtained data should be done carefully.

Generally, there are some major pedagogical implications arising from this study. In the traditional teacher-fronted methods of teaching language, a teacher entered the classroom and started to teach. He was considered as the sole authority in the classroom and students were expected to listen to him and follow the rules of being a good learner. The rules include being silent throughout the class time, never ask other classmates for extra information, and listen carefully to whatever the teacher says. Nowadays, with the growth in language teaching methodology and coming and going of many innovative methods in the field of language teaching, teachers have concluded that some changes are necessary and inevitable in the way of being a successful language teacher. In addition, psychological development from behaviorist psychology to the latest one that is constructivist psychology has promoted this change in language teaching. In short, behaviorist psychologists, in the nineteen century, tended to consider their field of study as a science. The most famous figure of this approach to psychology was Pavlov whose experiments with dogs and other animals help him to explain all learning in terms of conditioning. The learning process throughout this theory is explained in the form of stimulus response relationship. They ignored the importance of mind and concentrated on what that was experimentally approvable. As literature shows, behaviorist psychology was concerned with issues other than those mind-based ones and it was involved in consideration of observable data and behaviors. In contrast, cognitive psychology was the first school of thought in which human beings and their minds were of high priority. Cognitive psychologists were mainly concerned with the processes happening in the mind. As Williams and Burden (1997) put it, they are interested to know about the way people receive information, the way they process, and finally the way they comprehend and remember those internalized information. Finally, as the latest psychological doctrine, constructivist psychologists believe that teachers cannot simply give students knowledge. Students must construct knowledge in their minds and teachers can facilitate this process by teaching in ways that make information meaningful and relevant to students.

Knowing about this, the pedagogical implications of the study is to be put forward based on CL theory: The first pedagogical implication refers to feeling of learners. Following the results of the present study, a teacher should provide a situation for his students by which they feel important and try to have something to contribute to other members of the group to achieve the set goal unless they get nowhere. They are expected to help each other and gain more skills to achieve group success. The other pedagogical implication refers to the Interaction among learners. As far as Jigsaw technique is concerned, a teacher may encourage learners to have positive interaction with each other, reward one another, and provide assistance to help each other learn. In these situations, their partners are available to help them when they need help to answer a question or solution to a problem. When a learner answered incorrectly, the more competent one in the group could explain why that answer was not acceptable, and this explanation could increase interaction among group members, which could promote better learning of materials.

The third pedagogical implication stands for individual accountability. Through Jigsaw teaching, students in CL context should be convinced to suppose themselves as the essential aspects of learning situation of group work because they perform roles that are essential to the completion of group tasks.

Finally, as an overall pedagogical implication, CL and especially Jigsaw technique is proposed to EFL/ESL teachers. Through group work, students become interested and motivated in learning new things. There are times when teachers cannot provide an appropriate context for group work. However, it is highly recommended to the future teachers to incorporate group work in their syllabus. This helps their students to find themselves as important aspect of learning situation.

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MARITIME ENGLISH USED ON SIMULATORS FOR TRAINING FUTURE DECK OFFICERS IN CONSTANTA MARITIME UNIVERSITY

Abstract

During the last years, it has been noticed the appearance of an important system inside Maritime Education and Training and that is training the Deck Apprentices by using the simulators. It has been generally agreed that the graduates of Constanta Maritime University need a proper training regarding Maritime English during the study years by using simulators in order to keep up with the changes that occur on board a merchant ship due to: advances made in Maritime Education and Training as a direct result of equipment development, smaller crews that can operate ships exactly in the same way and at the same level of professionalism as the larger crews used until recently, reduced time spent in ports for ship's operations and so on. The modern Deck Officer must understand the basic concepts of the navigation systems used nowadays and in order to accomplish this they need a proper Maritime English to evaluate their output's accuracy and finally getting the right possible navigational decisions. For a new Deck Apprentice embarked onboard a merchant ship for the first time it is important to know an adequate Maritime English and this can be obtained only by a proper training including training on simulators .

In this paper we are trying to point out the fact that without using the simulators for training the Apprentices, Constanta Maritime University graduates would face real troubles when trying to apply for a job at the crewing and shipping companies where the University has a signed protocol with.

Key words: *deck officer, simulator, university, training, maritime education*

1. Introduction

Future Deck Officers' training represents a sensible issue for maritime universities all over the world. Training future Deck Officers on simulators became a very important component of the maritime education process since the International Maritime Organization (IMO) introduced training on simulators as an integrated educational part for future seafarers. Over the past decades, the education of professional officers has undergone many evolutions. Today's maritime universities, academies and faculties using advanced methods of teaching, modern simulators with communications in Maritime English and other sophisticated equipment have not to forget that practical training on board a ship still plays an invaluable role in officers' education. It must be acknowledged that a proper training on simulators is a good start for a theoretical training that could eventually be used onboard.

Constanta Maritime University offers a proper training programme for future officers by using simulator classes where the main language used in specialized communication is Maritime English. This happens because it has been proven that Maritime English represents an important part of a future navigating officer's training and it will still gain in importance as long as the shipping industry is in progress. As the young seafarers are provided with all the conditions to get acquainted with Maritime English during the university years, it's only up to them if they reach a certain level of knowledge necessary for a proper watchkeeping as their lives, other crew members' lives and the ship's integrity might depend on this particular aspect.

2. Maritime English – The Language of the Sea

It is well known inside the shipping industry that Maritime English is the main and only language that should be used in any type of maritime communication. Even so, more and more people, especially students of Maritime Universities from countries where a different language is used for teaching, have trouble understanding the importance of speaking English. In order to help these students understand the importance of learning Maritime English during the university years, Constanta Maritime University is using the most updated simulators where the communication is performed only in Maritime English.

English is the international language that is used worldwide and therefore the shipping industry accepted it as the main language on board ships and in communications ship-to-ship and ship-to-coast. In this era of globalisation, the future Deck Officers wishing to go on board merchant ships cannot afford to be left out for not mastering English. This is the main reason why teachers from Constanta Maritime University should try to explain to their students the importance of knowing Maritime English. It does not matter the subject that the teacher has to

teach during his/her classes as long as the specific maritime courses would have the key words attached in English.

It must be mentioned that new learners (in this case, students from Constanta Maritime University) of a language (English) really do need to build up a solid foundation of knowledge. Therefore it is extremely useful for them that all of their teachers know and control Maritime English and in this way it should become really easy for them to use some important maritime terms used daily on board ships and in any type of communications.

As previously stated future Deck Officers have no choice but to gain the appropriate skills and knowledge to communicate effectively and efficiently in English. Communication is an essential part of their daily activity onboard merchant ships and also of human interaction. The benefits of an effective communication are many and obvious as they enhance all aspects of our personal and professional lives. Ineffective or misunderstood communications in our personal lives may give rise to problems or embarrassment but in our professional lives the results of misunderstandings may have much more serious results. In the world of international shipping, with seafarers from many countries sailing on ships all over the world, effective communication ship-to-ship and ship-to-coast is vitally important, and in this way it can be emphasized the importance of Maritime English.

Because most maritime accidents are caused by human error, notably breakdowns in communication or cooperation, the legislation nowadays emphasizes the importance of the English language proficiency in relation to safety at sea. Instruction and practice of maritime English for communication and cooperation is an important element in maritime education.
Maritime English is to a great extent restricted to IMO Standard Marine Communication Phrases, which builds on a basic knowledge of English and has been drafted in a simplified version of Maritime English. It includes phrases for use in routine situations such as berthing as well as standard phrases and responses to be used in emergency situations. Under the STCW 1978, as amended, the ability to understand and use the SMCP is required for the certification of officers in charge of a navigational watch on ships of 500 gross tonnage or above.

There is also another important issue to be taken into account and that is the multicultural crew that is met almost onboard every merchant ship. Nowadays, the shipping industry is a multinational one. All activities in this industry are based on interaction and collaboration between people from different countries and cultures. In an international company these details are common, due to company necessity in having offices placed in different countries according to business interests. But these aspects become more complex when we refer to onboard ship activities. For this reason it is necessary to observe and study the kind of compatibilities or non-compatibilities that exist between seamen from different countries in order to create a proper working environment on board the ship.

Facing multicultural working environment, many seafarers have accommodation problems, difficulties in working relationships onboard and the biggest problem has been created by the use of a foreign language, mostly Maritime English, in the daily duties communication.

It is a fact that the language barrier onboard ship can be overtaken only if students really master Maritime English, so it is important for them to use as much Maritime English as they can during the university years in order to get used to speaking in a different language other than their mother tongue.

3. Using Maritime English on Simulators in Constanta Maritime University

An integrated bridge simulation system is primarily designed and introduced to train and develop potential cadets and officers with the necessary knowledge and skills in properly and correctly handling and managing a vessel. Whereas a new and alternative use of the integrated bridge simulation system has been discussed and proven to be suitable and effective in training and assessing communication skills, especially in contextualizing the practice of the mandatory part of the IMO SMCP, reinforcing the trainees to play different roles in a realistic atmosphere and environment. It has been decided that most of the scenarios and contents in SMCP can be flexibly designed or tailored and properly practiced in an integrated bridge simulation system based environment. The key task then is how to organize and implement the syllabus of Maritime English teaching and learning via this effective learning by pedagogic methodology.

In the past years there have been many discussions regarding an attempt to approach the training and testing the proficiency of Maritime English that meets the international standards pointed out in STCW. Using integrated bridge simulation system in a bridge activities context seems to be one of the most effective experiential learning and training methods, which will allow the future Deck Officers to get accustomed to a workplace environment and to expand their practice little by little, so that they may communicate and pass messages with confidence when taking up their future jobs onboard.

Taking into account many discussions regarding the use of integrated bridge simulation system in Maritime English practice, it can be concluded that affirmativeness in the possibilities is obvious. However, solutions in combining this technology with operational teaching and assessing maritime communications especially with coursework design has not much been referred to. Using the integrated bridge simulation system can assist Maritime English teaching, training and assessing. Collaborated operation of the system can be of benefit in facilitating communication and Maritime English training and practice, as well as enhancing mutual understanding of the navigation customs and cultural background among cadets and seafarers from different countries.

Constanta Maritime University is training future Deck Officers in accordance with the national standards developed by the Ministry of Education, Research and Innovation, and to the international standards elaborated by IMO (International Maritime Organisation). Apart from the evaluations made by the Ministry of Education, Research and Innovation, the University's curricula are assessed and approved by the Romanian Naval Authority considering the legislation and recommendations of the International Maritime Organisation, and of the European Agency for Maritime Safety and thus, the certificate of competency has international recognition.

The Bachelor of Science degree graduates have the advantage of a double certification. They get:

- Engineer diploma in the Naval Engineering and Navigation field (the European equivalent of Bachelor of Science diploma);
- Officer in Charge of a Navigational Watch Certificate.

Constanta Maritime University is fitted with simulators and laboratories with software for each specialty discipline thus every student gets the best theoretical training before going on board merchant ships as Apprentices. On these specific simulators, all the instructors are trying to use

as much Maritime English as possible during the communication situations that appear inside the scenarios performed and in this way making the students understand the importance of using a proper Maritime English that could eventually help them in their future career. Constanta Maritime University is applying communication in Maritime English for future Deck Officers by using the following simulators: Simulator for Navigation and Ship's Manoeuvre TRANSAS NT Pro 4000, GMDSS Simulator – Global Maritime Distress and Safety System and the Simulator for Handling Bulk Liquid Cargo, certified by Det Norske Veritas, Class A, B, C – Cargo Handling.

During the simulator classes the instructors are using different scenarios where a proper Maritime English should be used. The instructor who supervises the scenarios will initially allow the students to familiarise with the instruments and controls found on the bridge of a merchant ship. The student will be able to locate and use the bridge equipment in normal operating conditions.

The exercises get more and more difficult and the students get accustomed with the procedures used for turning on the navigation equipment. Every exercise is preceded by a briefing and followed by a group discussion - debriefing, in which the actions and decisions taken by the student are analysed and it is important to mention that these discussions are performed in English.

During exercises, every student will play different roles within the bridge team and will have the possibility of taking part in all the operations done during the watch, covering all the steps in the chain of command of the navigational bridge and in this way also getting acquainted with all the aspects of a proper communication performed in Maritime English on the bridge and during a navigational watch. The purpose of these exercises is to achieve the following goals:

- Familiarisation with the use of instruments and controls from the navigational bridge;
- The ability of making decisions;
- Organising the bridge/engine team;
- Understanding the individual role in the chain of command while working in a team;
- Understanding the specific tasks according to certain situations;
- Understanding the necessity of a good planning, following step by step the check lists, and the scheduling of each specific procedure;
- Good understanding of the watchkeeping procedures;
- Getting the expertise in identifying the operational problems and solving them;
- Familiarizing with communication in Maritime English.

Global Maritime Distress and Safety System Long Range Operator's Certificate Course - GMDSS LRC is another course provided by Constanta Maritime University and consists of the students' familiarisation with the issues considering the fundamental theoretical concepts about: maritime radio - communications and satellite equipment and systems (SMM - Maritime Mobile Service and SMMS - Satellite Mobile Maritime Service), communication techniques used in GMDSS, radio frequencies, GMDSS functions, and communication procedures etc., all of them performed in Maritime English.

The goal of this training is to achieve abilities for operating, testing and maintenance of the GMDSS equipments and systems provided and set up on yachts and pleasure boats.

This course is both theoretical and practical, aiming at complying with the requirements of the curriculum for SMMS - GMDSS - LRC Radio Operator Certificate, issued according to

that specified in A IV/2 STCW Code, the CEPT ERC/REC 31 - 05 E recommendations and to IMO model courses and ITU documents.

4. Conclusions

It is accepted worldwide that a safe shipping environment means that all seafarers across the world should reach high standards of competence and professionalism in the duties they perform onboard. The International Convention on Standards of Training, Certification and Watchkeeping for Seafarers 1978, as amended in 1995 (STCW-95), has the role of setting these standards, governing the awarding of certificates and controlling watchkeeping arrangements. Its provisions not only apply to seafarers, but also to ship-owners, training establishments such as maritime universities and national maritime administrations.

Therefore, all Constanta Maritime University's affiliations and member qualities along with the fact that our university is evaluated every year by the Romanian Naval Authority are solid proofs of a proper implementation of the 1995 STCW Convention in our institution. All training programmes and assessments in our university are provided in connection with the STCW-95 certificate and comply with STCW-95 standards, being approved by the respective Administration in our country, the Romanian Naval Authority.

Constanta Maritime University as a maritime education and training institute has installed an integrated bridge simulation system, based on which maritime teaching and training have been designed and experimented. In response to these changes, course and syllabus design and organization as well as instruction and evaluation have thus undergone reforms since the attention has been particularly drawn to simulator training. Physically within language skills targeted integrated bridge simulation system training, all means of lingual communication devices employed in real ship operation should be properly fixed to simulate navigational and safety communications from ship to shore and vice versa, from ship to ship, as well as onboard ship.

Maritime English course design and organization is critically important throughout the whole training program. It ought to take into account the emphasis IMO guidelines on ship management lays in the need for good communication. The major concepts and skills with this aspect are: Understanding culture differences; Situational awareness; Close loop communication; Briefing and Debriefing; and Communication procedures. Effective communications represent an essential ingredient to safe and efficient ship operations.

The international community has chosen the English language as the medium for that communication and IMO has developed a standard vocabulary and the training tools to deliver it. This is the main reason why teachers of Maritime English but not only them, instil in future Deck Officers the appropriate skills and knowledge to ensure that failures of communication are no longer a major cause for maritime accidents.

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BUILDING MARITIME ENGLISH BY EVENT SIMULATION

Abstract

Bridge and engine-room simulators offer a variety of training opportunities for cadets and seafarers of various types and ranks. They basically aim to develop the trainee's competency level in bridge and/or engine-room operation and management as well as helping to enhance the quality of education and training of seafarers. These simulators as well as helping to develop competence in use and/or management of the bridge or engine-room naturally help in improving the communication practices as well. However, there is often the case that communication is being a secondary issue or an unintentional outcome of bridge or engine-room training. As most Maritime institutions have only one to two of these simulators and considering the cost of running these facilities, communication and language training often takes place in classrooms or language laboratories. Research has shown that communication failures are as much responsible for accidents and incidents at sea as navigation errors and engine stops.

This paper focuses on training of merchant navy cadets, for enhancing their communication skills in on-board emergency situations which would help prevent future accidents due to communication failures. The basic aim is to discuss how simulators and simulations can be incorporated in the learning process to prevent communication failures. The study intends also to put forward the advantages of simulations in which trainees are allowed to make mistakes in a safe learning environment.

The study presented here makes references to CAPTAINS (Communication and Practical Training in Applied Nautical Studies), which is an EU funded Leonardo Transfer of Innovation project that aims to make a significant contribution to maritime education and communications training by incorporating state of the art technology, including 2D/3D virtual and interactive simulators.

The paper will also present outcomes of a communication training session conducted in a bridge simulator in which IMO SMCP phrases were practised in a 'building-up' manner through a passage scenario.

Keywords: *Maritime English, Cadet Training, Communication, CAPTAINS, Simulators, Simulation*

1. Introduction

Over 75% of ships are now multilingual. The vast majority of maritime accidents are attributable to human factors, of which communication failure represents one third. The International Maritime Organisation (IMO) has underlined effective communication as a crucial issue for marine safety (IMO MSC, 2006). This retroactive identification of the communication issue has reiterated the need for improving common language to facilitate safe communication. For English is recognised as the 'language of the sea', provisions to meet this need have covered variety of efforts. Maritime English, as supplementary to general English, can be defined as the operational language, with its specific area and terms in which a term is not only a language unit but also represents a notion of the maritime world. SMNV (Standard Marine Navigational Vocabulary), IMO SMCP (Standard Marine Communication Phrases), IMO Model course 3.17 has been among the major efforts to contribute improving and standardising Maritime English worldwide. European projects like Mareng and MarTEL are other collective approaches to help facilitating improvement and standardisation of Maritime English. However, tools for implementing communicative language training in the context of real-life situation on board are not readily available to maritime education and training (MET) institutions.

Making use of available simulators and creating computer based new simulations with interactive and communicative approach may be a step forward. This will help accustom seafarers to real-life on board communications by using maritime aspect of English language hence reducing the number of accidents due to communication failures.

2. Simulators

Simulation in broad terms can be described as; creating particular conditions that exist in real life by using computers and models. Modern training simulators are designed to provide lifelike experience to trainees. They get as close as possible to real life behavior, appearance, senses, etc. therefore enabling their subjects to experience what is happening as if it were real.

In maritime world, modern bridge and engine-room simulators are designed to offer variety of training opportunities. They basically aim to develop the trainee's competency level in bridge and/or engine-room operation and management as well as helping to enhance the quality of education and training of seafarers.

2.1. Bridge Simulators

Bridge simulators focus on ship handling, bridge team management and bridge equipment training like ARPA / RADAR, ECDIS, AIS etc. The training scenarios may cover a wide range, from passage monitoring to docking practices with some prompt injections on the scene. These simulators as well as helping to develop competence in use and/or management of the bridge, naturally help in improving the communication practices as well. However, there is often the case that communication is being a secondary issue or an unintentional outcome of bridge training. Focusing directly on the bridge equipment and navigation competency may set covering every aspect of the bridge communication needs back, unless special sessions for communication training are arranged. When in transit, bridge communication needs broadly covers; ship-to-ship, ship-to-shore VHF communications, exchange of information within the

bridge and the internal communications with the engineering officers and the engine control room.

2.1. Engine room simulators

These simulators cover a range of engine configurations and propulsion systems. They contain all main systems and auxiliary systems with controls indicators, valves, alarms, etc. In addition, these systems incorporate many graphic status diagrams and read-outs.

Besides helping to develop competence in use and/or management of the engine-room, these simulators allow trainees to be assessed automatically by introducing various fault situations. However, concentrating on smoothly running the engines and auxiliaries and injected faults, the communication end is generally left out. In real life, there needs to be a constant information flow between the engine control room and the bridge, especially in times of engine or auxiliary failures. Actually this is a two-way need; especially when navigating under restricted conditions like low visibility and TSS passage, a fully clear and comprehensible communication should be maintained between the bridge and the engine control room to facilitate evasive manoeuvres and sudden speed changes.

3. Duty cycle and communications routine of merchant ships

Before discussing how simulators and simulations can be utilized in enhancing maritime English and hence maritime communications training, it is deemed beneficial to make a quick review of the communication routine of the merchant ships in their duty cycles. As per its definition, communication covers the whole range of verbal, non-verbal, expression of ideas and feelings, for the purposes of this paper, the focus will be directed mostly on the operational side of the maritime world, which is speech communication. Other elements which play role in effective communication, like cultural differences, non-verbal communication, gestures etc. will not be included within the scope of this study due to the diversity of assets required. (However, noting that the maritime working environment is multinational, differences in accents will be mentioned briefly.) .

3.1. Duty cycle of merchant ships

General Duty cycle of merchant ships starts with cargo loading and securing operations. Safely navigating to port of destiny is the second phase of the duty cycle. Arriving in and discharging the cargo at the port of destiny completes the cycle. However, depending on the type of the ship, this cycle may have additional phases like, SBM (Single Buoy Mooring) or “lightening” operations before entering the destination ports.SBM is basically used by tankers as single point mooring (SPM) in which the ship is moored to a buoy anchored offshore. The buoy also serves as a connection point for tankers for loading or offloading gas or fluid products. Lightening can be described as transshipment of cargo from one vessel to another.

A sample duty cycle and communication routine of merchant ships are shown in the

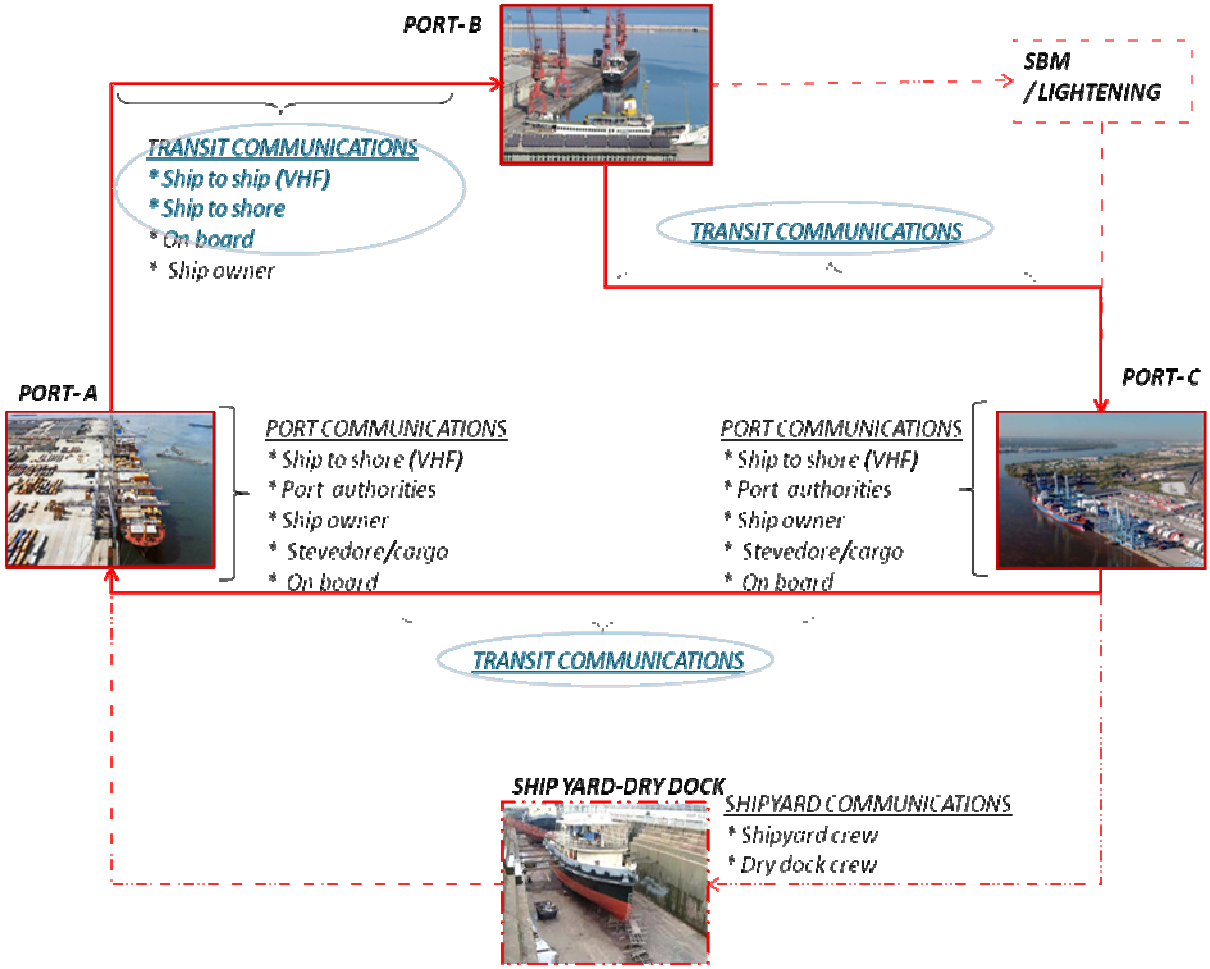


figure below.

A sample duty cycle and communications routine of merchant ships - TUDEV

Auxiliary and passenger ships may have slightly different duty routine than the one shown in the figure due to their operational requirements. Nevertheless, another phase that is part of the duty cycle of a merchant ship always includes shipyard maintenances and dry docking procedures. Having this variety within their duty cycle, makes it a necessity for the seafarers to cope with variety of maritime English terms and communication needs to perform their duties properly.

3.2. Communication routine

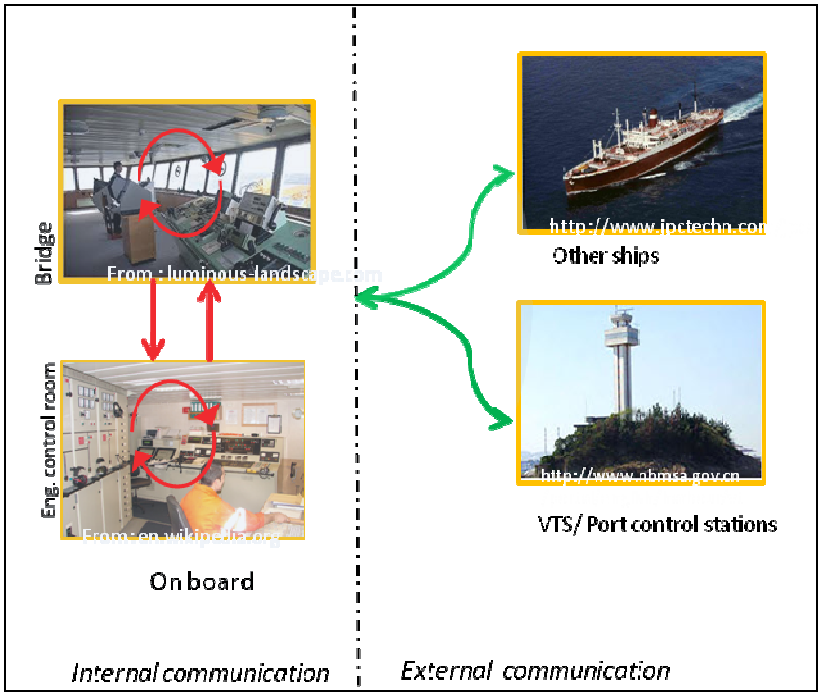
The communication routine of a merchant ship can be separated into three basic parts for analysis purposes: Port communications, transit (navigation) communications and the others (like SBM, Lightening and shipyard/dry-docking). Since SBM, Lightening and shipyard/dry-docking communications are considered to be too technical /specialised to practise in a MET Institution's simulator, they will not be covered in the course of this paper.

The figure below is a simple comparison of communication needs of merchant ships at port and while in transit. Communications for cargo operations (stevedores etc.) and communication with the port authorities (port state control, harbour masters etc.) seem hard to simulate due to the diversity of issues, cargo types and methods used for loading /discharging.

Port Communications	***Transit/Navigation communications***
Ship to shore(PCS)	Ship to shore (VTS/PCS,etc)
With the port authorities (PSC/admin)	Ship to ship
With the ship owner/agent	With the ship owner
On board	On board
Stevedore/cargo	

A sample communication needs comparison - TUDEV

Obviously communication with the ship owner/agent does not require any simulation. It is mostly performed by the masters and chief engineers of the ships by plain English. So, including these in some kind of simulation might be a far goal for the present. However, common areas like ship-to-shore and on board communications can be covered within well-rounded scenarios. This short analysis leads to the fact that presently available simulators can best be used for transit/navigation communication needs which cover ship-to-shore, ship-to ship and on board communication aspects. The figure below shows communication routine of a merchant ship when navigating between two ports.



Communication routine of merchant ships while in transit – TUDEV

The navigation communication routine requires that, together with external VHF communication with the shore stations and the other ships in the area, continuous communication must also be established between the bridge and the engine control room throughout the voyage. Additionally, clear and comprehensible verbal communication within the bridge and engine control room must be sustained for safe navigation of the ship. The crew must be able to perform operational communications clearly, like handing over the watch, reporting faults, contacts and incidents etc.

Realisation of all these can be done within the simulators by conducting special communications/maritime English training sessions in parallel with the professional competency training. Supporting conventional classroom lectures with special simulator sessions will help enhance the level of maritime English and familiarise the trainees with the real life communication routines. Before discussing main points for preparing special maritime English training sessions, we will have a quick review of the benefits of simulations and recent efforts to create new simulations for enhancing maritime English and meet the communication needs of seafarers.

4. Learning through simulations

4.1. Classroom versus simulator

Classroom teaching doubtlessly establishes the main step of teaching/learning process. Giving the basics of the subject matter, explaining the basic dynamics and fundamental theories and teaching the ways to follow the relations among the subjects can easily be realised with the presence of a teacher and a learner group. Direct communication in a classroom also contributes to learning/teaching process by availability of both sides. This is how the schools try to prepare their students for life outside the classroom. However, when professional maritime education comes on the scene, there seems to be a large gap between the safety of an enclosed learning

space and the diversity of the life and experiences that exist outside of the classroom. This is where simulators and simulations come on the stage.

A true simulation has a specific goal in mind: to simulate a real system so that the learners can explore it, perform experiments on it, and understand it before implementing in the real world. Utilising the knowledge gained through exposure to simulation is the main purpose of simulation education. Simulations make imitated situations available to the learner to practice and perfect necessary skills, rather than having them set off right into real experience. Simulation may comparatively be better than experience because they compress time and remove elements which are not on the subject. Simulations are optimised for learning as they provide a focused learning experience, where skills, process and knowledge can all be enhanced in a way that reality cannot. The opportunity to explore, experiment and repeatedly apply this knowledge to model situations makes simulation the most versatile form of learning. Today with development of the new technology, computer simulations make this type of learning more effective than ever.What makes training with simulation more attractive is the possibilities it presents to learners. Firstly, simulations reduce boredom, sustain motivation for long periods of time and promote the transfer of acquired skills (communication included) to the real world.

The learners, by achieving success quickly, build their self-confidence and maintain their motivation and interest. Especially with task-based scenarios, which are highly relevant to their personal and/or professional lives, they come to enjoy the knowledge they acquire. Being able to compress the time, practising the scenarios at different difficulty levels are among the basic benefits of simulation training. Simulations also allow the training to actually be fun by giving the learners chances to repeatedly apply the knowledge gained by simply rewarding them after a correct decision. So, how can effective maritime communication skill be built by making use of simulators?

Modern bridge and engine room simulators, primarily aim to increase the professional knowledge and competency levels of the trainees in using and/or managing of the bridge or engine-room. As explained above, today communication is an integral part of safe navigation of the ships. Thus, enhancing maritime English for effective communication must be an integral part of simulator training, seeing that communication failures are as much responsible for accidents and incidents at sea as navigation errors and engine stops. Integrating maritime English training into simulator sessions requires a well established level of co-ordination between the simulator instructors and the instructors of maritime English. Having clear-cut communication scenarios in hand will surely enhance the quality of training. Depending on the level of the trainees, the communication scenarios may be set to fit into already running simulator scenarios. When necessary, special and simplified stand alone communication scenarios may be used to give the trainees opportunity to prepare themselves for future more advanced scenarios.

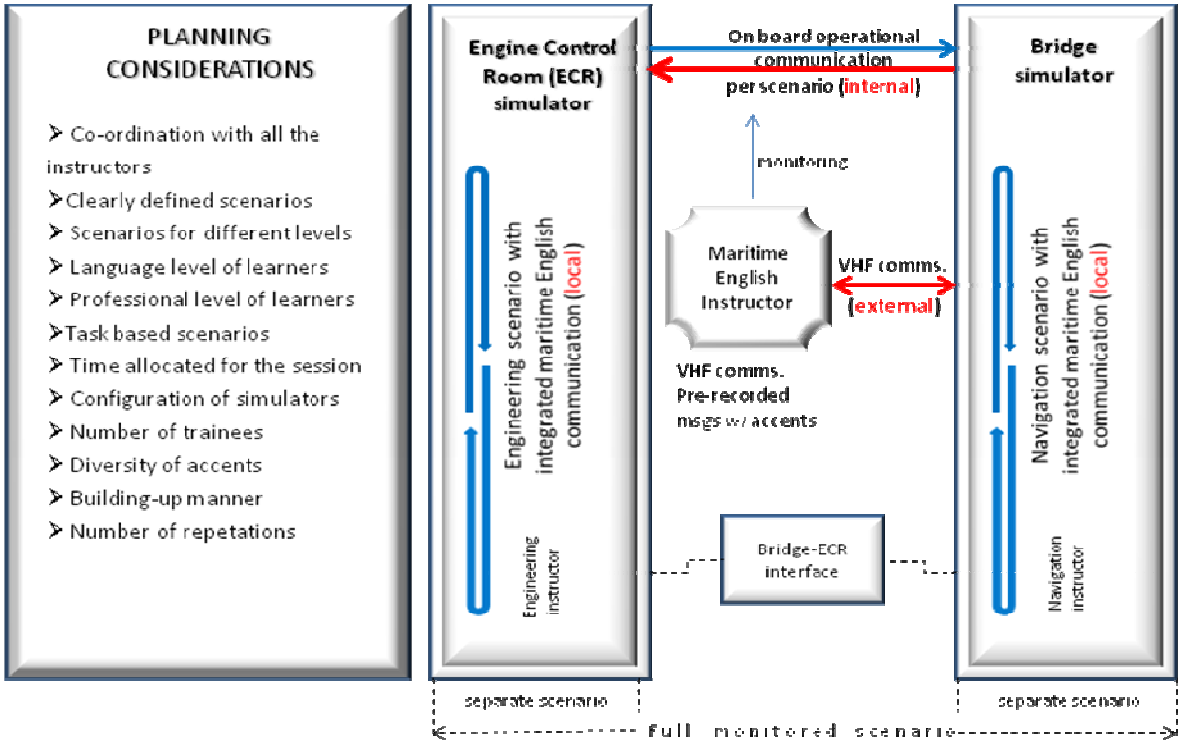
4.2. Implementing simulator usage in language training.

Preparing maritime English/communication training sessions to be practised during simulator session starts with good planning and well- established co-ordination between the different units of a MET Institution. The configuration and setting of the available simulators also play a great role in preparing scenarios for maritime English training with simulation. Another important factor is the level of trainees both from professional and linguistic point of view. This is very important because learning/ using any maritime English term or phrase requires having a certain level of general English beforehand. Further, the professional levels of the trainees need to be considered as well. For example, in a possible collision or near miss scenario during a bridge training session, the learner is supposed to perform the correct communication for preventive or evasive manoeuvres. Expecting a trainee who has not yet been

trained on colregs to conduct the right communication, would not be fair as chances for him/her to succeed would be very low. Moreover repeating the scenario will not help much due to lack of professional knowledge.

At the planning stage one important thing to be kept in mind is the fact that maritime English level goes in parallel with the professional background. A solemn shortcoming that could be experienced while maritime English/communication training in simulators may be the lack of diversity in accents. In real life, the trainees will be working with seafarers from different nationalities who will have different accents. It will be part of their daily lives to communicate with people from different nationalities both for on board and external communication aspects. Having variety of different accents in a national MET institution could be the shortcoming, but this difficulty may be overcome by a little international co-operation and pre-recorded dialogues/messages to train the ear. So how should we plan and conduct maritime English/communication sessions in simulators. Basic concern seems to be the preparation of communication training scenarios to meet the needs. The difficult part lies when it becomes necessary to fully integrate the communication scenarios with the existing navigation/engineering scenarios. Technically it is not a must to begin with. For a start, separate communication scenarios may be produced both for engineering and navigation purposes. The figure below shows a sample set up for conducting simulator sessions to practise on board and external communications. The set up will vary according to the number and type of simulators, availability of ECR (engine control room) and bridge simulator interface and availability of internal and external communication equipment.

As discussed earlier in section 3.1., setting simulator sessions for maritime English/communication will include only transit/navigation communication needs which cover ship-to-shore, ship-to ship and on board communication aspects.



A sample set up for conducting simulator communication session – TUDEV

The first step can be the process of creating a series of communication scenarios in parallel with the information provided in other classes of profession. Basic scenarios may include simple exchange of information and reporting routines. The IMO SMCP establishes a very versatile ground for this purpose. Depending on the language level of students, further scenarios of higher levels can be created for a step ahead. After having clear-cut scenarios in hand, enhancing the scenarios or improving the way they are conducted can easily be performed using the feedback from the students. The number of students and the time allocated for each training session are among the factors which have direct effect on the quality of the training. Careful planning should be made to provide each student with enough time for practising. Assessing the success of the students should be made after they are given chances to repeat as necessary and digest the subject matter. Maritime English instructors should co-ordinate all aspect of the scenarios with engineering and navigation instructors before each session is conducted. As the primary lecturer in the field, maritime instructor should monitor the whole communication scenario and when possible should also take actively part in communication activity. Following section gives brief information on a communication session trial conducted on the bridge simulator at TUDEV.

5. A communication trial session

5.1. The routine

Simulator training at TUDEV is an integral part of maritime education both for deck and engineering cadets. The cadets are given opportunities to practise and enhance the knowledge they gain through classroom lectures. Depending on their level, basic communication routines are also included in some sessions. They are mostly planned before the end of semester so that cadets will have accumulated enough knowledge to practice. One other issue to consider is to give the cadets opportunity to have fresh experience before they go on their sea training period.

5.2. Preparations

For trial purposes, a special VHF communication session, which primarily based on SMCP usage, was integrated in the navigation bridge training. The target group was composed of the second year deck cadets who had already completed SMCP training and ready to go for their first sea training. In the preparation phase, aims of the communication training were set as much possible as to match the navigation scenario. The aims basically were: a) to practise a variety of VHF voice scenarios, b) to present them in a building-up manner to cover a range from very basics to emergency situations, c) to set the number of repetitions adequately to enable cadets to develop some kind of reflex for properly communicating under tense conditions.

After the aims are laid down, a set of SMCP phrases arranged and distributed to cadets for use as reference during the training. They were briefed on the targets and expected outcomes of the training. It was made sure that they understood that they were expected to abide by the navigation scenario unless instructed otherwise.

5.3. The conduct and feedback

Two separate bridge teams were established in two separate bridge simulators. Three cadets from each team were assigned for running the communication routines. Each team

arranged their own job distribution for passage monitoring and manoeuvring by taking turns. Two teams represented two different ships in the same area both within VHF range and the instructor represented the shore control station/VTS.

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Communication integrated simulator session at TUDEV

Each team was given all the necessary information like call sign, flag state, ship and cargo type, port information etc. While the two teams sustained communication, the maritime instructor played the role of shore station/VTS and monitored the communications between the two teams throughout the scenario. Cadets from each team were given 15 to20 minutes to practice their Maritime English. During the course of session, the instructor gave prompt injections which would require prompt responses. When cadets failed to respond correctly, they were given enough chances to repeat and build their self-confidence for the next step.

When the session was over a short post training briefing was held to discuss the conduct and receive the feedback. Instructors observed that the cadets who played the communication role were very hesitant in the beginning. The “voice” through the VHF was found to be the main reason for this. The cadets, while having completed the SMCP training in the classroom, stated that the voice through the VHF, though belonged to their instructor, was made it more realistic as if it was the real world. They all agreed that by time they felt more comfortable and concentrated more on the communication by disregarding the VHF factor. They proved to make good advance after few repetitions and said that they felt more confident and ready for the coming sea training. One setback of the trial was lacking of different accents through the VHF to train the ears of the cadets to simulate the real world of seafaring. Nevertheless, the most pleasing feedback the instructors got after a couple of months was receiving appreciation phone calls from the cadets who were already on their sea training all around the world.

6. CAPTAINS Project

TUDEV, as a partner of the CAPTAINS project, is taking part in the recent efforts to improve communication skills in maritime education by transferring the experience being gathered. CAPTAINS (Communication and Practical Training in Applied Nautical Studies) is an EU Leonardo Transfer of Innovation project which aims to make a significant contribution to maritime education and training. The project is aiming to collate existing knowledge regarding linguistic, paralinguistic, and cultural issues that act as barriers in communication on board multi-nationally crewed ships, and create interactive online communication training courses for seafarers.

Recent technological breakthroughs in the field of e-learning, and modern communication based learning strategies will be creatively combined to form dynamic new learning tools. State of the art technology, including 2D/3D virtual and interactive simulators, will allow users to interact with the virtual environment in a variety of authentic scenarios, providing the opportunity to ‘learn by doing’. The CAPTAINS project will contribute to an enhanced safety at sea culture by providing a means for seafarers to improve their English language communication skills. The partnership will transfer innovation by combining advanced e-learning and collaboration tools with interactive rich media learning contents, taking into consideration scenario-based and experiential learning.

7. Conclusion

As the labour force of the maritime world will continue to be multi-lingual, the efforts to improve the 'common language' will have to take new steps. In addition to conventional classroom teaching, use of modern technology and simulators may contribute a great deal in achieving higher standards in maritime English training. As this will help make the operational lives of seafarers, hence maritime world safer, it will also make their daily lives easier. Using simulators in maritime English training will let the cadets transfer their acquired skills to the real world by practising realistic, extensive inter-personal communications. On the other hand, latest innovative means and methods like the expected outcome of the CAPTAINS project, using 2D/3D annimation, will be a step forward for enhancing Maritime English education, hence reduce number of accidents due to communication failure.

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LANGUAGE TAUGHT AS LANGUAGE USED INTEGRATING MARITIME ENGLISH IN THE TEACHING OF MECHANICAL ENGINEERING

Abstract

One of the challenges in the teaching of Maritime English is to design courses that integrate communication at sea, technology and educational environments, and logically connect Maritime English to its specific context. To meet this challenge, lecturers are beginning to engage in course revising procedures and in the development of course-overlapping teaching, learning and assessment strategies aiming to make Maritime English the obvious tool it is intended to be: a transparent lingua franca at sea.

This paper describes the process of integrating the intended learning outcomes of three different course modules, Machine Engineering, Drawing Techniques and Maritime English within Marine Engineering 1, a cross-curriculum introductory course at the Marine Engineering Programme at Chalmers University of Technology. The paper establishes the contextual cross-curricular relevance of overlapping learning activities, assessment and evaluation criteria which also allow for joint examination of the three course modules, constructively aligned at course, department and programme level.

1. Introduction

According to STCW, CDIO (Conceive, Design, Implement and Operate - a statement of goals for engineering education], and the Swedish National Agency for Higher Education, a marine engineer should not only be responsible for the mechanical systems of ships but also be able to communicate orders, reports and instructions efficiently, both orally and in writing. Most accidents at sea occur due to communication difficulties implied by the human factor, therefore a "correct use of English in the global maritime profession is considered crucial to avoid incidents at sea and to facilitate a more effective means of communication between ships and ship and port as well as to harmonize management and operations onboard vessels with multi-national crew"(Ziarati R, Demirel E, 2010].

Teaching language to marine engineers is undoubtedly a matter of adapting context to purpose and utility. Maritime English being a language of a certain context, it needs to be taught as a part of maritime frameworks which in the case of marine engineering programmes would primarily be mechanical engineering and ship propulsion alongside IMO standards of communication. Since communication apprehension among second language speakers is not an

unfamiliar concern among Maritime English lecturers (Rojo-Laurilla, M, *English for Maritime Purposes),* this also raises yet another dimension to be taken into consideration in the making of cross-course integrated teaching and learning activities and assessment of student development

The Marine Engineering Programme at Chalmers University of Technology aims to continuously integrate Maritime English as well as language and communication course modules in various marine technology and marine propulsion courses progressively, throughout all four years of studies. *Marine Engineering I* is an introductory course given in the first year, currently in the process of integrating learning outcomes, learning activities and assessment for three course modules *Mechanical Engineering*, *Drawing Techniques* and *Maritime English.* Accordingly, the following paper reports on the process of integrating the intended learning outcomes and teaching activities in order to constructively align (Biggs 2007] the three course modules stated above. The constructive alignment is expected to result into a joint cross-course and cross-curricula assessment model.

The development of corresponding testing tools to assess Maritime English skills has lately become imperative amongst Maritime English lecturers chiefly as there are no elaborated criteria to gauge results of tests like TOMTEC, MARTEL or MARLINS (Velikova G, *Maritime English Testing - Current State of Affairs).* In addition, these tests, apart from to some extent MARTEL, do not assess language skills in the context of a certain marine profession and are not oriented toward specific requirements for marine engineers albeit addressing IMO requirements. *The Yardstick for Maritime English SCTW assessment purposes* (Cole, C, Trenkner, P] is however an instrument attempting to incorporate STCW requirements for efficient communication on board (see Velikova G, above].

To provide language training that generates higher learning skills amongst sea engineers the lecturers need to incorporate the teaching of language and communication in the context of marine technology and marine propulsion courses. This also helps the students acknowledge the importance of well developed communication skills in the perspective of the professional circumstances they have chosen to abide by, thus giving meaning to their education. *Marine Engineering I* provides basic knowledge about the function and structure of technical systems in shipping facilities, and knowledge of the associated auxiliary systems necessary for the functioning of the various installations in the engine room. This course also provides basic knowledge of drawing techniques and an introduction to Maritime English, mainly in terms of technical vocabulary and safety terminology used on board. Presently, the intended learning outcomes are outlined in agreement with each course module.

After completing Marine Engineering I, the student will be able to:
describe different technical systems, propulsion systems, auxiliary systems, one- and multi-engine systems.
draw and interpret a drawing according to current standards.
understand and apply basic technical vocabulary and safety terminology on board, in English.

In the context of *Marine Engineering I*, the module of *Maritime English* is taught as a tool to be used in the process of understanding terminology regarding working platforms for engines and engine rooms, drawing techniques and security measures regarding bunkering, fire fighting and life boat operations, framing the requirements and implications of effective communication at sea. The learning activities consist of four language lab sessions designed to enclose content from *Mechanical Engineering* and *Drawing Techniques* learning/teaching activities (see table 1 on page 3] and to provide additional language/content training. In this way, the students learn to master language and communication in accordance with certain graduate attributes they expect to achieve as they complete the programme.

According to the course Constructive Alignment report (Eliasson, 2010] there are specific intended learning outcomes (Biggs, 2007] for the *Mechanical Engineering* and *Drawing Techniques* modules, as follows:

After completing Mechanical Engineering and Drawing Techniques modules, the student shall be able to:

Describe the components of a ship machinery system, particularly as far as the combustion system is concerned, (sessions 2,3, 4, 6)

Describe the basic construction of a diesel engine and all its adjoining systems. (sessions 2, 3, 6, 7)

Explain how adjoining engine systems are assembled and how their various functions may relate to the ship machinery system, (all sessions)

Explain the conditions in which all the adjoining engine components will function at optimal level, (all sessions)

Draw and be able to read an engine scheme following current regulations (all sessions within the Drawing Techniques module)

Table 1: integrated learning activities *of Mechanical Engineering I*

Language laboratory	Mechanical Engineering session	Drawing techniques session
Nautical English common words and phrases - SMCP/Mareng **The Ship** vocabulary - Mareng, **Technical vocabulary** common tools onboard, engine parts, common technical phrases, *Diesel Engines P* *Book chapters 2,3, 4*	**Session 2:** functionality, classification and working principles of diesel engines. **Session 3:** efficiency, losses, construction and standard figures of various types of diesel engines	**Specific technical vocabulary:** shapes and drawing technique, concepts and terminology

The engine room vocabulary - Mareng, *Diesel Engines I,* various exercises. **SMCP** fire fighting drills, fire protection, hazards in the engine room **Language proficiency** communication exercises, structure	**Session 5:** lubrication, air supply and cooling of diesel engines **Session 6:** driving gears, starting systems, speed control of diesel engines. **Session 7:** noise, vibrations, balancing and steam systems	
Handling liquid goods bunkering hazards in the engine room, translation -reading/writing exercise **SMCP** lifeboats, status/checking applied exercises **Language proficiency** words and phrases	**Session 4:** fuels, fuel-line systems, fuel cleaning and fuel injection systems. **Session 8:** diesel power plants ship propulsion	**Specific technical vocabulary:** shapes and drawing technique, concepts and terminology
Radiomedical vocabulary **Repetition Quiz**	**Session 9:** repetition exam lecture	

Following up on the integrated learning activities above, the intended learning outcomes for the *Maritime English* module seeks to emphasize a contextual interconnectedness of curricula/topics (Biggs 2007, pg 93] incorporated in *Mechanical Engineering I* and to include SMCP and STCW requirements as follows:

After completing the Maritime English module, the student shall be able to:

Understand and use common technical terminology regarding diesel engines and engine rooms on board, in English (lab 2, 3)

Be able to describe the structure of a four-stroke and a two-stroke diesel engine, in English, (lab 2,3)

Understand and use SMCP when describing hazards in the engine room, bunkering processes and lifeboat operations. [4] *(lab 1,3, 4)*

Both sets of intended learning outcomes are also aligned with STCW requirements and regulations as follows:

The marine engineer needs to demonstrate:

- adequate knowledge of the English language to enable the officer to use engineering publications, drawings and to perform engineering duties.

- ability to operate, maintain, monitor and evaluate engine performance and safety.

- manage fuel and ballast operation

- ensure safe working practices

(STCW]

Integrated learning outcomes and learning activities enable teachers to produce cross curricular assignments and a cross curricular/cross course examination for the three course modules, which lies in the interest of the students, the programme and the department. The course is presently assessed through a written, two part examination for *Mechanical Engineering* and *Drawing Techniques* which to some extent integrates Maritime English and SMCP. The students must pass the first part of the exam with full points, before they may proceed with the second part and there is an expressed ambition among course tutors to soon incorporate Cole and Trenkner's *Yardstick* (IMEC20, 2008] in the first part of the exam. At present, a joint Constructive Alignment report for the three course modules is also in the making, establishing clear activities and assessment throughout the course.

Several difficulties related to the process of integration of the three course modules have been identified and are currently being addressed. Firstly, the course is given prior to the students' first practical training period and must therefore include extensive information regarding basic attributes required on board implied by SCTW. The basics of SMCP and SCTW are currently taught in a compressed manner, extensively web-based but as the integration of the course modules proceeds, more specific, purpose oriented teaching and learning activities are to be reported. Secondly, the course objectives have been reformulated as to make CDIO and the Swedish National Agency for Higher Education requirements comply with STCW and IMO regulations and a Constructive Alignment report is being drafted.

Thirdly, student prerequisites vary significantly, directly affecting the student workload and the teaching methods, predominantly during simulations and communication exercises. To improve teaching activities as to meet student needs and expectations, diagnostic tests and additional training have been elaborated in order to motivate and aid students in the process of assimilating essential course content. Course literature, lectures, assessment and independent exercises have been integrated as to comply with all three course-modules thus creating context and relevance for the learning process and indicating Maritime English as a common ground for all communication on board. Assessment criteria in conformity with *The Yardstick for Maritime English SCTW assessment purposes* (Cole C, Trenkner P] are in the making to ensure the quality of Maritime English proficiency amongst sea engineers at Chalmers.IMO articles involving Maritime English no longer being introduced with "a definition of the term and a justification of its importance" (Cole C, Trenkner P, IMEC20 2008], research in this regard thus indicates an established recognition of and an adaptation to the need of efforts to be made, in order to internationally acknowledge the importance of excellent language proficiency in the marine context. *Marine Engineering I* is expected to raise the professional competence of a marine engineer generating a professionally contextual awareness of how important efficient communication on board is, as it aims to integrate communication regulations at sea with mechanical engineering curricula.

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DEVELOPING SOCIOCULTURAL COMPETENCE AS A KEY FOR IMPROVING CULTURAL AWARENESS OF FUTURE SEAFARERS

Abstract

One of the leading tendencies of modern pedagogy is a systematic inclusion of culture elements into the training process at all its stages. In recent years the great attention is paid to the phenomenon of sociocultural competence as an indicator of readiness for cross-cultural communication. For future seafarers the development of sociocultural competence must become one of the most important component of their professional performance in the multilingual crew. Owing to this fact it will become possible to organize successful work on board, prepare plans of cooperation in the crew, distribute functions and carry out emergency and routine tasks. Thus, the development of sociocultural competence of mariners as a component of their professional training process must get complete explanation on the level of functional pedagogical theory. The necessity to specify the basic characteristics and elaboration of such a theory caused the actuality of this paper. The main goal of developing sociocultural competence of seafarers is to gain better understanding and appropriate responses to different cultural and professional situations, because the lack of such information can negatively affect their cooperative work. In this case English serves as the most successful medium of communication. Seafarers must be able to understand the differences in their native and other countries cultures, accept them positively and overcome sociocultural contrasts. The results of this research will help to motivate maritime cadets to develop a wider outlook on successful communication on board the ship. Instructors can also find some useful ideas how to help students build up sociocultural competence.

Key words: *sociocultural competence, training process, modelling, job-related areas and situations, multinational crew*

1. Introduction

Nowadays the need of maritime students to develop sociocultural competence derives from close relationship between language and culture. They are tied to one another and have a great influence on communication. Developing an understanding of general cultural contexts will enable future seafarers who usually work in multinational crews to improve their cultural awareness. That is why one of the basic aims of ESP Curriculum (2005) is sociocultural one. It

focuses at developing understanding and interpreting different aspects of culture and language behavior in the world of work, for instance on board the ship. The basic idea of this paper is to analyze what is behind sociocultural competence and its use in teaching ESP for mariners.

The idea of developing sociocultural competence of future seamen is fairly recent. Nevertheless, many cross-cultural and intercultural issues were fundamentally studied by Joseph Okon Joe (2010), Carmen Chirea-Ungureanu (2010) and Lieve Vangehuchten (2010) respectively. Cultural values (time, individual space, etc.) and their key role in communication with members of a multinational crew was analyzed by Tatiana Oleneva (2010).

In spite of this, there has been a slow progress in developing instructions and materials that would help English language teachers to understand the importance of sociocultural competence for maritime students and to implement it in their classrooms. Several papers have been published recently which explain its great role and how the absence or lack of this sort of information can negatively affect future seafarers. This paper is an attempt to summarize the ideas of different theories and suggest a methodological strategy for sociocultural competence implication into ESP teaching in maritime educational institutions.

2. General issues of sociocultural competence

2.1. Definition and objective of sociocultural competence

Sociocultural competence is an integral part of ESP teaching and there are a number of its definitions. Some of them would be analyzed and one which seems to be the most sufficient would be suggested.

ESP National Curriculum for Universities defines that sociocultural competence "aims at developing understanding and interpreting different aspects of culture and language behavior in the world of work. It encourages the development of the skills involved in appropriate behavior in and responses to different cultural and professional situation" (2005).

Romanenko Oksana (2008) considers that sociocultural competence is "an adoption of cultural and religious values of native and other nations, norms which regulate relations between generations, genders, nationalities, encourage aesthetic and moral growth".

"Sociocultural competence – a complex of verbal and non-verbal skills needed in cross-cultural communication", the definition given by Kuzmenko Yulia (2007).

In our conception ***sociocultural competence is a human ability to accept, understand, interpret adequately and be aware of nation and culture focused information in intercultural communication***.

2.2. Components of sociocultural competence

The majority of researchers raised questions about multicomponent structure of sociocultural competence. There are a number of different theories on this issue.

In the American methodological literature we found the following structure. According to the thesis there are four components of sociocultural competence: social contextual factors, stylistic

appropriateness factors, cultural factors, and non-verbal communicative factors. Moreover, authors mention that some of these components are often neglected in ESL education, leading to comprehension difficulties or confusion (Celce-Marcia, Dorneyi & Thurred, 1995). For example, forms of non-verbal communication, such as body language, eye contact, and use of personal space are an integral part of each culture, whose norms are simply understood and are not discussed by its culture beams. However, people of other cultures usually have different customs of body language use. Seafarers who are usually unaware of such communication standards can have frequent misunderstanding problems in their multinational crews.

Russian researcher P.Sysoyev considers that sociocultural competence consists of four components:

- sociocultural knowledge (information about the country of a studied language, cultural traditions, including representatives of different ethnic groups, features of national mentality and behaviour);
- communication experience (a choice of tolerable and acceptable style in communication);
- personal attitude to culture facts (including ability to overcome and resolve sociocultural conflicts in communication);
- application of language (the correct use of national-marked language in speech in various spheres of intercultural communication) (Sysoyev 2001).

Sociocultural competence in I.Bim's interpretation includes sociolinguistic, presentive, common cultural and national cultural competences (Bim 2002).

V.Safonova also considers sociocultural competence as a complex phenomenon which includes a set of components, referring to various categories. In her opinion, sociocultural competence consists of:

- national lingual component (lexical units with national-cultural semantics and ability to use them in situations of intercultural communication);
- sociolinguistic component (language features of social strata, representatives of different generations, groups, dialects);
- common cultural component (common and universal culture elements, e.g. friendship, love, beauty, evil, harm etc.);
- culturological component (historical and ethno cultural background) (Safonova 1996).

Above mentioned theories about multicomponent structure of sociocultural competence show that all of them can be changed and updated in the future, thus their common basic core remains invariable.

3. Modelling of educational situations of seafarer's professional work as the method of developing sociocultural competence

3.1. The general model of job-related situations in the course of ESP (maritime profile)

Modelling of educational situations reflecting professional work of the seafarer, is one of effective ways of ESP teaching in the higher maritime educational institution. Use of educational situations allows to introduce novelty, a creative training, helps the teacher to individualize training process, to create a friendly atmosphere in the class. Principle realization

of educational situations promotes the development of oral speech skills, and also listening skills. It causes a high actuality of educational situations modelling which contents is professional work of the seafarer, and their use in the course of teaching ESP (maritime profile).

It is necessary to mention, that the role of professional situations in the course of ESP has been studied by many scientists and experts. In the last decade a lot of interesting publications have started to appear. They affirm that the modelling problem in methodology cannot be limited to questions of the organisation of a language material, and on this basis it is offered to create models of job-related situational dialogue, which allows to optimize training process of the English language. Practical experience of use of certain models and method of modelling in the course of teaching ESP in maritime educational institution has shown, that application of a separately taken model is not enough for effective training. Absence of the system approach in modelling does not allow to realize completely diverse possibilities of use of models in the professionally-focused training.

It has caused the necessity of systematic development of educational situation models which reflect the main characteristics of professional work of the seafarer. The model below shows the interconnected set of different types of situations used in the course of teaching ESP (maritime profile). Components of this model which are based on six criteria, we submit in the form of the table (tab.1).

Table 1. Educational situations of seafarer's professional work (model components)

Criterion	***Variety of job-related situations***
On a functional orientation of the educational problem	Situation-problem, situation-exercise, situation-illustration, situation-evaluation, situation-information, situation-inquiry, situation-statement
On the form of the educational activity	Group, individual, collective, (cadet – cadets, teacher –cadet, officer – cadets, officer – cadet, cadets – cadets)
On a thematic orientation	Theme 1. Personal identification. Theme 2. Nautical education. Plans for the future. Theme 3. Types of vessels and cargoes. Theme 4. Crew roles and routines. Theme 5. Ship construction. Theme 6. Safety on board. Theme 7. Emergencies and alarms. Theme 8. Life-saving appliances. Theme 9. Security at sea. Theme 10. Weather conditions. Theme 11. World map. Theme 12. Injuries at sea. etc.
On a purpose	Training, informative, monitoring and self-checking
On complexity degree	1) beginner, 2) elementary, 3) pre-intermediate, 4) intermediate, 5) upper-intermediate
On character of a language material	1) lexical, 2) grammatical

Proceeding from the allocated criteria, the general schematic model of typical situations of professional work of the seafarer has been developed. Its basis includes those situations which are classified according to a functional orientation of a certain educational task. Each of the basic types of situations can have hundreds of variants depending on the chosen type of the

tasks defined by several types of systematic approach. We apply its schematic model below (fig.1)

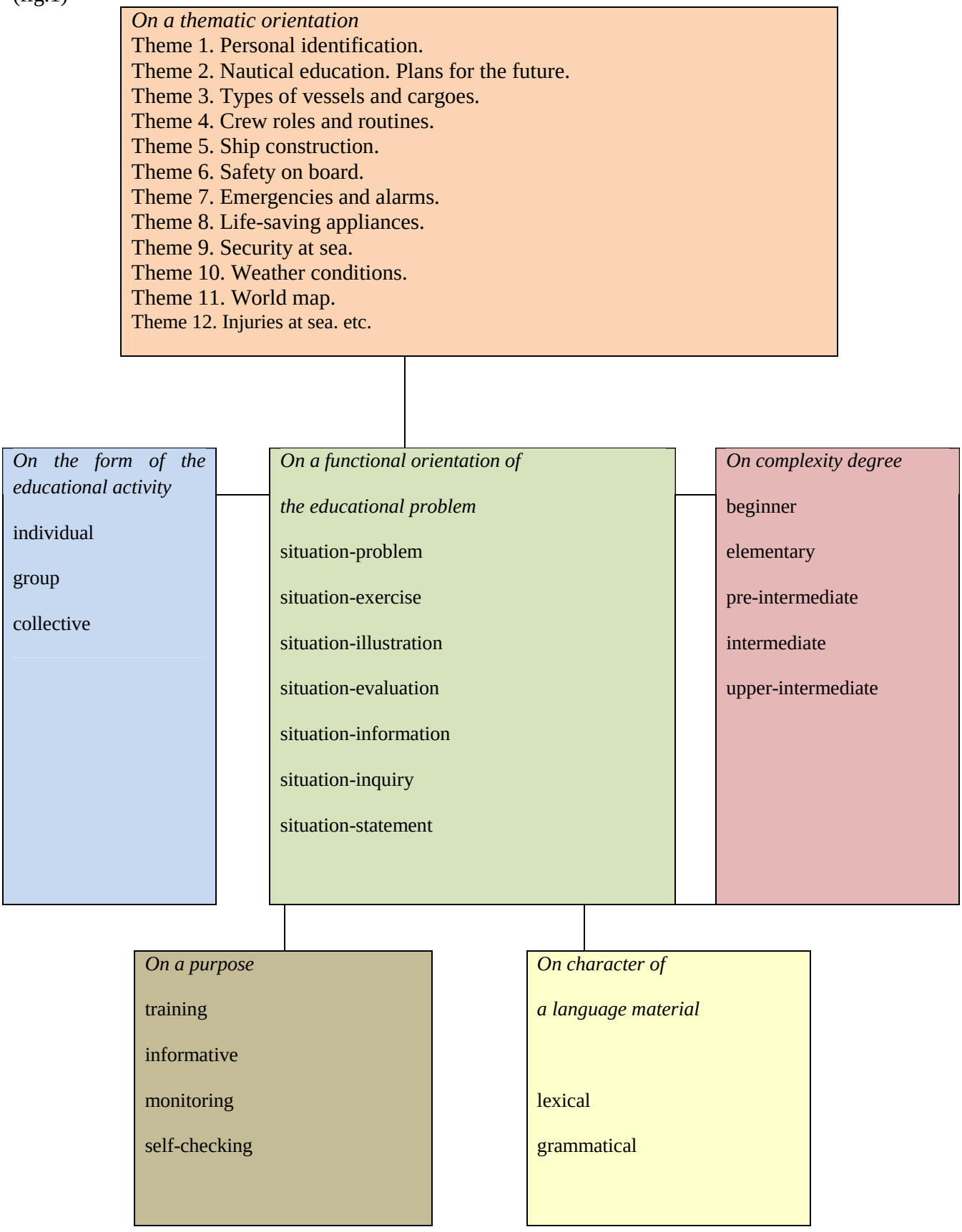


Figure 1. The general model of educational situations

The general model of situations of professional work is developed by us on the basis of the complex analysis of the theory of modelling, the purposes and training problems of teaching ESP, correlated with the contents of professional training of cadets. In the system of models of educational situations reflecting characteristic aspects of activity of the seafarer, the important role is given to the creation of the models corresponding to certain organizational forms of training.

Before developing educational problems intended for educational purposes, it is necessary to analyze the program of ESP (maritime profile), structure of real tasks and processes of their solution by future seafarers. In their professional work marine officers execute different functions. Whatever was the sphere of cadet's activity, then the officer's, in all cases it faces various problems which solution demands high degree of his competence development, professional thinking and knowledge of a foreign language. It is practically impossible to develop all variety of situations and problems solved by the seafarer. Each marine officer makes his decisions in each concrete situation which is dynamically changed, and in each new situation his new reaction is required. In a training process it is necessary: to allocate the general types of problems solved by the seafarer; to develop methods of their reconstruction and the organization of trainees' activity in educational problems of various type; ability to formulate their decision in a foreign language (fig.2).

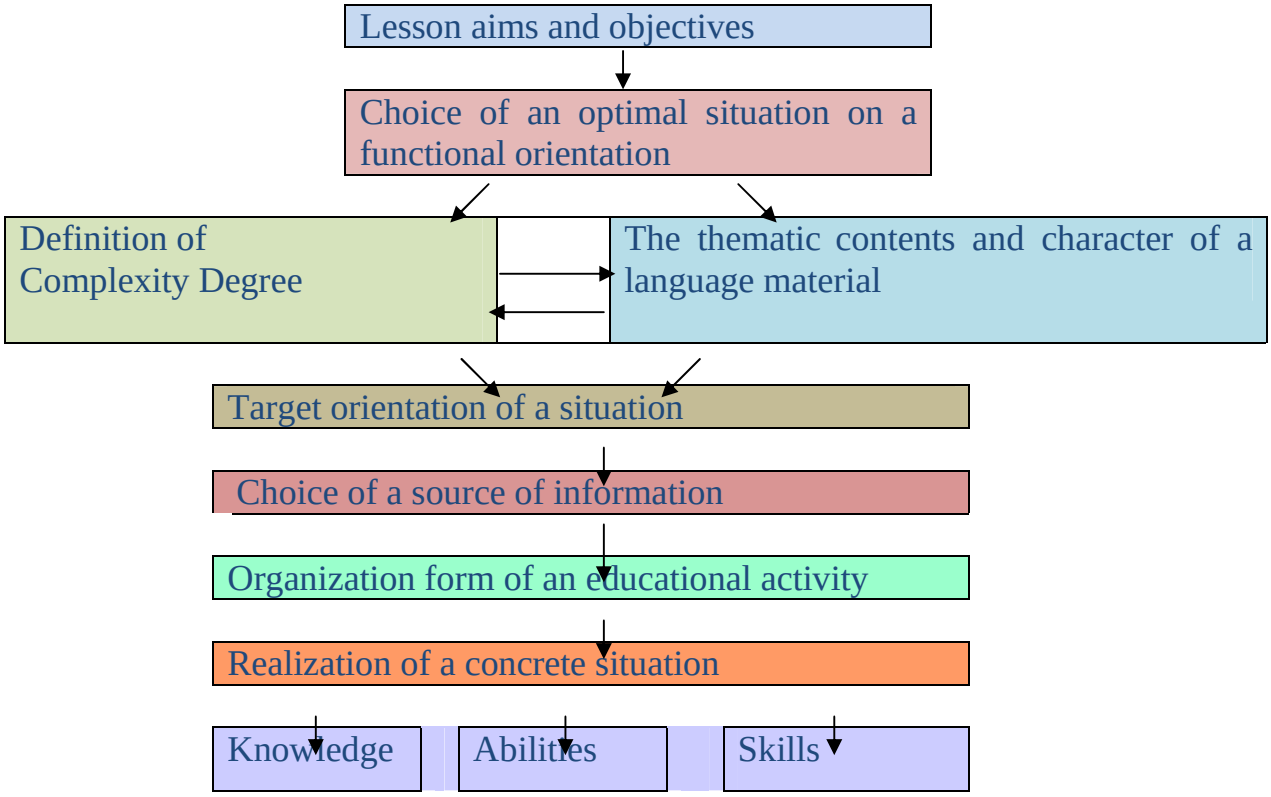


Figure 2. The general model of job-related situations

Advantages of the general model of situations in the training process:

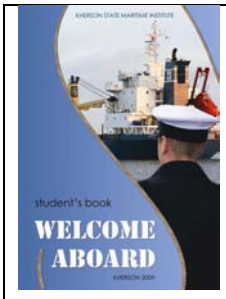
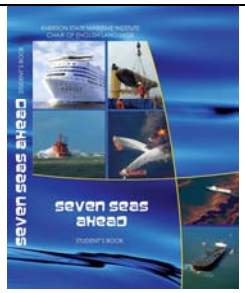
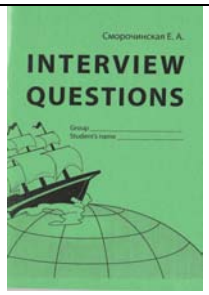
1) Brings a variety in ESP (maritime profile) teaching;
2) Positively stimulates educational motivation of trainees;
3) Creates a friendly atmosphere in the class;
4) Gives additional possibilities for realization of more intensive ESP studying;
5) Increases a professional standard of the seafarer.

The analysis of practical use of models in practice of ESP studying has shown expediency of its application. Modelling of situations of professional work represents itself as one of the important activation means of communication in a foreign language.

Generic job-related areas and situations with sociocultural component in textbooks developed by English Language Department of Kherson State Maritime Academy

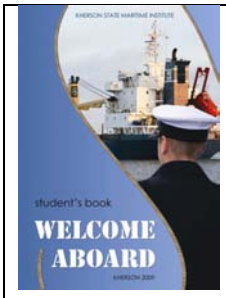
The main aim of ESP teaching and learning is to prepare students to communicate effectively in their academic and professional environments. The Curriculum developed by English Language Department of Kherson State Maritime Academy in 2009 proposes that real-life situations should be given priority in the class.

Since 2009 four textbooks have been published.

			
Welcome Aboard	Seven Seas Ahead	Lucky Voyage	Interview Questions

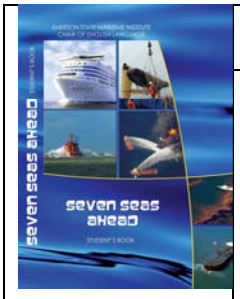
It is not possible to provide a complete list of job-related areas and situations given in these textbooks, as they are too numerous. So, a sample list of them illustrates how language serves various professional needs in *Welcome Aboard* and *Seven Seas Ahead (tab.2 and 3)*.

Table 2. List of job-related areas and situations in *Welcome Aboard*

	Job-related areas	**Job-related situations**
	1. Applying for a job	Job interview Appointments and meetings (Do's & Don'ts)
	2. Nautical education	Lectures Seminars Choosing a profession

		Student life
	3. Types of vessels and cargoes	Exchange information on vessels and their design Exchange information on cargoes and their properties Warning marks
	4. Ship construction	Identification of vessel parts Working place General arrangement plan
	5. Crew organization and routine operations	Crew roles Establishing contacts/relations Briefings
	6. Safety Aboard	Identification of oral commands Safety signs Use of checklist for life-saving appliances

Table 3. List of job-related areas and situations in *Seven Seas Ahead*

	**Job-related areas**	**Job-related situations**
	1. Around the world	Continents and oceans Distances on land and sea Countries and nations Description of a ship's route
	2. Emergency & survival at sea	Oral commands in simulated emergency situations Use of life-saving appliances Survival techniques

	3. Medical assistance	Identification of injury type Basic reports of the causes of accidents
	4. Environmental protection	Potential problems of marine environment Description of pollution avoidance procedures
	5. Security at sea	Report of events that occurred during a sea passage Pirates' high spots on the world map Stowaways on board
	6. Shipboard training	Cadet's training program Future predictions

Though the sample list provides a variety of job-related areas and situations, it is necessary to choose those which contain sociocultural component and can be used for realization of a sociocultural aim - ***developing a broad understanding of important and different international sociocultural issues in order to operate appropriately in culturally diverse professional and academic environments*** - in ESP (maritime profile) Curriculum (2005).

The following job-related areas and situations can be used for developing sociocultural competence of future seafarers (tab.4).

Table 4. Sociocultural component in *Welcome Aboard* and *Seven Seas Ahead*

Job-related areas	**Job-related situations**	**Sociocultural component**
1. Applying for a job	Job interview Appointments and meetings (Do's & Don'ts)	Negative effect of crew cost variation
2. Nautical education	Lectures Seminars Choosing a profession Student life	Negotiation of a social arrangement that incorporates the wishes of everyone in the group
3. Crew organization and routine operations	Crew roles Establishing	Understanding of the cultural norms of different nationality

	contacts/relations Briefings	groups on board
4. Safety Aboard	Identification of oral commands Safety signs Use of checklist for life-saving appliances	Demonstrating awareness of how sociocultural issues can affect team work and safety at sea
5. Emergency & survival at sea	Oral commands in simulated emergency situations Use of life-saving appliances Survival techniques	Recognition of differences in types of non-verbal communication
6. Around the world	Continents and oceans Distances on land and sea Countries and nations Description of a ship's route	Maritime beliefs and superstitions from different countries
7. Security at sea	Report of events that occurred during a sea passage Pirates' high spots on the world map Stowaways on board	Pressures that face seafarers in their work and give some advice
8. Shipboard training	Cadet's training program Future predictions	Expected standards of work and behaviour on board

Thus, sociocultural component presented in textbooks developed by English Language Department of Kherson State Maritime Academy seems to be an integral part of their contents. It aims at developing understanding and interpreting different aspects of culture and language behavior in the world of maritime work.

4. Conclusion

Sociocultural competence encourages the development of the skills involved in appropriate behavior in and responses to different cultural and professional situations that take place on

board the ship. It means that alertness must be stimulated in future marine officers to various unexpected sociocultural differences between their crewmembers and themselves. This is very important because English is in use as a medium of intercultural communication on board between non-speakers from different countries. It should be mentioned, however, that teaching sociocultural competence in maritime educational institutions is not asking cadets and students to abandon their own cultures and adopt another identity. Instead, it is meant to offer sociocultural information which can help them understand their future multinational crews.

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Author's Bio-Note

Olena Smorochynska is a Senior Lecturer in Kherson State Maritime Academy, Ukraine. She has been teaching English for more than five years specializing in English for Specific Purposes such as Maritime English. She has written and produced articles, teaching materials and textbooks, including *Welcome Aboard* (2011) and *Seven Seas Ahead* (2010). She is currently writing her PhD thesis in Theory and Methods of Professional Education and is a lecturer and researcher.

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INTERCULTURAL COMPETENCE AND EFFECTIVE COMMUNICATION AT SEA:

AN INVITATION TO CELEBRATE DIVERSITY ON BOARD

Abstract

One of the main challenges facing human resource management in the current maritime sector lies in cultural and linguistic diversity and in how to harness its strengths and eliminate its weaknesses. The mission statements of international shipping companies reveal objectives that aim not only to provide professional services, ensure safety, increase security and protect the marine environment but also to respect diversity and promote unity amongst seafarers. Diversity is "a source of wealth" for a shipping company and its employees; an asset to be "celebrated" (Bourbon, http://bourbon-online.com).

The exact manner of "celebrating" and promoting this diversity remains, nevertheless, elusive. With 90% of the world's fleet being operated by multi-ethnic, multilingual crews, recent recognition of the need to explore and encourage cultural competence in cadets of the merchant marine is gaining momentum. Although the maritime community still harbours intercultural "sceptics", the majority of the sector's stakeholders are pondering the best approaches to the subject. There is no doubt, however, that effective communication at sea holds the key. It opens doors to achieving (inter)cultural objectives as well as creating a harmonious and efficient working atmosphere on board.

The paper offers an analysis of a survey-based research project (University of Antwerp and Antwerp Maritime Academy) which aims to determine the linguistic and intercultural features of maritime communication that hinder or aid the quality of work onboard a merchant ship. The paper focuses on the second questionnaire (intercultural aspects) of the research project, the first having been discussed at IMEC22.

1 Introduction

An analysis of the subjects presented at IMEC conferences over the last few years reveals some changes in content. Academic papers and workshops regarding verbal communication and English as the lingua franca of the seafaring community continue to dominate the conference, but a brief glance at proceedings past and present suffices to highlight a rapidly growing awareness of the importance of (inter)cultural issues. Within academic and training circles, there are moves to encourage interest in the subject and, ultimately, to incorporate (inter)cultural competences in global maritime curricula. Wide evidence of this recent surge in interest can be found in the content of current maritime training projects, in research topics within MET institutions and in curriculum development around the world. These combined factors serve to create an 'intercultural snowball' which is fast gaining in momentum.

In addition, at the level of the industry, the mission statements of international shipping companies reveal objectives that aim not only to provide professional services, ensure safety, increase security and protect the marine environment but also to respect diversity and promote unity amongst seafarers. Cultural diversity management of maritime resources has been steadily gaining in importance. Browsing the websites of shipping companies quickly leads to the conclusion that diversity and multi-ethnicity are 'hot' topics. Belgian company Safmarine proclaims "*We have a truly multinational identity*" (Safmarine http://www.safmarine.com) whilst Euronav's human resources page states "*We celebrate the diversity in our workforce*. (…). (…) *commitment and stability enriched with diversity have enabled us to achieve excellent results in an extremely competitive industry"* (Euronav http://www.euronav.com). Bourbon also claims to be "*essentially a multicultural group*" which relishes the opportunities posed by diversity. "*Backed by this openness to the world, the group is formalizing its practices to benefit as much as possible from this diversity, a source of wealth for the company and its employees*" (Bourbon http://bourbon-online.com). The growing need to nurture intercultural management skills, or formalise practices in this field as Bourbon puts it, has thus moved to the forefront and shipping companies are eager to tap and optimise resources.

The question arises as to why intercultural competences matter? Why are these skills suddenly demanding attention? Increasing globalisation combined with a general decline worldwide in numbers of seafarers has meant that multi-ethnic, multilingual crews have become the norm rather than the exception. A seafarer of the 21st century embarking for the first time encounters crew members of different nationalities, often from unfamiliar cultural backgrounds, speaking a range of languages. It therefore comes as no surprise that communication on board has become increasingly vulnerable to both linguistic discrepancies and cultural misunderstandings. Communication proves to be frequently problematical, inevitably resulting in an inability to communicate. This leads, in turn, to inefficiency in terms of the seafarer's work onboard and, in the worst cases, to serious breakdowns in safety. As demonstrated by de la Campa Portela (2005, 2006), failures in communication have serious consequences for safety at sea and are still often cited as contributory causes of maritime accidents. In addition to the safety aspect, social issues are also linked to communication; seafarers who are limited in their ability to converse with their fellow crew members experience feelings of solitude and isolation.

An obvious solution to the problem of communication on board has been to use a common language and English has gradually become accepted as the lingua franca of the maritime world. In addition, attempts have been made to standardise language at sea. The IMO[17] has always kept abreast of evolving communication issues on board and in 2001, in a move to address problems, it replaced the Standard Marine Navigational Vocabulary of 1977 with the Standard Marine Communication Phrases (SMCP). The 'new' SMCP are modelled on a more accessible language, designed to facilitate safety and take into account state-of-the-art innovation and conditions in the field of modern navigation. They contain external communication phrases (ship-to-ship and ship-to-shore) as well as on-board communication phrases. However, research has shown that this standardised language is often sparingly used in practice. The MARCOM report of 1998 suggested that "*the advantages that SMCP can offer are still not appreciated by the majority of mariners*" and advocated more widespread use of the phrases in order to minimise misunderstandings. MARCOM offers several case studies where use of the SMCP would, without doubt, have provided clarity during communication[18]. It is therefore unfortunate that the SMCP's artificial nature seems to act as a disincentive to learning the phrases (Bocanegra-Valle 2010, 163). If reports of the high number of accidents still caused by miscommunication are to be believed (Squire 2006), the lack of effective communication thus remains a serious threat to safety.

Bridge Resource Management (now also known as Maritime Resource Management) and, in particular, relationships between master, crew and pilot also play a crucial role in efficient working practices. If there is a breakdown in communication between these parties, safety is compromised. In these areas it is not only language barriers which can prove problematic but also cultural differences (Deboo 2004). For a multi-ethnic crew, difficulties arising as a result of an insufficient command of the English are not the only issue but also those stemming from often seemingly insurmountable intercultural differences. In many cases the onboard management, namely the master and officers, does not have the necessary knowhow to recognise and articulate (inter)cultural differences in the first instance, let alone the ability to encourage crew members to overcome them, resulting in a lack of communication and cooperation which, in the worst cases, causes accidents and even fatalities.

The maritime community has therefore rightly invested in the linguistic aspects of communication (SMCP) and has made attempts to place leadership skills, teamwork and group communication (Bridge Resource Management) firmly on the seafaring curriculum, as seen in the 2010 Manila Amendments to the Standards of Training, Certification and Watchkeeping (STCW). It should now not fight shy of scrutinising the other facets of communication, in particular (inter)cultural aspects, in order to improve safety.

The paper will consider the drawbacks of linguistic and cultural diversity but does not wish to dwell on these. On the contrary, the paper aims to celebrate diversity. Specifically the paper presents an analysis of a survey-based research project (University of Antwerp and Antwerp Maritime Academy) which aims to determine the linguistic and intercultural features of maritime communication that affect the quality of work onboard a merchant ship. This paper

[17] International Maritime Organization, http://www.imo.org

[18] Data from the third part of the authors' survey, relating to the SMCP, is the subject of ongoing research.

focuses on the second questionnaire (intercultural aspects) of the research project, the first questionnaire having been discussed at IMEC22[19]. The aim of the paper is to focus on data, analyse the evidence and thereafter draw conclusions. The paper ends by offering suggestions for discussion and future research.

2 Brief Literature Review

The MARCOM project of the late nineties, coordinated by The Seafarers International Research Centre at Cardiff University, was the most recent large-scale research project on internal and external maritime communication. The main results of the project revealed that, due to the globalisation process, approximately 80% of the world's merchant ships had become multilingual and multi-ethnic in terms of crew composition (MARCOM 1998). The most difficult communication problems were identified at the levels of understanding English first when used between ship and shore under critical conditions, second between ship and shore in close and congested circumstances when there was little time or space to rectify initial misunderstanding and third in passing orders between different language speakers on the bridge of a vessel and during emergencies. The study unequivocally signalled that language was not the only problem. Cultural differences in a mixed crew involving, for example, different meanings and emphasis being applied to the same words and ways of communication were also shown to cause friction and lead to accidents (ibid.).

In the field of language for specific purposes (LSP) in general, the results of studies and the current research literature on intercultural communication argue that there undoubtedly exists a positive correlation between linguistic and intercultural competences (Cunningham & Spigel 1971; Davis 1995; Enderwick & Akoorie 1994; Lautanen 2000; Schlegelmilch & Crook 1988; Schlegelmilch & Ross 1987; Swift 1990; Swift 1991; Turnbull & Welham 1985; Ursic & Czinkota 1989; Walters 1990). Knowledge of languages can be regarded as human capital as it offers significant competitive advantages. Moreover, a good command of foreign languages and major intercultural openings go hand in hand. A good linguistic team also appears to facilitate information flows extensively and promote innovation (see, for instance, Leonidou et al. 2001, Williams and Chaston 2004). It thus seems clear that research into linguistic and social interaction or research into the use of language should not be executed from a mere linguistic perspective but by employing and merging aspects from various disciplines, including socio-linguistics, anthropology, organisational sociology and intercultural management. In a professional environment, communicative competency during discourse can only be achieved if the participant possesses, on the one hand, knowledge of the language system in question and, on the other, of the specific culture-related characteristics of the communicative event or conversation. Specifically, in the field of business communication, scholarly work draws on Bourdieu's (2001) concept of 'linguistic capital', defined as the knowledge of and fluency in institutional discourses and bureaucratic languages and subsequently juxtaposes this with the concept of 'linguistic penalty', the opposite factor. Roberts and Campbell (2006) offer a clear example in the form of job interviews conducted in English, where native speakers are clearly at

[19] 22nd International Maritime English Conference, October 28th – November 1st 2010, Arab Academy of Science, Technology and Maritime Transport (AASTMT), Alexandria, Egypt

an advantage and thus benefit from linguistic capital. Another example would be international conferences conducted in English and, more pertinently, whose subject is the English language itself, such as IMEC, where native speakers may also be seen to take the upper hand.

Adding to the debate on intercultural communication it must not be taken for granted that intercultural competence is a subset of linguistic excellence. Claes and Gerritsen (2007 : 131) point out that, despite possessing linguistic competence, someone who masters a foreign language grammatically may have scant understanding of mistaken usage of certain linguistic elements in a specific context and situation. Culturally diverse participants in discourse may speak the same language or resort to a shared *lingua franca*, thus enabling them linguistically to 'decode' the messages they 'transmit', but this does not necessarily mean that they 'construct' the same mutual meaning from the message. Cheng (2003: 2) notes that intercultural conversation is shaped by cultural assumptions and culturally-determined behaviour on the part of the participants which may give rise to misunderstanding. This lack of understanding arises from a difficulty in recognising that aspects such as the use of names, titles, the use of formal/informal second person pronoun, politeness markers, turn-taking in conversation, thought patterns, opinion giving and oral presentation techniques are dependent on culture. Competency in cross-cultural or intercultural discourse thus demands an acceptance that culture has a direct influence on communicative behaviour and that, in order to share meaningful discourse, it is important that participants are able to decode cultural signals.

In the light of the literature the authors opted to elaborate these aspects in a survey on communication for maritime purposes. This paper focuses on the extent to which linguistic and intercultural features influence the quality of communication in the maritime sector. Having described the methodology and the profile of the respondents, the paper will provide an exploratory data analysis, with a view to familiarisation with the data, make observations on the results of the data and finish with a concluding discussion on implications for MET institutions and the shipping industry.

3 Methodology

To investigate maritime communication in the Belgian shipping industry, the authors decided to use survey-based research methods and opted for a cross-section descriptive survey[20], this being regarded as an appropriate tool with which to investigate the relevance of communication problems (see Baarda & de Goede 2006). In order to ensure that all respondents were sufficiently knowledgeable (Kumar et al. 1993) the scope of the survey was restricted to officers only. The Royal Belgian Shipowners' Association[21] assisted in contacting the Belgian shipping companies which in turn sent our survey to their captains and officers. In addition, the survey was sent to the alumni of the Antwerp Maritime Academy. As a result non-Belgian shipping companies were also indirectly involved.

[20] Since the findings presented in this chapter are part of unpublished doctoral research, the survey remains confidential until the doctoral thesis is eventually published.

[21] Details of the Royal Belgian Shipowners' Association can be found at www.brv.be

The first part of the survey addresses general respondent information such as employer, shipping experience (years of experience, vessel type, trade type and geographical area) and onboard function, as well as more specific questions on the linguistic aspects of communication problems in the maritime world, their causes and possible solutions (Vangehuchten, Van Parys & Noble 2010[22]). The second part of the survey examines the extent to which (inter)cultural features such as divergent ethical and social norms, divergent thinking and/or acting patterns, divergent organisational practices, divergent verbal and non-verbal communication forms, lack of intercultural awareness and inability to overcome prejudices influence the quality of communication in the maritime sector. The third part inquires into the use and usefulness of SMCP or an alternative standardised language.

4 A basic characterisation of the respondent group

A response to the first questionnaire (linguistic issues) was received from captains and officers from 28 different shipping companies. 127 respondents completed and returned the questionnaire. The response is considered to be high, taking into consideration overall low response rates to similar surveys in recent years. A total of 84 provided their current or former function. 20% reported that they were no longer navigating. Of the remaining 80%, who still held an onboard function, 57% indicated that they were captain or chief officer, and 43% that they were second, third, fourth or apprentice officer. Of the 127 respondents, 32% sailed on gas tankers, 7% on chemical tankers, 7% on dredgers and the remaining 54% are spread over other types of vessel, namely bulk carriers, container ships, general cargo vessels (break bulk carriers), oil tankers, passenger vessels (cruise ships), ferries and ro-ro vessels, coasters, tug boats and ocean-going tugs. The relatively high percentage of respondents sailing on gas tankers is to be expected, given that this type of vessel is characteristic of the Belgian fleet.

In terms of nationality (and the native language) on board a distinction was made between groups: the group which includes the captain, deck officers and engineer officers and the other group which includes other crew members of the deck department, of the engine room and of the catering department. The survey showed that the first group was a mixed nationality group with Belgians included. Captains, for example, were reported as being of Belgian, Chinese, Polish, Lithuanian, Bulgarian, Spanish, Indian, Croatian and Congolese nationality. In the group of the other (lower) crew members[23] the absence of Belgians was shown to be more noticeable: the group was mixed but, in the majority of cases, included no Belgians at all.

The number of respondents who progressed to part two (intercultural part) of the survey fell to 90, resulting in 37 respondents fewer. All of the 37 who did not progress from part one of the survey to part two had previously reported their current or former function and we are consequently able to note these: 4 were captains, 10 chief officers, 14 second, third, fourth or apprentice officers and the remaining 9 were no longer navigating. This data facilitates the respondent profile of the second part of the survey.

Table 1, below, demonstrates that the respondent profile for part two of the survey has, therefore, changed slightly in terms of both categories, namely currently navigating

[22] See Vangehuchten *et al* (2010) for details of the methodology applied to the linguistic part of the survey.

[23] The nationalities of the other crewmembers were the following: Belgian, Chilean, Ecuadorian, Lithuanian, Polish, Filipino, Indian, Croatian, Spanish, Burmese, Portuguese, Indonesian, Australian, Uruguayan, and Ukrainian.

captains and chief officers on the one hand and second, third, fourth and apprentice officers on the other. The percentage corresponding to each category has fallen by 10%. However, the percentage of currently navigating respondents in the top management category, namely captains and chief officers, who completed part two, continues high, at just under 50%. This percentage rises to 59% if we relate it only to the total number of respondents currently navigating. It should be noted here that respondents who chose to give no answer to a question are not included in the figures at the analysis below.

Table 1 Number of respondents for Parts 1 and 2

	Part 1 (linguistic aspects)		Part 2 (intercultural aspects)	
Total respondents	127		90	
Total respondents currently navigating	102	80%	74	82%
Captains & chief officers	58	57%	44	48%
Second, third, fourth and apprentice officers	44	43%	30	33%

5 Descriptive analysis of the data

5.1 Exploratory results of the first questionnaire (linguistic factors)

The respondent profile discussed above clearly indicates that multi-ethnic, multilingual crews on board merchant marine vessels are not in dispute. Their existence is an established fact and the survey in question offers further proof, within the context of the Belgian fleet, that crews are comprised of 'mixed' nationality seafarers.

Part of the data from the first questionnaire provides information about communication problems on board. The next stage is to investigate whether there exists a link between multicultural crew composition and miscommunication. From the data it would seem that communication problems on board, if there are any, occur particularly with crew members who do not fall into the category of captain or officer and, occasionally, with the pilot. Since we also know from the first questionnaire that it is precisely the former category (other crew members) that displays the greatest variety in terms of nationality and ethnicity it can be construed that multiculturism may play a role in miscommunication.

In terms of causes of miscommunication, the first part of the survey investigates linguistic aspects impacting on communication. Respondents (at least 50%) replied that, with

the exception of reading skills, all of the aspects listed (SMCP, writing, listening, speaking, pronunciation, grammar, technical/nautical vocabulary, vocabulary) caused problems from time to time during communication with officers. When it comes to communication with other crew members, at least 60% of the respondents consider all linguistic aspects listed to cause miscommunication on some occasions. Here, listening, pronunciation, grammar and (technical/nautical) vocabulary prove the most significant.

When asked about solutions to miscommunication on board respondents were significantly (mostly over 90%) sure that when using English all language skills, namely writing and reading skills, speaking and listening skills, pronunciation, grammar, (technical/nautical) vocabulary and, in addition, SMCP were important for their work on board. By the same token a high number of respondents considered all language skills to be important for recruitment and assessment and this explains the fact that the majority of respondents (more than 70%) consider in-service training organised by their shipping company important.

5.2 Exploratory results of the second questionnaire (intercultural factors)

In the first instance, the analysis of data from part two of the survey corroborates data from part one. The following two tables illustrate this. Where culture-related problems arise during communication, 34% (13 of the 39 respondents) cite insufficient knowledge of a foreign language, namely English, as *rather often* to *very often* being the cause of the problem between officers (Table 2). Where other crew members are concerned (Table 3), even 37% of respondents (15 of the 40) cited this as being the cause. If we look back to the analysis of the data at part one of the survey (linguistic), we can recall the specific linguistic causes of miscommunication (Vangehuchten, Van Parys & Noble 2010). 36 of 59 respondents (52%) listed grammar[24] as being rather often to very often the most problematical issue, 38 of 73 (52%) selected technical/nautical vocabulary or simply vocabulary (39 of 73 or 53%), and 37 of 72 respondents (51%) selected pronunciation. The data thus already start to offer comprehensive results in terms of linguistic and (inter)cultural aspects of maritime communication and their potential links.

It is relevant to note at this stage that linguistic aspects of miscommunication may not necessarily be perpetrated by a non-native speaker of English but may also be initiated by a native speaker resorting either to colloquial or local patterns of speech, using complicated vocabulary and/or speaking an unknown dialect or using an unfamiliar accent. A respondent to part one of our survey commented "*officers whose native language is English often use words and expressions that are not easily understandable by non native English persons. Officers from US are the worst. Words, expression and pronunciation are different*". In such instances lack of familiarity with or scant knowledge of local (English) pronunciation and dialects can pose problems. Tagaki (2011) comments that a Japanese native speaker, even one who is well versed in English, may at times, struggle to comprehend the language, especially during ship-to-shore communication in certain waters (e.g. when entering North American ports).

More often than not, however, the miscommunication lies with non-native speakers of English and their inability to communicate adequately in the language. As previously mentioned the literature makes reference to the 'linguistic penalty', whereby a crew member who is non-

[24] The MARCOM report (p. 76) interestingly enough considers that a lack of grammar, as evidenced when seafarers resort to pidgin English, "*does not seem to affect the success of the communication method*".

proficient in English will be at a professional disadvantage. Problematic talk, social isolation or, in the worst cases, serious miscommunication leading to accidents will be the outcome.

Table 2 Factors resulting in culture-related problems *between officers*

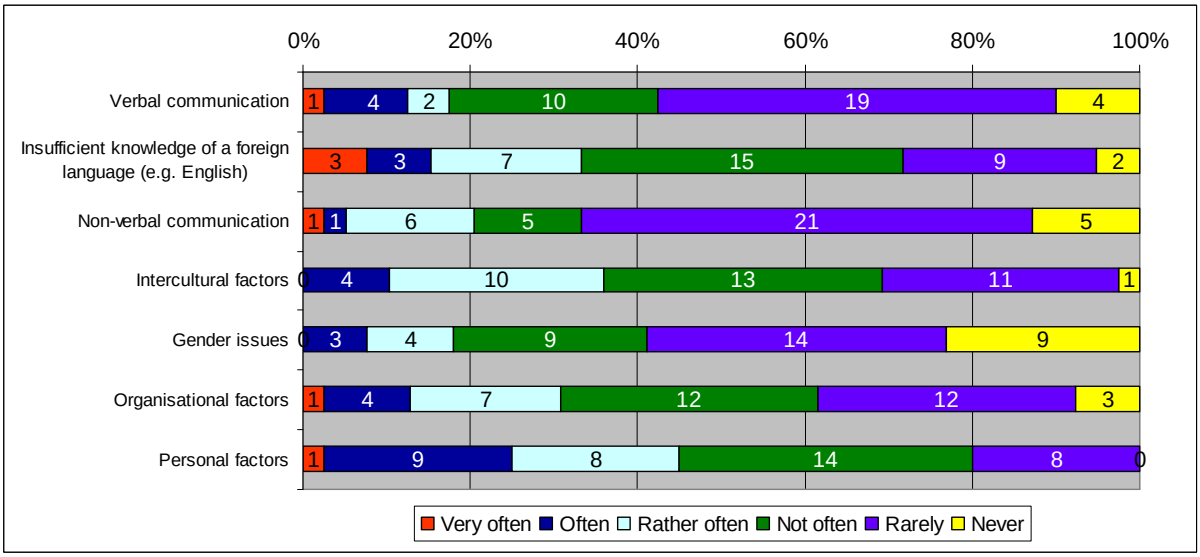
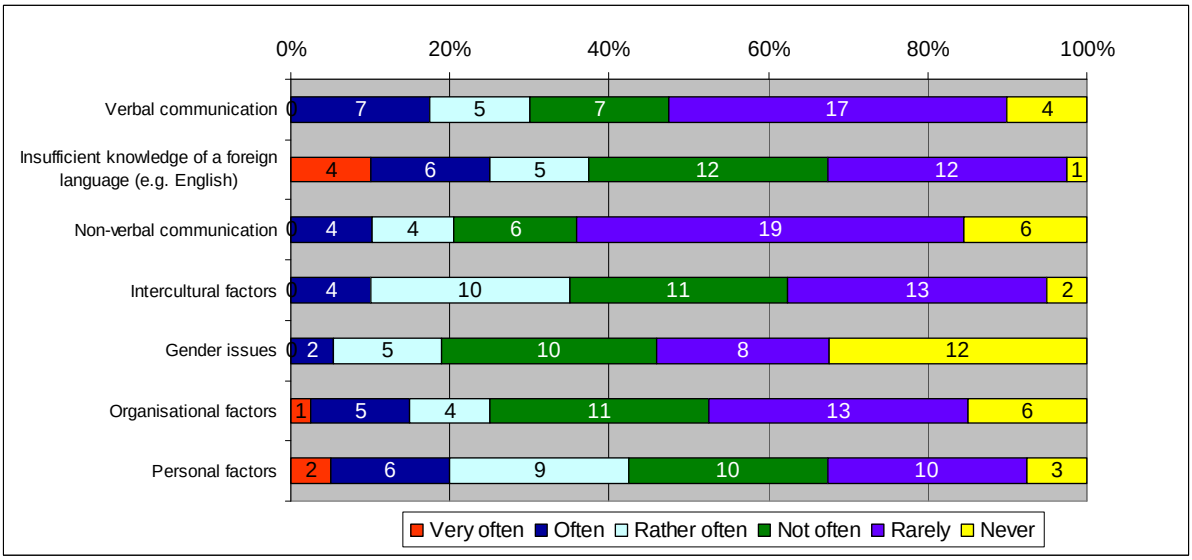


Table 3 Factors resulting in culture-related problems *with other crew members*



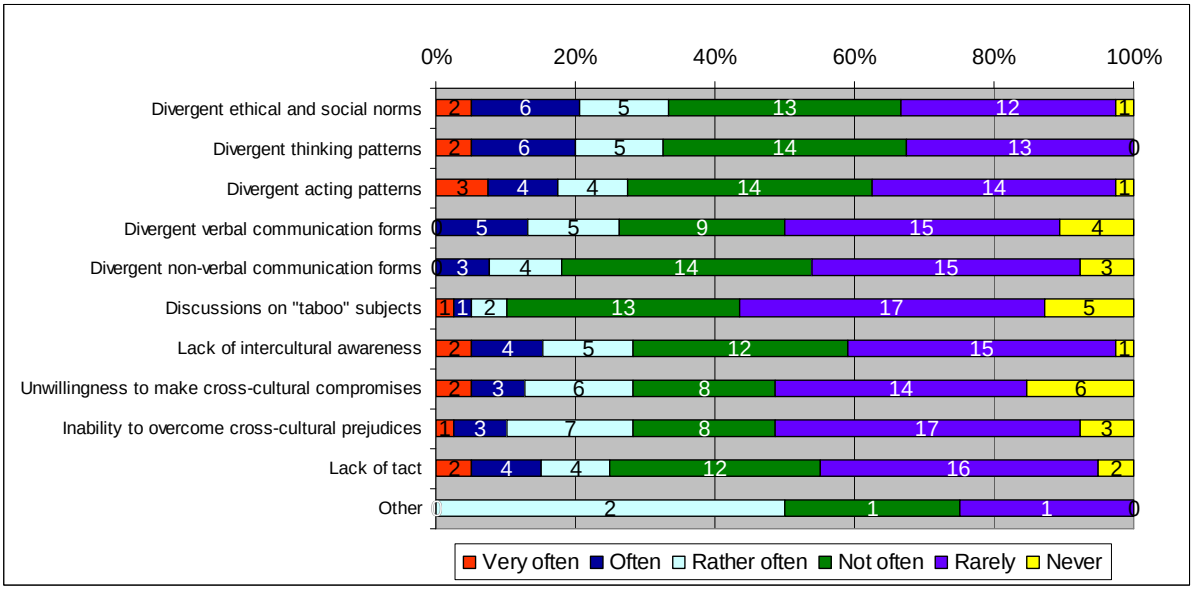
In addition, it can be seen from the tables above, that insufficient knowledge of English is not the only factor which invites discussion. Intercultural factors, it seems, also play a key role. Table 2 shows that 36%, or 14 of the 39 respondents to this question, consider that intercultural factors *rather often* or *often* cause culture-related problems during communication between officers. In Table 3 the percentage is only slightly less, 35%, for communication with other crew members.

At this stage in the survey the analysis of the data must start to focus on concepts of culture and why interaction on board between crew members of diverse cultures, in other words

of an intercultural nature, can lead to miscommunication. The opening line of the MARCOM report (1998) states that "*language is inseparable from culture*". The report goes on to explain that language is "*embedded*" in culture and that linguistic aspects of an interaction cannot, therefore, single-handedly be held responsible for miscommunication. Culture is thus a vital component of communication. During communication, features specific to one's own culture, such as turn taking, the role and interpretation of silence within discourse, interruptions and overlaps, topic management or the degree of directness/indirectness during conversation, can all influence the effectiveness of communicative discourse (Cheng, 2003, pp. 17- 64).

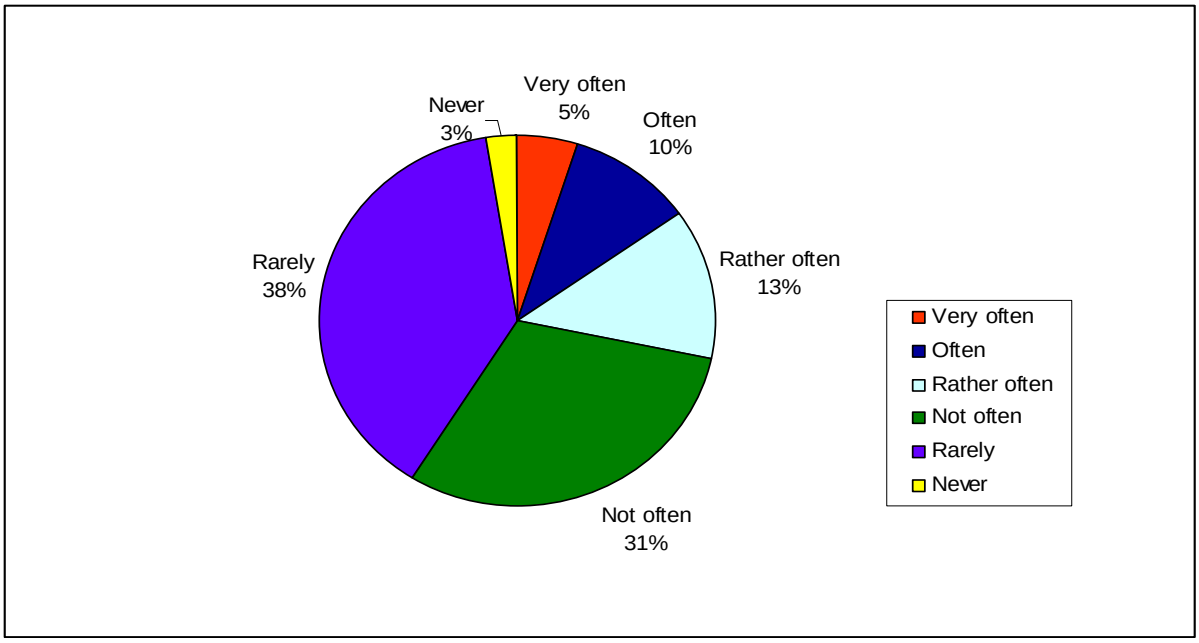
Having established the importance of culture-related aspects of communication, there is a need to ascertain which specific intercultural factors may hinder communication. Questions 4 and 5 of the survey address this issue in more detail. The results are illustrated in the tables below.

Table 4 Intercultural factors influencing the communication *between officers*



The data displayed in Table 4 above show that, in general, a lack of intercultural awareness is cited by 59% (23 of 39 respondents) as having, with varying degrees of frequency (*very often* to *not often*), a negative effect on communication between officers. Chart 1 below provides a more detailed analysis: 28% claim that, if culture-related problems arise during communication, the cause is *very often* to *rather often* a lack of intercultural awareness; only 3% cite lack of intercultural awareness as never being a cause of culture-related communication problems between officers.

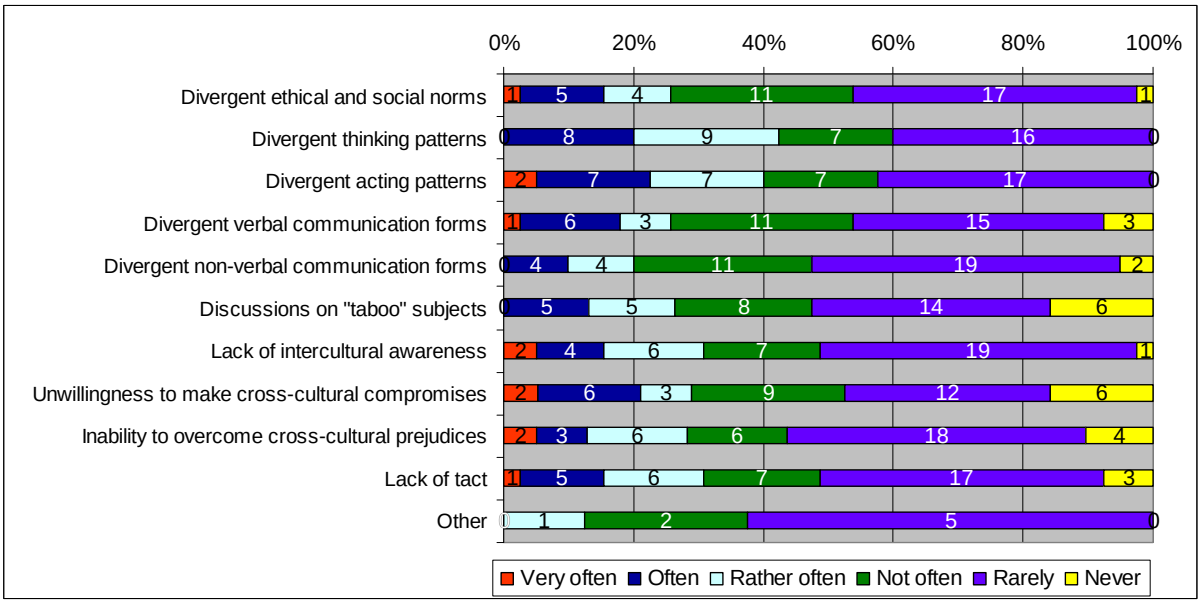
Chart 1 Frequency with which lack of intercultural awareness causes communication problems *between officers*



In addition to a lack of intercultural awareness, Table 4 indicates that divergent ethical and social norms as well as divergent thinking and acting patterns are also cited by respondents as key aspects where intercultural communication problems arise.

If the same questions are applied to communication with other crew members, the data reveal that respondents once again claim that divergent thinking (42%) and acting patterns (40%) are *very often* to *rather often* an influential factor where culture-related communication problems are concerned (see Table 5 below). Lack of intercultural awareness and an unwillingness to make cross-cultural compromises also display relatively high percentages of respondents (30% and 28% respectively), who claim that these factors are influential.

Table 5 Intercultural factors influencing the communication *with other crew members*

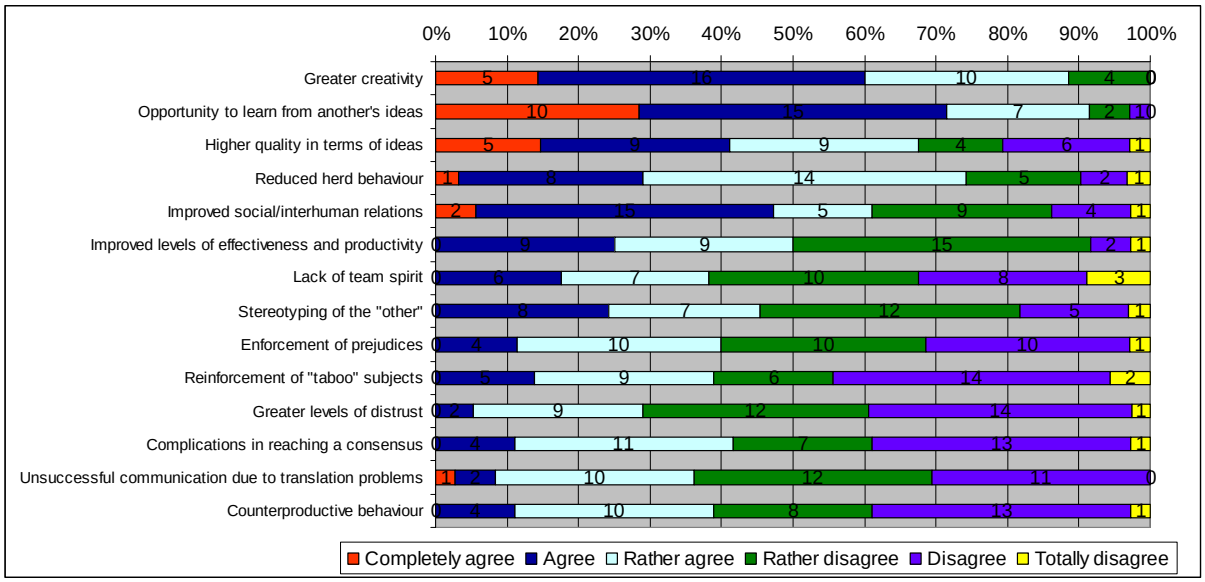


5.3 The advantages (or disadvantages) of a multicultural crew

Having examined intercultural factors in detail the survey moves on to investigate whether a multicultural team is perceived by the respondents as being advantageous. Table 6 below demonstrates the data, which reveal that the different facets of a multi-ethnic and multicultural crew are, in general, considered positive. For example, 88% of the respondents (31 of 35) agree to some extent that a multicultural team generates greater creativity and 91% (32 of 35) that it generates the opportunity to learn from another's ideas (28% or 10 of 35 respondents *completely agree* with the latter statement). In addition, 74% (23 of 31) agree that a multicultural team leads to reduced herd behaviour. 71% (27 of 38) disagree with the statement that a multicultural team generates greater levels of distrust, 62% with the statement that multicultural crew composition leads to a lack of team spirit and 61% with the statement that it leads to counterproductive behaviour.

It is worth noting that the response to the question as to whether a multicultural team generates improved levels of effectiveness and productivity was evenly balanced, with respondents being split, 50% agreeing and 50% not agreeing with the statement. The multi-ethnic crew could and should, it seems, be operating better and the current challenge facing the industry is how to improve areas of concern and capitalise on the existing potential.

Table 6 The advantages (or disadvantages) of a multicultural crew



6 Discussion

When drawing conclusions, the data from parts one and two of the survey clearly indicate the areas that cause concern in terms of effective communication. It is proven that communication-related problems exist at all levels but are more prevalent with lower ranking crew members, namely non-officers. This group was shown, significantly, to be the more muti-ethnic group. Data from the first questionnaire demonstrated unequivocably that a wide range of linguistic issues, including pronunciation, (technical/nautical) vocabulary and grammar, can be considered to lead to miscommunication. At the same time the data provided the first evidence that intercultural factors also play a role. Data from the second questionnaire went on to look at culture-related problems during communication, demonstrating that a lack of intercultural skills or understanding of cultural difference was to blame. From this we might deduce that effectiveness and productivity in a multicultural crew are open to improvement, given the right kind of training.

Today's crewing managers are ultimately not given a choice. Due to economic factors and current levels of globalisation a multicultural crew is not an option but a matter of fact. Crewing managers do not *choose* a multicultural crew as opposed to a culturally homogeneous one but are obliged to operate with the parameters of the industry's options. They are thus forced to confront the challenges in managing multilingual, multicultural human resources and in producing efficient, productive crews.

It is not only the crewing manager, however, who has to consider the multi-ethnic crew in all its diversity. Crew members themselves are becoming increasingly aware of the challenge. This is supported not only by data from the survey but also by additional comments relating to the questions asked. The observation of one respondent (who reminds us that, in fact, the multi-cultural element in crewing is not completely new) seems appropriate. In reply to the question "*When intercultural factors are the cause of the communication problem, how often do you consider the following aspects to influence communication between officers/with other crew*

members?" he noted *"It's not a matter of how much these differences influence the communication, they always will. It's much more important to learn how to deal with these differences, to learn how each culture will behave; otherwise you will never be able to form a bridge team."*

The data displayed in Table 7 below prove the significance of this remark. In reply to a question about the importance of in-service training organised by shipping companies the data show that respondents, although recognising that "other skills" are also desirable, consider all the skills mentioned (cultural awareness, intercultural management, team building and group dynamics) to be important. Chart 2 below shows that, in terms of training, intercultural management, when considered in isolation, is perceived as being *important* or *very important* by 60% of respondents. Thus captains and officers of the Belgian fleet confirm the importance of training in this area.

Table 7 The importance of in-service training organised by shipping companies

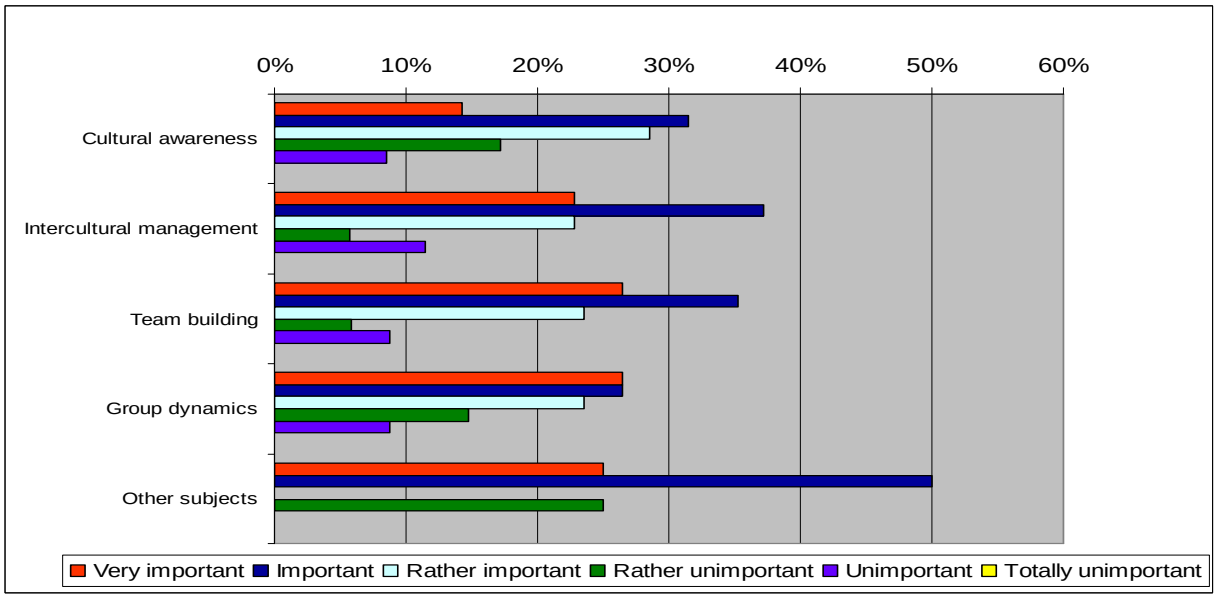
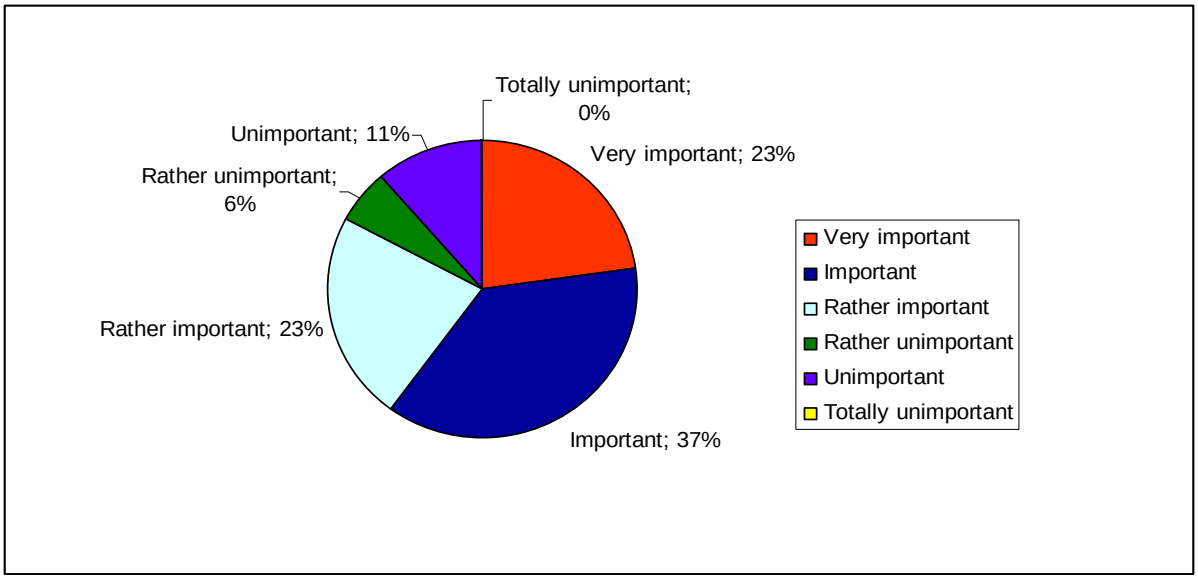


Chart 2 The importance of in-service training (organised by shipping company) on intercultural management



Despite the evidence of the need and desire for training in intercultural skills, within maritime circles there sometimes appears to be a lack of support. There still exist intercultural 'sceptics' who would claim that the strict work ethic and rigid hierarchy inherent to a merchant marine crew leave no room for cultural niceties. The argument frequently touted is that once a seafarer contracts to a certain shipping company he is bound to abide by the hierarchy, procedures and regulations imposed. The corporate culture thus prevails and intercultural 'interference' should not then deter the seafarer from his duty. The argument follows that intercultural competences, the so-called 'soft' skills, become redundant in such an environment. This would seem simplistic. It has already been established that it is impossible to separate communication from culture, and surveys, the present one included, reveal that intercultural aspects play a significant role in onboard communication, with a consequent impact on safety and the effectiveness of the crew's work. It follows that current multi-ethnic, multilingual crews render maritime communication, whether on board, ship-to-ship or ship-to-shore, vulnerable to intercultural pitfalls. It would seem advisable to recognise the existence of these pitfalls and take steps to avoid them rather than trusting to strictly vertical hierarchies and stringent leadership to simply bridge the gap. It is proven that whatever the culture of a corporation, here onboard culture, native cultural tendencies amongst employees, here crew members, tend to prevail. Hofstede (2001) demonstrated that, even if employees adapt to the corporate culture, the latter does not override their native cultures, which, in turn, have an impact on various aspects of corporate life, including communication. The same holds true for a multi-cultural crew. Cultural diversity manifests itself, notably in discursive interaction, and the maritime 'manager' thus faces a perhaps unusual challenge in that he or she must approach the issue *within* the existent parameters, namely the strict hierarchy onboard.

Whatever has been said about the potential drawbacks of a multicultural team, it is fitting to conclude this section of the paper by mentioning the advantages. When drawing conclusions from the data analysis, we can state that respondents to the questionnaire generally considered a multicultural team to be a positive force, offering the crew opportunities to learn

from each other and pool ideas whilst at the same time modifying and reducing any negative elements which may threaten to disrupt the harmony and effectiveness of the group. In certain disciplines, the social sciences in particular, it is known that diversity does not always promote harmony. Having published the results of his five year study into diversity in 41 US communities, the social scientist, Putnam (2007: 151), stated that "*diversity, at least in the short run, seems to bring out the turtle in all of us*". He elaborated by explaining that in the face of diversity people tend to "*hunker down*" or "pull in like a turtle", perhaps sheltering from the sometimes bewildering array produced by diversity, be it cultural or otherwise. Diversity makes people uncomfortable and it is therefore doubly encouraging for the shipping sector that the data are so optimistic. They appear to indicate that the motivation, solidarity and morale of the multicultural crew are potentially high. Shipping companies are therefore justified in proclaiming their belief in the wealth of diversity and according it the attention it deserves. A multicultural crew is undoubtedly an asset, and a source of celebration, but one which, due to its diversity, requires intelligent and careful management in order to reap the benefits of its considerable potential.

7 Conclusions

In her masterclass on the subject Jacobs (2003) states that "*intercultural management is not for the faint-hearted*". This remark would, we suggest, hint at the 'robust' nature of leaders who successfully bring about the effective funtioning of diverse groups of people, in other words who harnass the benefits of a multi-ethnic, intercultural team. Jacobs' publication refers specifically to managers within multinational companies but, similarly, future captains, senior officers, shipping company managers and other stakeholders in the maritime community must also be robust when dealing with crews rich in intercultural diversity. In addition they must be good linguists and, moreover, prove able to demonstrate flexibility, be open-minded and quick thinking. In other words, future captains and officers must be able to promote harmony, should it be lacking, within a diverse group.

At IMEC22 Cole and Trenkner (2010) spoke of "*raising the bar*". They were referring to the 2010 Manila Amendments (STCW) and to improving standards in Maritime English. This paper's intention has been to urge all those with a stake in Maritime English to raise the bar a notch higher, by promoting good communication through sound promotion of intercultural skills. We set high standards for the aspirant seafarer. "*Intercultural competence doesn't just happen*" states Deardoff (2009) in the preface to her handbook . It is "*a lifelong process*" (ibid.). It is true that not everyone has a natural aptitude for managing and leading a multi-cultural team. By analysing the data from the second part of our survey, this paper has demonstrated that within the maritime sector there is a desire and a need, on the one hand, to acquire the intercultural skills demanded for the job and, on the other, to reap the benefits of diversity. The current interest in intercultural competences aims to celebrate diversity and the life-enhancing role of cross-cultural interaction. At the same time it upholds one of the maritime manifestos of the 21st century that intercultural competences, leading to better and safer communication on board, can and must be acquired.

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Authors' Bio-Note

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All three authors are participants in a major research project, headed by Prof. Vangehuchten, on how linguistic and (inter)cultural elements impede and/or facilitate communication in the maritime world (project: *'Communication for Maritime Purposes')*. The data collected during the project form the basis of Alison Noble's doctoral research.

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GETTING ALONG AT SEA-SOME ASPECTS RELATED TO CULTURE MATTERS AS PERCEIVED BY ROMANIAN CADETS DURING THEIR ON BOARD TRAINING

Abstract

In consequence of various predicaments of the culture concepts and of an applied communication theory, that is mainly oriented towards cooperation and understanding, research in the field of intercultural communication is facing epistemological paradoxes. Thinking about qualitative research on intercultural communication and competence thus means facing these foundational theoretical obstacles. Studying the field of intercultural communication is a highly complex task for researchers. Especially the controversial concept of culture, as one of this field's key components, often causes theoretical difficulties, which are being inevitably reproduced in every intercultural research setting.

The current state of affairs represents a new challenge for the mutual relationship between the actors, namely the present Maritime Lecturer as a trainer and the future marine officer as a trainee working within a multilingual environment. Under these circumstances the Maritime Lecturer must be equipped with the teaching methods par excellence so that his/her students should receive and understand the information accurately in order to be trained to face and control the challenges within multilingual crews. The aim of this paper is to bring forth the importance of teaching intercultural communication skills to the seafarer who is to embark on a multilingual vessel, and to point out specific instruction and evaluation of communication skills as they relate to the seafarers responsibilities including good communication with his/her peers.

Key words: *openness, flexibility, critical thinking, intercultural communication, intercultural sensitivity, intercultural adaptation, intercultural adjustment*

"Shipping is perhaps the most international of all the world's great industries and one of the most dangerous."
(International Maritime Organization [IMO], 2002a)

1. Introduction

The 21st century shipping industry faces new challenges. For instance, 25 years ago the average cargo ship would have been manned with a crew of between 40 and 50 (Grech & Horberry, 2002). Today technological advances have contributed to decreased manning, in some cases to just 22 seafarers on a Very Large Crude Carrier (VLCC). There are two sides to the technological advances. Improvements in ship design and navigation aids have reduced the frequency and severity of shipping incidents. In turn, the reduction of failures in technology has revealed the underlying level of influence of human error in accident causation. Merchant shipping is known to be an occupation with a high rate of fatal injuries caused by organizational accidents and maritime disasters (Hansen, Nielsen, & Frydenberg, 2002). Common incidents such as collisions, allisions, and groundings specifically have decreased in this period; this is attributed to enhanced technology in aids to navigation.

Several electronic databases (e.g., PsychARTICLES, PsychINFO, ScienceDirect, and Web of Science) could be used to identify research articles on human factors in shipping by using the following search terms: *maritime, shipping, stress, fatigue, situation awareness, decision making, communication, teamwork, safety,* and *shipping/ maritime accidents*. Additionally, institutions that had conducted work in these areas (including government bodies) could be sourced through search engines (e.g., Google) and authors could be contacted directly with requests for relevant literature. For studies the following criteria could be included: a sample of seafarers, those in peer–reviewed journals, those with an empirical data set, conference papers or government papers, and published in English. A total of 30 studies were identified, of these 20 met the criteria. From evaluating these 20 studies it appears there is a comparatively small amount of work in the maritime domain on concepts that are relatively well established and researched in other domains. This paper presents a review of this fragmented area, and attempts to unify the body of research and present a case for where further research is required.

2. Dilemma of Intercultural Communication Research

Studying the field of intercultural communication is a highly complex task for researchers. Especially the controversial concept of culture, as one of this field's key components, often causes theoretical difficulties, which are being inevitably reproduced in every intercultural research setting. The theoretical problems with the culture concept are well known, so they need not be outlined in all detail. However, the following passages will briefly recount the main issues with the intention to prepare for subsequent thoughts on this concept.

One main obstacle of addressing communication research fields under the perspective of culture is the inbuilt assumption of distinction. Intercultural communication research has adopted this notion of distinction, although it intrinsically aims to rise above it. This creates misunderstandings in the definition of intercultural communication. Paradoxically, cultural studies on communities have already shown decades ago that cultural groups are symbolically constructed and imagined rather than a natural entity (Anderson, 1983; Barth, 1998 [1969]; Cohen, 2000 [1985]). However, intercultural communication research is still caught in this

paradoxical loop: It is constructing precisely those differences that it initially intended to overcome.

Another dilemma of intercultural communication research is the conceptualization of diversity within cultural groups. Questions of similarities and differences within cultural groups—meaning of cohesion and integration—are far from being understood in detail. It has also become more complicated since individuals in socially differentiated societies have many identity options and face the task to construct a unique, individual personality (Giddens, 1991; Kraus, 2006). Ideas of hybridity (Bhabha, 1994) and superdiversity (Vertovec, 2007) challenge the idea of intercultural research in general since cultural traditions become manifold or hazy.

Furthermore, the idea of culture is closely connected to tradition and only scarcely to innovation or change. Thus, investigating intercultural communication hardly takes cultural dynamics and processes of social change into account. One needs to consider, however, that more or less dynamic but still ongoing change is part of every cultural production and reproduction. And more, dynamics seem to be increasingly relevant within modern life-styles (Welz, 2003).

The concept of culture thus has its limits. Even the upcoming more or less new ideas about culture, such as transculturality (Ortiz, 1995 [1940]; Welsch, 1999), hybridity (Bhabha, 1990, 1994) or cosmopolitanism (Hannerz, 1996; Vertovec & Cohen, 2002) cannot solve the outlined difficulties of the culture concept. They just accentuate them in a different way or challenge the relevance of the concept of culture in general.

However, the culture concept is not the only component, which is causing theoretical complications in Intercultural Communication Research. The problems imported by the culture concept are furthermore supplemented by the theory of communication, which is mostly applied in Intercultural Communication Research. This theory is mainly oriented towards cooperation and understanding, but rarely develops a comprehensive concept of the various intentions of communicating. Persuasive or strategic dimensions of intercultural communication are not only apparent in business communication. Nevertheless, an ethical orientation towards "understanding" is often still assumed. Thus, the relevance of power structures, which are enacted in social fields, for communicative acts is not systematically acknowledged. Furthermore the interrelation of communication and communicative competence is not worked out at all (Rathje, 2006).

To sum up shortly, theoretical difficulties with Intercultural Communication Research are limiting the understanding as outlined above. Furthermore, culture theory and communication theory as relevant theoretical frameworks for Intercultural Communication Research are used complementary, like two independent variables. Thus, the fundamental interrelation of them both, the dialectic constitution of culture and communication, is widely ignored.

3. Safety climate and safety culture

Interest was generated in “safety culture” in industry after the International Atomic Energy Agency (IAEA) developed the concept in relation to the disaster at the Chernobyl nuclear power plant (IAEA, 1991). The report defined safety culture as the “*assembly of characteristics and attitudes in organizations and individuals which establishes that, as an overriding priority, nuclear plant safety issues receive the attention warranted by their significance*” (p. 1). There is a current focus in the maritime industry on safety culture after an address of the IMO stated that “*safer shipping requires a safety culture*” (International Maritime Organisation, 2002b).

Organization safety climate is like a snapshot of selected aspects of organization safety culture at that particular point in time (Mearns et al., 2003). Although there is some debate on the definition of safety climate, definitions proposed consistently feature either employee’s attitudes or perceptions of safety (Clarke, 2006). One commonly used definition was proposed

by Zohar (2000), where essentially climate perceptions relate to "procedures as patterns," whereby consistent procedures represent patterns that reflect the importance and prioritization of safety over competing goals. Zohar presents a group level model of safety climate, whereby there is a distinction between the organizational level of policies and procedures and then the group level of supervisory practices in implementation and prioritization of these procedures.

There exists an important relationship between safety climate and performance, indicating that a robust measure of safety climate could be used as a predictive safety performance indicator. Griffin and Neal (2000) propose a method through which safety climate translates into organizational performance. They propose that there are antecedents of safety climate (management values and additional sub dimensions) that contribute to safety performance. Then they argue that the mediating variables between safety climate and safety performance are the workers level of knowledge, skill, and motivation. The components of safety performance they measure are safety task performance and safety contextual performance. Safety climate has been measured in many different domains: Israel–production (Zohar, 1980); UK electricity (Glendon, Stanton, & Harrison, 1994); U.S. construction (Dedobbeleer & Beland, 1991); and UK offshore industry (Mearns et al., 2003). Interest in safety climate has now diversified into the maritime domain.

3.1. Safety climate in shipping. Brief research review

Håvold (2003) used a composite scale from existing instruments to measure safety culture, national culture, and risk in Norwegian shipping companies. About one third of his items are taken from a safety climate scale developed for the offshore oil industry (Mearns, Whittaker, Flin, Gordon, & O'Connor, 1998). Håvold's scale was made up of the following factors: *management/employee commitment to safety, safety norms/compliance to rules/occupational risk behaviour, workload/work pressure/stress, fatalism, knowledge/ competence, espoused safety values, degree of conflict between safety and work/priorities, reporting culture, work appreciation, officers awareness of risk, learning culture/ learning from accidents/organizational learning, safety communication, actions based on accidents, perception of safety instructions, work itself, and safety behaviour*. The dependent variables in this study were not stated.

The questionnaire was administered to 2,558 seafarers from 27 different countries including: Philippines, Norway, Poland, India, Latvia, Netherlands, Romania, Indonesia, Great Britain, and Cuba (all of these had greater than 10 respondents). These individuals were all working on Norwegian owned vessels. Håvold (2003) demonstrated a potential existence of regional cultures (cultural views as measured by the Value Survey Module [VSM 94]; (Hofstede, 1980) espoused by a group of individual cultures), which had the same attitudes to safety. Norway and Netherlands, Poland and Latvia, and the Philippines and India grouped into cultural subsets (on greater than 12 of 16 factors). All nations seemed to show positive attitudes toward safety and risk issues, but there were significant differences between the countries in the sample. Håvold (2003) also discovered that there were correlations between most safety and risk factors and national culture indexes. This suggests that this is an interesting area to investigate further, how to promote best practice from the highest performing national cultures to reduce these differences. He also found that vessels with crews from a single country or from two countries had better attitudes toward safety and risk than did those with multinational crews. Furthermore, he also established that cultures are a powerful index of work performance.

Of Håvold's sample, over 50% of respondents were from the Philippines and the majority were male, which is a reflection of the industry. Håvold demonstrated that different nationalities produced significantly different scores on the safety culture scale, therefore this large proportion

of the data set generated by Filipino respondents may have skewed the data set as a whole. An additional caveat to note is that Håvold administered the "safety culture" questionnaire in either English or Norwegian; **he does not acknowledge that the Filipino sample may not have had the level of English necessary to understand the questions.**

Ek, Olsson, and Akselsson (2000) developed a bespoke scale to measure safety culture for use on different types of passenger ships. When defining safety culture they use a working definition that encompasses the following nine dimensions; reporting culture, flexible culture, just culture, learning culture, working conditions, safety related behavior, attitude toward safety, communication, and risk perception.

The first four dimensions were proposed by Reason (1997), but the authors do not provide a rationale for the selection of the other dimensions. Two studies have been conducted using this questionnaire. The first was conducted on a Swedish registered passenger/cargo ship, completed by 48 respondents, 90% of whom hailed from European countries. The first purpose of the study was to investigate the usability of the questionnaire. Alpha levels were calculated from each scale, all yielded high enough alphas to show internal consistency, despite a low sample size. Ek et al. (2000) noted that most respondents were able to complete the questionnaire with few unanswered questions. Considering that one of the aims of this initial phase of the project was to establish the usability of the measure the authors could have selected a more robust outcome measure, than completion of questions, to assess participant's understanding. They found as a whole that the crew generally gave a positive response for all safety culture dimensions. There were significant differences between the officers from both departments and the catering staff on five of nine safety culture dimensions, the officers rated flexibility, communication, safety behaviour, reporting and working conditions more positively than did the catering staff. The authors acknowledge
that the sample size is small and that future research should be conducted with a larger sample size. **They do not make any reference to the language the instrument was used in which is another key issue when trying to interpret the results.**

Ek (2003) conducted a follow-up study using the same measure of safety culture, on a high-speed craft (HSC; 16 officers 36 crew) and a passenger/cargo ferry (ROPAX; 17 officers 40 crew) both from Sweden. The author also used observations, open interviews with crew members (to get experience on which risk and safety situations exist on board), a standardized interview with crew members at different work levels in all departments, and a collection of facts and statistics about the vessel. Officers on both vessel types had significantly more positive mean scores on the safety culture dimensions than the crew (for 4/9 safety culture dimension on the HSC, and for 8/9 dimensions on the ROPAX). The author explains the significant differences between the two ships by the small sample size on the HSC making it more difficult to reach levels of significance, however the **sample size in both cases is small.** Therefore this cannot really be adequately used as an explanation for these results. Another interesting finding to note was that on the ROPAX there were no significant differences found on safety culture dimensions between engine officers and crew or between officers and catering staff. Ek purports that the results indicate that safety culture differs across different levels of the organization on board, which is congruent with their previous findings (Ek et al., 2000) and also with other safety climate work (e.g., Mearns et al., 1998).

To sum up these, safety climate research within this domain is in its early stages, and there still appear to be issues in classification of safety climate or safety culture research. When using a questionnaire to assess shipboard staff it is difficult to provide rationale as to how this is measuring safety culture. The research previously conducted has small sample sizes and often fails to link findings with any tangible outcome measures such as safety performance.

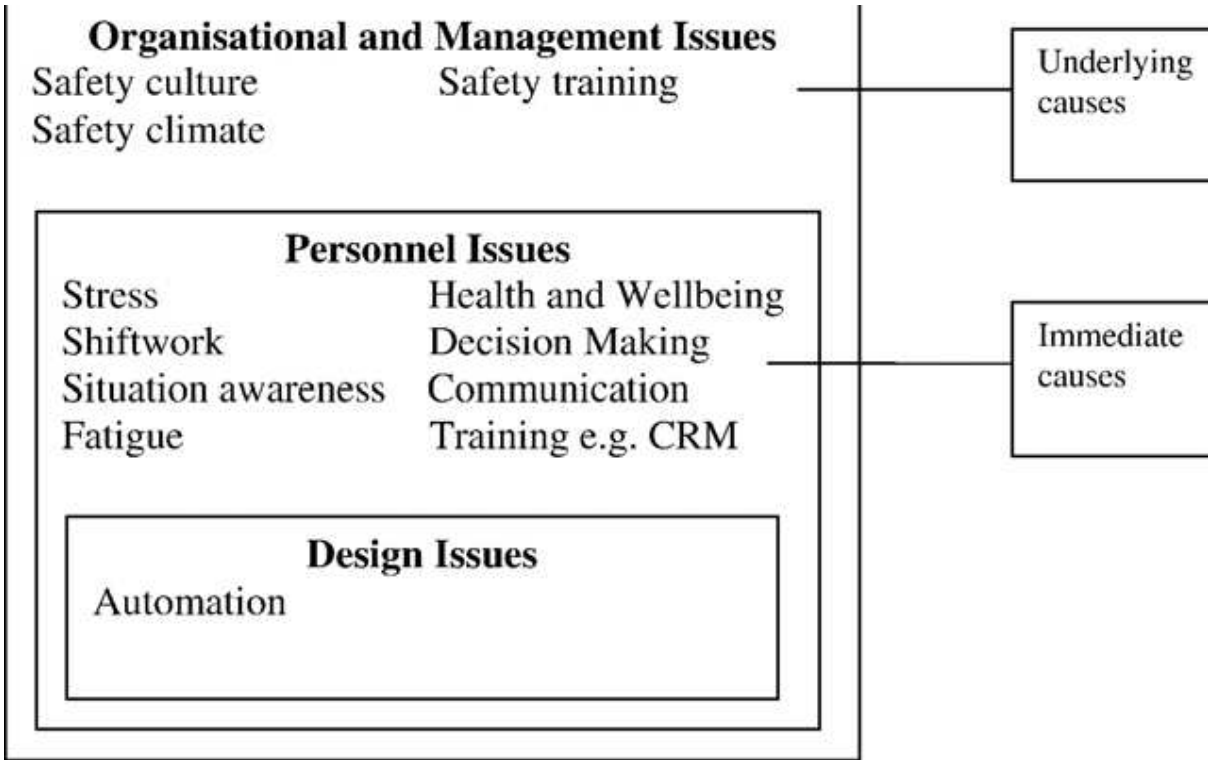

Fig. 1. An organizing framework for human factors which contribute to organizational accidents in shipping adapted from Stanton (1996), Jørgensen (2002), and HSE (1997).

4. Why Intercultural Communication Teaching within Constanta Maritime University?

Diversity and Cross-cultural issues exist everywhere. They exist in every aspect of our lives. A culture clash of some sort occurs as soon as two people get together, since no two people, even family members, have the same internal world or the same view of the external world. In the broadest sense, our students 'cross' cultures with every person they come into contact with, whether they are the 'same' as them nor not. Most of the time, people accommodate, sublimate or ignore these different 'cultures', because of common ground, shared goals and like interests. When people concentrate on similarities, the differences are less noticeable, or at any rate, less important. Once we get a certain amount of common ground, we can 'get along'. Taking all these into consideration, we hold the idea that Constanta Maritime University is open to and in the same time is developing several students' placement programmes. In this way, the future maritime officers have the opportunity to find on their own 'the magic pill' for crossing cultures.

The process of crossing cultures is a dynamic and complex one, where context is everything. A list of behaviours or a script can only take our students so far, for what is a "do" in one set of circumstances might very well be a "don't" in another. We strongly believe that the "*Intercultural Communication Onboard Ships*" *Course* will help our students function outside the script, to understand the values and beliefs behind behaviour, and, ultimately, how other different people think.

The syllabus of this special course was not so easy to be done, as we want it to be effective and helpful. The key question was how to choose the course's themes so as to reach its

very important aim, that was how to *make seafarers of different cultural backgrounds work better together* and not how to make them work harder or in a more efficient manner. During our analysis of our students' answers to the questionnaire of the placement training report, it has also been observed that sometimes to opt for a more multicultural crew is to favour the well known technique of control, divide and rule. The ability to communicate in such an isolated and independent environment is crucial.

Crews that can talk to each other, laugh together and – importantly – joke together are likely to work safely and happily irrespective of the mix of their nationalities. The ability to communicate in a common language is the crucial factor determining the success of a multinational crew, regardless of what nationalities are on board, or how many. The more seafarers can understand each other, the more likely they are to run not just an efficient and safe ship, but a happy ship on which personal and working relationships can be built up.

4.1. What to expect from "*Intercultural Communication Onboard Ships*" *Course*

Our course on "*Intercultural Communication Onboard Ships*" is designed to show students how to avoid cultural faux pas and pitfalls, as well as how to connect with others. At this course's conclusion, students should be able to:

Explain the on board ship advantages of having a multicultural workforce.

- Describe the challenges and remedies for stereotypes in the workplace.
- Demonstrate the use of open and closed questions.
- Identify and explain the four basic behavioural styles and the benefits and challenges of each.
- Describe a model of feedback, communication, and listening.
- Explain the importance of body language in the listening process.
- Demonstrate techniques for better listening when communicating with challenging speakers.
- Develop an action plan to improve communication skills

4.2. A General Outline of the "*Intercultural Communication Onboard Ships* Course

1. **Money and Sense: Profiting from Cultural Differences**

> *"I believe that the very purpose of life is to be happy. From the very core of our being, we desire contentment. In my own limited experience I have found that the more we care for the happiness of others, the greater is our own sense of well-being. Cultivating a close, warmhearted feeling for others automatically puts the mind at ease. It helps remove whatever fears or insecurities we may have and gives us the strength to cope with any obstacles we encounter. It is the principal source of success in life. Since we are not solely material creatures, it is a mistake to place all our hopes for happiness on external development alone. The key is to develop inner peace."* **Dalai Lama**

✓ The course begins with a cultural self-assessment and continues with a discussion of why working in a multicultural environment is beneficial from both a personal and business

standpoint. Through hands-on activities, students will see the value of tolerance and patience as they work with others from cultures other than their own:

The **Brain Storming, and the Hand –outs themes** are the following:

a. Allow the dialogue among the religions: *What is useless for some people?*

b. Make people more peaceful: *What make people more insensitive?*

c. *Name* One of the main elements of the Humanistic value

d. …….are used only by missionary for the third world countries: *Name them*

e. ……is Indispensable tool for world peace: *Name it*

f. ……is Necessary to be able to live in a harmony in differences: *Name it*

g. ……is Not necessary because it causes terrorism and violence: *Name it*

h. ……is The first step for understanding different cultural and religious worldview: *Name it*

i. ……are The key words to move prejudices and to stop wars: *Name them*

j. Put up with differences. *Discussion*

k. Showing respect for the race, religion, age, gender, opinions, and ideologies of other people or groups. *Discussion*

l. The Challenge against Fundamentalism. *Discussion*

m. The exchange of ideas, practices, beliefs, and cooperative work for social justice among representatives of the world's religions and cultures. *Discussion*

n. To respect the other's right to his or her feelings on the matter. *Discussion*

o. **Tolerance and dialogue is.....**

2. **It's a Jungle Out There and In Here Too!: Recognizing Communication Styles**

✓ The second unit focuses on each student's personal communication style. Students will learn to identify their own behavioral styles and the styles of their colleagues in order to adjust for better communication. The teacher places special emphasis on cultural differences and the need for tolerance where other communication styles are concerned.

EVALUATION QUESTIONS

a. Please describe briefly "*prejudice*" in your mind.
b. What is the role of tolerance on preventing prejudice?
c. What are the basic factors which increase the prejudices among youth and on society? What are basis of these factors?
d. According to you how do you describe Intercultural Dialogue?

e. What are your suggestions and advices to solve prejudice problems?

3. **Sticks, Stones, and Stereotypes: Overcoming Hurtful Preconceptions**

   ✓ In this component, students will analyze the messages they are exposed to everyday, including the use of stereotypes to portray different groups of people. As an extension of this discussion, the trainer will explain how these stereotypes help perpetuate intolerance and will recommend ways to break the cycle of stereotyping in the workplace.

4. **Listen Up! A Better Means of Communication**

   ✓ At this point in the training, students will be taught a method for improving their listening skills. They will learn how to focus on the speaker, empathize with what is being said, analyze the message, and respond. They will engage in several rounds of practice listening after which they will pinpoint their biggest challenges.

5. **Yes? No? Maybe So: Reading Nonverbal Cues**

   ✓ Sometimes what is said is not what is meant. This is something careful students of body language know. This section reviews the importance of nonverbal communication signals and the ways they affect the communication process. Students will learn how to listen more effectively by recognizing these signals. They will also find out how cultural and gender differences influence the interpretation of body language.

6. **Better Questions, Better Answers: Skills for Eliciting Communication**

   ✓ Many people can have an entire conversation without asking a single question. Unfortunately, they often miss important points, facts, or opportunities to communicate that they really understand the speaker. At this point, the trainer will show students how to ask and explain when to use each. Here are a few examples of open-ended questions:

   - *What does that mean to you?*
   - *What do you think will happen next in the story?*
   - *How did you go about solving that problem?*
   - *How did you make that choice?*
   - *What information do you have about that?*
   - *What would you do differently next time?*
   - *Why do you feel that way?*

   and closed-ended questions that you can use in a conversation

   - *Is this your first time to experience this problem?*
   - *Do you need more clarification on (subject matter/topic)?*
   - *Is that correct?*

- *Shall we continue…?*
- *Does this clarify your confusion about…?*
- *Could you please (instruction)?*
- *Have you checked on (information)…?*
- *Do you have any questions regarding (subject matter/topic)?*
- *Are you searching/looking for (information)?*
- *Are you ok?*

7. **Worlds Apart: Agreeing to Disagree**

   ✓ Different points of view often lead to conflict in the workplace. Occasionally, agreeing to disagree can solve a problem or keep it from materializing at all. In this unit, students will evaluate several case studies and determine whether agreeing to disagree is an option. They will then practice using the technique to communicate a point of view.
   ***"If A is success in life, then A equals x plus y plus z. Work is x; y is play; and z is keeping your mouth shut."* Albert Einstein**

8. **Sticking Together: What We Can Do Better**

   ✓ The course concludes with a review of all concepts discussed, and students will have the opportunity to set personal goals, team goals (if applicable) and examine current workplace practices and attitudes. Students will understand the personal and business value of a multicultural workplace. They will have a better awareness of which behaviors are acceptable and expected, and they will know how to listen better for improved communication with people from a variety of cultures and backgrounds.

9. **Culture Pool, Final Course**

   ✓ **Feeling**: *Draw a symbol for this course activity and explain why you chose this symbol?*

4.3. Some aspects of Intercultural Communication on board ship report of CMU-ERASMUS students

We have implemented the ERASMUS and LEONARDO da VINCI programmes within Constanta Maritime University. As a matter of fact we have been developing the ERASMUS programme since 2007 and more than 600 of our students have been the beneficiaries of this programme. As the institutional coordinator of these programes I (Carmen Chirea-Ungureanu, PhD) have had several discussions with the beneficiaries/participants of these programmes after completing their onboard training. As they worked within multilingual crew on board ship I have analysed their placement report questionnaires, focusing on their answers to intercultural communication on board, communication barriers, their agreement or disagreement with specific behaviours, attitudes, and answers to particular situations.

Our corpus of collected data seems to indicate that that the attitude of the Captain/Master of the ship is the single most important factor influencing the morale and happiness of the ship's crew.

Masters can actively encourage recreational activities such as birthday celebrations, barbeques, darts, table tennis tournaments, bingo, card games etc. Some ships have the facilities, where seafarers can play basket ball, practice tennis or golf techniques, play music, sing karaoke, box or work out in the gym. Where the Captain/Master disapproves or does not actively encourage such activities, the seafarers withdraw to their cabins, reduce social interactions and may live out months of monotony broken only by the demands of heavy workload. At times this isolation can erupt in the form of personal grievances or aggressive behaviour that has an immediate adverse effect on ship operations and on the rest of the crew.

As an important example to all these, for these reasons we encountered cases of force majeure, when the beneficiaries of such Communitarian Programme funded by the European Union had to come back home before the period of placement would had been finished, and for that reason they lost their grant, too. What was the main cause for that? We found out that their inadaptability to the multinational environment on board ship, and lack of communication made them suffer a lot, they got sick and they had to be repatriated because they required immediate medical assistance.

A typical response from our students when asked whether there were any good aspects about working with different nationalities was that they "*learned different kinds of customs*". Asked whether there were bad aspects, they replied: "*No. Well, some of the guys don't really speak good English, and you can't understand them. Otherwise nothing"*. Even if standard communication phrases are used for VHF radio and GMDSS messages, good general English is needed to enable the ship to function as one society, rather than a gathering of disparate groups.

In the maritime industry, employees of many cultures and nationalities work within the same environment. This can potentially create language issues, therefore flag states require that each ship must have a working language that each employee must speak to a certain standard, deemed competent. However, is this always the case? In emergency situations can individuals speak coherently and competently in their second language where other cognitive demands are high? Here is the ERASMUS report of one of our ERASMUS students, which can be used as part of a case study. He was on a vessel the stated common working language was English, which was the second language for everyone onboard: " *Due to the multinational feature of crew on board ship, various language barriers tend to appear. One of these bariers is the low educational level of the other crewmembers, from less developed countries. This fact tends to appear due to the shipping companies that want to pay the seafarers as little as possible. Two aspects of this low educational level are bad pronunciation of words and bad accent when speaking English. It can be also include here the lack of maritime vocabulary, but this is hardly noticed when you cannot even understand the Standard English words. One of the solution I used on boad was to ask my more experienced colleagues to make the "translation". Even if this is effective, it is embarassing and so inefficient. During the voyage you get used to all these and you will learn their way of speaking English. However this come at a price. Since you could't understand them in the first place, in order for them to understand you, to learn to speak like them in the easiest option. Although you have little choice to that, and a bad one also, you find out that you have destroyed your own accent and you have learnt wrong words....."* (Maxim Robert- 3rd year of study, Erasmus student).

Even if the opinions and studies about developing cultural awareness for seafarers are very important for one part of the researchers within the maritime domain, or these opinions and studies are ignored by the other part of the researchers as they consider all these as being non-operating on board ship permanent work, we have to agree with the fact that communication is an important tool for social interaction and, more importantly, for safety at work. During our analysis we uncovered examples of practical and emotional problems caused by communication breakdown. Even where language is not different, ship board work can suffer and become

dangerous as there is yet no levelling of the ship board management and decision-making process with regard to rank and title.

Multinational crews from different cultural backgrounds speaking different languages are particularly impressive in their ability to overcome cultural barriers well enough to be able to use humour aboard. However, some crew members with very poor language skills may avoid making jokes and thereby miss out on an important aspect of a crew's social life. This can lead to social isolation and further precipitate depression or addictive behavioural patterns. Communication difficulties can pose a major challenge to mixed nationality crews.

Another view commonly expressed that we found out during the analysis of our students onboard ship training placements is that while there are many benefits to working with people from different ethnic and cultural backgrounds, the negative side is that it is much harder to communicate effectively. This miscommunication can cause work-related problems that can cause irritation or at times lead to dangerous misinterpretations of warnings or orders. We teach English and Maritime English to our students, and we want our students to rise their level of English language competency. But to speak effectively, the crew member must not only know the English language, but should be able to understand different accents. Aboard ships one can come across Chinese English, Filipino English, German English, Singaporean English, Hinglish (Indian English) etc. So, seafarers are continually having to adapt to the language and accents of their newly encountered "gangway friends" so as not to be seen as less than competent in any aspect of their job.

5. Intercultural Adaptation and Adjustment. Critical Thinking

Intercultural experience is comprised of continuous adaptation and adjustment to the differences with which we engage every day. This engagement is not easy because of the inevitability of conflict and misunderstandings due to the existence of cultural differences. Our ethnocentric and stereotypic ways of thinking, which are themselves normal, psychological functions, make it easy for us to create negative value judgments about those differences, conflicts, and misunderstandings. Negative emotions are also associated with these judgments. These negative reactions make it difficult for us to engage in more constructive methods of interacting, and keep us from truly appreciating those differences and integrating with people who are different.

But none of us can create that dictionary of culture for all the cultures and peoples we will possibly come in contact with, and many of us do not have the opportunities to become truly culturally fluent in this fashion. Instead, the vast majority of us will need to rely on a *process model* of intercultural growth to engage in effective intercultural communication. As conflicts based on intercultural communications and misunderstandings are inevitable, it becomes important to be able to control our negative emotional reactions when engaging with those differences. Those who can will then be able to engage in a more constructive intercultural process and open the door to more successful intercultural interactions. Those who cannot will have that door closed to them. Emotions, therefore, are central to this process, and hold the key to successful or non-successful intercultural experiences.

By engaging in critical thinking about cultural differences and being open and flexible to new ways of thinking, people continually add new cognitive schemas in their minds to represent the world. The addition of new schemas adds complexity to the ability to interact with diversity, creating new expectations and greater awareness of similarities and differences. All of this is possible only when emotions are regulated and negative emotions are not allowed to get the best of one.

This process is not easy. Many of us who have experience dealing with children know that, despite their often altruistic nature, when something happens to hurt or upset them, their

thinking and worldview revert to a more primitive way of dealing with and understanding their world. It becomes impossible for them to engage in altruistic acts, because they are locked into a more infantile mode of operation. This concept is known as “regression,” and it is not the sole domain of children and adolescents; adults regress at times as well. In these situations, it is easy for people to be overcome by those negative feelings; they “take over” one’s way of being. Even the most altruistic or critically minded person may not be able to think or act in such a manner when overcome by such negative emotions.

If negative emotions overcome us and dictate how we think, feel, and act, we cannot engage in critical thinking about those differences. People revert to a previous way of thinking about those differences that is rooted in their ethnocentric and stereotypic ways of viewing the world and others. Instead of creating rival hypotheses and new schemas that will stimulate growth in ways of thinking, this process reinforces pre-existing, limited ways of thinking. Openness and flexibility to new ideas and to these rival hypotheses are not even options because the new ideas don’t exist. Instead there is only a regurgitation of stereotypes and vindication of ethnocentric attitudes. This is a non-growth model.

The key, therefore, to achieving successful intercultural adjustment is the engagement of a personal growth process model where ways of thinking, person perception, and worldview are constantly being updated by the new and exciting cultural differences with which we engage in our everyday lives. The key to this engagement is the ability to regulate our emotional reactions and the other components of the psychological engine of adjustment. If we can do so, then the increasing cultural diversity of the world is an exciting research laboratory where we can constantly test our hypotheses, explore new hypotheses, throw out theories of the world that don’t work, and create theories that do. In this framework the world is an exciting place to be and the challenge of cultural diversity and intercultural episodes and conflicts is a stage for forging new relationships, new ideas, and new people. It is the stage for intercultural success for those individuals who can engage in the processes outlined above. For these individuals, life is an enjoyable journey.

6. Conclusion

Cultivating the sensitivity, skills and understanding necessary to managing cultural differences is imperative to one's ability to function effectively and ethically in a diverse and global workplace, city, and world. Without getting into cultures and sub-cultures, it is perhaps most important to realize that a basic understanding of cultural diversity is the key to effective cross-cultural communications. Without intently studying the individual cultures and languages, we must all learn how to better communicate with individuals and groups whose first language, or language of choice, does not match our own. It is also important that employees being thrust into communicating across cultures practice patience and work on their own to increase their knowledge and understanding of the different culture. This requires the ability to see that a person’s own behaviours and reactions are often culturally driven.

Perhaps simply showing a genuine interest, paired with patience and understanding, is the best answer here.

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DIVERSITY MANAGEMENT: A COURSE FOR STCW AND A CHALLENGE IN PEDAGOGY

Abstract

Cultural awareness is called for in frequent research reports. The reason for this is that maritime casualty investigators often find that accidents and incidents are related to lack of both communication skills and cultural awareness.

IMO has not been able to integrate diversity management into the STCW Convention and neither to issue a model course on cultural awareness. Notwithstanding, there are MET institutions that proactively have started to conduct courses in order to meet an increased demand from, for instance, the shipowners. These courses are conducted by various industry stakeholders and show a variety of overviews and pedagogy; no harmony and to no best practise.

Therefore this paper aims to highlight educational challenges to this dilemma. The empirical findings stem from conversations with WMU students and faculty.

In the conclusion it is said that a course in cultural awareness should not be mixed with other MET subjects. The course should lead to the individual's own experience and wake-up. It is important that the course is conducted without comparing and because of subject sensitivity what is discussed in class must stay in class.

To make employers interested in sending staff to a course there is a need to assess the students to demonstrate the value of the investment. In this paper I recall one technique that I found interesting and note that a student's rethink might come immediately or not until several years. Apart, the employers should be aware that stereotyping can never be eradicated.

Key words: *culture, diversity, education, MET, STCW, WMU*

1. Introduction

Courses or training in diversity management, or cultural awareness because culture is a major diversity in this context, have become a ten billion per year industry in many countries, especially in USA and gradually also in the EU. This is not most important. What is important is that nowadays maritime casualty investigators often take note that it is lack of cultural awareness and substandard communication that is the deep-rooted reason to many accidents and incidents at sea. Therefore people at relevant authorities should face the question: how to tackle this industry challenge? To my opinion - as long as there is no better solution than to educate: Educate!

Convincingly maritime accidents give good reasons for offering courses in cultural awareness. But seldom, if ever, it has been discussed how these courses should be composed and conducted; the subject is sensitive. Though, the International Association of Maritime Universities (IAMU) has an ongoing project: *Cross-Cultural Competence for Maritime Professionals through Education and Training: Addressing the challenges that lie ahead* (Parsons, Potoker, Progoulaki & Batiduan 2011). This research will look into the need for cultural awareness courses and what is being done at existing worldwide Maritime Education and Training (MET) institutions.

From reading articles in maritime journals it appears that many stakeholders in shipping wish courses to be conducted but nobody has managed to tell how to do. IMO has not been able to recommend a cultural awareness course to be included in the international convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW) and there is no IMO model course on the subject. Instead a few worldwide MET institutions have found themselves obliged and henceforth been proactive to undertake courses and conduct them to their own best knowledge. As a result it is done un-harmonised, in a mixture of methods and often scheduled to be an elective subject. A good thing is that sometimes the course fees contribute to a financial support to often already poor worldwide MET institutions. An alternative to the MET institutions conducting diversity management courses are: shipowners, P&I Clubs, unions and private consultants. These courses are also conducted proactively and to industry needs and request. One interesting industry example is the shipping company Maersk Line that found it necessary to educate their Danish ratings to better take orders from non Danish officers. Despite industry initiatives the arguments, in this paper, are that the natural course-patron should be the MET facilitators that have superior pedagogy experience boosting safety. Today the learning processes tend to be too informal and *ad hoc*.

Certainly, with awareness it will be easier for people to match and to accept the variety of human diversities when own behaviour differs from the colleagues'. An alternative to reach awareness can, besides attending courses and improving communication skills, be reached through an experience of own mistakes. To learn through own mistakes are not wrong as long as the learning process does not get exaggerated and, of course, as long as people and industry do not suffer. Psychological damages to humans can cost a lot of money on recovery treatments and it is one of the worst offences that a human being can do to another human. Obviously to learn the hard way can be very costly to the employers, e.g. the shipowners, because of peoples' mistakes originating in miscommunication and lack of attitudinal understandings (expressions, feelings, manner, behaviour, posture etc.).

These industry and MET dilemmas gave me an interest to the need for diversity management courses for people in shipping. In this paper I do not aspire to present best practise but more to highlight issues for discussions on what to observe, include and not include when conducting cultural awareness courses. My conclusions embark from empirical findings [1] from conversations with World Maritime University (WMU) students and faculty and of course from a literature review.

My conclusion is threefold, each of us needs to be better in and start to focus on: 1) listening to others, 2) to have an open mind and 3) to *demonstrate empathy*, not only say that you have or feel empathy but also show it in action. These issues are nothing new under the sun but apparently seldom properly practised.

Normally the following four alternatives are practised to make people culturally aware: education (lecturing), training, mentoring and coaching. In this paper I focus on education.

2. Reflections on diversity

By choosing the word diversity I wish to emphasise that it is *not only* culture (a word often used in this context) that matters but all different diversities that we encounter and therefore should be dealt with in a presumptive course. Diversity could constitute (could include) the nine issues as noted in table 1.

Table 1. Diversities

Age	*Culture*	Race
Beliefs (political, religious)	*Gender*	Sexual orientation
Cognitive style	*Language*	Skills (specialisation, expectance)
Colour	Physical ability	Social class

My findings conclude that a course directed towards people working in the shipping industry mainly should focus on the general aspects of culture, gender, language and to some extent various religious beliefs including the non-believers (agnostics and atheists).

When feelings are involved in discussions on differences it easily can create frustration and hostility that can effect and hamper safety and reduce academic performance. Feelings do not disappear by ignorance or silence; the opposite.

Diversity should be seen as an asset and managers/presidents/rectors/ship masters they all play an important role to inspire their staff to welcome diversity and to identify people that do not show empathy and behave eccentric or egocentric. To facilitate this key job of the managers various alerting signals from the staff need to be taught. All the staff of any company/organisation need to be enlightened on such signals.

When being away from own genuine culture the growth of information and communication possibilities influences cultural codes and often a new identification process takes place [2]. This process, that people undergo when together with others, develops individually and takes different moment in time to get rooted. The process can make it an additional difficulty for people outside the sphere of the transformed person. The cure and activity to avoid despair and confusion is to talk about such transformations. To manage this people need to learn how to think differently to the accustomed, the transformed person. Michaels (2006 p.20 my parenthesis) has expressed this with: “The trick is to think of inequality

(diversity) as a consequence of our prejudices rather than as a consequence of our social system". Most of our diversities can come from a social construction; even sex.

An important issue in the course must be to make people realize that often racial diversity is talked about as cultural diversity and thereby people cover up what they really talk about. It has become rude to talk about races and therefore, to avoid embarrassment, race is sometimes labeled culture. It must be wrong to replace our concept of race, as a biological entity, with culture. If people do not wish to be grouped or categorized under the race that they are borne with perhaps they will have no identity at all? People who commit themselves to racism they believe that there is an inequality between races and this skewed stereotyped belief should be discussed in courses on diversity understanding i.e. to challenge a false sense of superiority.

3. Diversity observations at WMU

Shy students and students with weak English make an additional challenge in a multicultural awareness course and therefore needs an attention out of the ordinary. For instance, to initiate debates is not in the favour of the students coming from Asian countries so it is not surprising that these students more appreciate to read than to listen and debate (Horck 2006). If the learner's language knowledge is weak it could be a time issue when reading is considered to be effectively faster than listening. A totally new pedagogy (andragogy, because the students studying at WMU are grownups) would be required. With weak English also comes a lack of enthusiasm to talk and talk well. The faculty identified a challenge to understand, both orally and in writing, what the students mean (Horck 2010a). This dilemma could be rooted in cultural differences. With above follows that oral skills are extremely important in understanding others. Therefore this obvious statement should be an issue profoundly to be discussed in the course, note – not to be learnt but to be discussed in a cultural awareness course. The logic of this purport is that the course dialoguing must be slow, free from metaphors, similes and metonyms and with a minimum of language redundancies.

A striking phenomenon is the students' disrespect to time. One could assume that this attitude has a cultural explanation. But effectively it simply shows disrespect to others and an ego-centrist thinking; an attitude of being for more than the others. Not to be able to be on time would make a survival in shipping cumbersome [3]. Perhaps timekeeping is an issue for the management to focus on because I understand that at the students' workplace at home it is important to respect time. Time and timekeeping is therefore important to discuss with people in the maritime industry throughout a cultural awareness course. Generally it must be the management's responsibility to tackle any issue that disturbs the operations independent if it happens onboard, in an office or in the classroom.

Not to have full control of own confidence is an issue that the students will have improved by the time of graduation. For instance, to have problems to be able to express a straight no is perhaps a cultural habit but it is not a valid excuse because to master an opinion with a straight yes or no, and mean it, reduces misunderstandings. It promotes cooperation. A similar situation presents itself by people using the expression *it depends*. Make up your mind and have an opinion and life becomes easier, i.e. less misunderstandings.

Normally by being with people from other milieus and cultures improves a person's self-confidence. Besides: the more we know about and understand the world around us the less we wish to have all the light on self, i.e. less ego-centralism, more cooperation and increased cohesiveness between staff.

It is recorded in Horck (2001, 2006) that often the female students take the back-seat in discussions. When this behaviour is observed it is a course leader's obligation to interact.

Therefore the gender perspective is an evident issue to discuss during the course (Horck 2010b). For instance, if it is found that students directly go to their quarters after class, and it becomes a life between the four walls of the room, it is a good reason to meddle. An alienated can easily become a risk to self and to others.

The study-scheduler must offer the students time and a fair chance to interact. Too many exams and assignments impede on students' interaction. Groupwork and field studies are excellent opportunities to learn how the colleagues think and behave and it makes one and each to realise the need for mutual acceptance and understanding. In the early years of WMU this learning activity was realised; an asset to learning. In addition, the course length (MSc studies) was 21 months (today it is 14 months) giving the students good time to rethink, evaluate, discuss and interact.

To help others and to listen to others increases cohesiveness, own learning and it reduces the risks of alienation. Besides these benefits it is worth taking note of what Lord Byron said: in company we learn how to live.

4. Course overview

Important parts of the course objective is to promote clearer communication, establish trust, open new horizons, strengthen relationships and in this way generate substantial education and business results.

The course aim should be: 1) to give managers a tool to avoid the occurrence of disputes and misunderstandings within the company and 2) to give ships' officers a tool to increase safety and 3) to give the educators a tool to avoid unhappy students and increase the fairness of the grading of students. To manage this it is important that *all* at the workplace take a course in cultural awareness. Generally it is an agreed understanding, at least in Europe, that "… everyone has to be aware of the similarities and differences between their own culture and other people's so that they can interact with others" (Candelier 2007 p.67). With the understanding of this statement follows that this awareness is a prerequisite for cooperation; cooperation being a repeated IMO theme of the year.

First we must realise that it is practically impossible to have all the world's cultures discussed in a course on diversity management. One has to be generic in discussions. The reason is also that cultures constantly change and the same language can be spoken in several countries. It is better that knowledge is sought on how social groups and identities function. The *discussing* is a fundamental course activity because communication makes the humans aware. "It requires the cultivation of dialogical relationships and the realisation for the need to strive towards a synthesis of action and reflection …" (Clay and George 2000 p.209).

The class should start with a short lecture and thereafter discussions and then perhaps a role-play. At WMU I sometimes have the students, on a voluntary basis, to play professor and student and the student knocks at the professor's door to complain about marks. After the play, unbiased, observed behaviours and expressions are discussed.

This course layout appears very lenient but to carry it out the very critical and demanding course-questions are: how to educate, what to discuss and talk about, how to talk about what, course duration and an eventual assessment of the students.

Before conducting a course on cultural awareness I would recommend that the course-management considers the following issues that could be stamped as a code of conduct:

1) What is being said in class *stay in class*
2) Any kind of *comparison* must be avoided
3) The course participants must be able to talk fairly good English and must be given ample time to *fulfil a sentence* without being interrupted
4) The course management and the employers should not expect an instantaneous participants' positive *outcome* of the course

Issue number four is particularly important. For some people it can take a day, others a month and perhaps years to realise and be aware. Anyway, agree with me that the idea with the course is to *change* peoples' perceptions – i.e. to reduce eventual wrong stereotyping and wrong anticipation that often is founded from looking at movies, reading books and hearing stories. Humans stereotype and this phenomenon can not be eliminated but be given a better justification emanating from course discussions. The course-aim is not to change the learners' values but to make them explicit and conscious. It is all about how an individual perceives the other learners' culture/diversity. With this aim it becomes complex to have a predetermined syllabus.

In order to have a system in the process the course should have its pillars on: 1) Opinions and arguments, 2) Contrasts and 3) a blend of 1) and 2) i.e. a synthesis (ibid.).

How do we practically handle our efforts to achieve the course aim and objective? Firstly, the course needs a leader (teacher). Instead of calling the leader a teacher I would prefer to nominate this person a facilitator.

5. The facilitator

The cultural awareness course facilitator should be very well prepared and be good in pre-thinking (to foresee outcome). The competencies are further defined with qualities like: knowledge of the subject, to an extent a didactical aptitude, ability to listen and to be able to interact with the students. The facilitator should also be able and aware of recognising behaviour patterns that interfere with the learning process. In order not to cause embarrassment she/he must have an open eye and a sensitive ear to human behaviour.

The facilitator is the students' assurance that any comparison of discussed issues is avoided. To compare is most likely leading to unhappy course participants.

The facilitator is there to help the learner to see relationships between own and the other's culture and to acquire an interest and curiosity about the other and an awareness of self seen from other peoples perspective. The facilitator is there to help asking questions and interpret answers. He or she should act as a support to understand and question dichotomies and conceptions of diverse and denial of cultures.

Six emotions are recognisable in all cultures: anger, fear, happiness, sadness, surprise and disgust. But it is not only emotions that are culturally patterned, also verbal intonations, speech pauses and body language. The course leader must be alert and sensitive on these nuances in the communication.

5.1 The English language programme professor as facilitator

There is a multicultural/intercultural dimension in language teaching. This encompass to consider the others' social identity and be able to judge what is appropriate language. When mastering these dimensions a communicative response can be better interpreted, the risk of relying on stereotypes is reduced and respect is developed of the person with whom you are

interacting. In a plural context it is justified to discuss because it is a communicative need. Therefore my point is that diversity skill-achievements should not be mixed with the acquiring of a language's syntax and other language rules. If a mixture of diversity skills-achievement and language learning is carried out then the *aha*-experience, the wake-up, might get watered down.
Language teachers traditionally focus on cognitive knowledge and if they also are to concentrate on cultural awareness they should acquire the basic principles of teaching when emotions are involved (Byram, Gripkova & Starkey 2002). Besides knowledge and skills as identified in paragraph 3.1 no special knowledge is needed to be on the rostrum in a cultural awareness class.
For practical reasons it could be clever to conduct the courses with intervals during relevant semesters and under the auspicious of the English language professors. Though, if the courses are handled like this, again, the-wakeup is gone.
In the following I will present four examples of course ideas that the facilitator should be responsible for.

5.2 Course overview; WMU

The MET course, where the WMU faculty aims at educating administrators in MET, comprises a module on the management of diversities. The course duration is ten times 90 minutes. The objective is to identify various issues that the MET facilitators should pay attention to when addressing a diversified student complement. The course is built on three sub-modules:

1) Diversity management - general aspects on why diversity issues have become a challenge in shipping and views on women taking up management roles onboard.
2) Discussions - looking into the change of attitudes, awareness of self, communication dilemmas and victims of prejudice; no specific culture is discussed but a highlight of wide-ranging perspectives. Group behaviour in role play constitutes part of the contact hours and is meant to instigate discussions.
3) Assessment - considerations are also bestowed on how to gauge if a person is culturally aware or not.

This course does not give a limited exposure, i.e. an effort is taken to be culturally nonspecific.

5.3 Course overview; two MET institutions

Below follows two examples of European MET institutions that voluntarily give becoming seafarers a course in cultural awareness: 1) Maritime Institute Willem Barentsz, Terschelling (The Netherlands) and 2) Kalmar Maritime Academy, Kalmar (Sweden).
It should be mentioned that many MET institutions that have declared that they proactively conduct a cultural awareness course have not been very agreeable to disclose the course content. The reason for this could be that the MET institutions are not sure that they carry out the course with the right approach. They are uncertain of best practise and therefore reluctant to tell.
1) Maritime Institute Willem Barentsz.
The STC-Group (2005) has developed a course on cultural awareness for ships' crews. The course duration is about 17 hours and is delivered during three full days and contains about 14 modules. The course is focused on the Dutch culture and cultures that are common on Dutch flagships; the exposure to different cultures is limited. Role play, case studies and discussions all play an important part of the course. Ten course modules are listed in table 2:
2) Kalmar Maritime Academy.

At this institution the subject is obligatory (at the Swedish MET institution in Göteborg the subject is elective). Four times 45 minutes is set aside on the subject. The course content is focused on differences between the Philippines and the Swedes and is scheduled during the semester before graduation; a limited exposure to cultures.

Table 2. STC - ten course modules (my selection)

1	Cultural awareness onboard ships	2	Cultural awareness defined
3	Five dimensions by Hofstede	4	Other cultures put into perspective
5	Communication across cultures	6	Decision-making
7	Religion	8	Dealing with conflicts across cultures
9	Woman onboard ships	10	Stereotyping and prejudice

5.4 Course overview; a Danish study

In 2001 the Danida Fellowship Centre asked for a study on a preparatory assimilation course on how to approach multiculturalism in Denmark. The course is planned to be introduced to foreign students coming to Denmark to study degree subjects and to Danish civil servants taking positions abroad.

Brander concludes that a ten to twelve weeks course would be appropriate. In the study she identified a range of challenges that can affect a student's ability to study abroad. In the following I have recorded communication and cultural challenges:

Communication challenges:

1) Failure to negotiate with tutor about mutual expectations, timetabling meetings, making appointments, appreciating tutors workload
2) Not knowing how to take initiatives and ask for something they need
3) Underdeveloped verbal presentation skills
4) Poor listening skills

Particular challenges relevant in the academic world were noted: need for teaching skills, not able to communicate across academic borders, ability to stimulate debate, using internet and IT packages for communication, unsure academic writing kills, how to structure a report, not being open to learning together with and from people from other disciplines.

Cultural challenges:

1) Attitude to women
2) Look down on Danes who speak less good English
3) Need to learn independence, break down barriers built on hierarchy
4) Not being open to equality
5) Accepting and adapting to equality in the social sphere
6) It is not natural to discuss problems, need to learn to be more open, confident to seek help
7) To be open to criticism from your tutor, understand that it is not a reprimand
8) Accepting and adopting to equality in the academic sphere
9) Feeling excluded in the company of Danes
10) Behaving congruently in the Danish society
11) Not know how to say "no", being able to speak up for themselves
12) Not knowing/not using strategies to combat loneliness
13) Respect for time. Arriving on time and making appointments
14) Feeling disappointed when others don't recognize my religious and cultural holidays
15) Need to learn patience
16) Getting used to the freedom and safety (women) e.g. going out to church alone
17) Unsure of own social skills

18) Confidence to use personal resources to take control
19) Be prepared to culture chocks (Brander 2001 p.28-29 modified by me).

In order to meet these challenges five course priorities have been identified, see table 3. I also believe that these priorities are essential in order to carry out a successful course.

The above priorities are key course performance indicators. The only objective that I have is that the course should not focus on the culture/s of a specific country but be more generic in nature.

Table 3. Danida – five cultural awareness course priorities (ibid.)

Course priorities	Training implications
Understanding the norms in society	Compare history and sociology of each other's cultures, why cultures differ, the roots of ethnocentrism, know that in country X it is different, learn to be open to difference
Being open to equality	The basis for status and respect in country X, compared with home culture, accept the equality and understand the implications. Study places where expectations will be independent and strong. Be comfortable using first names/being called by first names
Being open to difference	Be able to accept difference, not taking difference for granted, ask for clarification if puzzled by another's behaviour, explain own actions, be aware of the effect on own actions on others
Behave congruently regarding cultural setting of country X	Learn not to misunderstand/misinterpret the behaviours in country X, know the customs, what behaviour is acceptable/unacceptable, who pays, ask strangers for directions/help
Communicate inter-culturally	Understand the importance of context in communication. Check understanding of what is said and received

6. Cultural effectiveness

An assessment of the students' cultural effectiveness/awareness should start and end the course. Besides finding out if the course has been beneficial or not, it constitutes an employers valid indication if the education has been worth its value for money. The difficulty is that there is no recognised technique to assess the success of a course in cultural awareness. Some students may react at once or during the course, other people require a longer time to realize and for others a change in stereotyping etc. can take several years.

A multicultural personality test; a programme on how to evaluate a person's *cultural effectiveness* has been developed by Dr van Oudenhoven (Professor of Cross-Cultural Psychology at the Faculty of Behavioural and Social Sciences University of Groningen). The foregoing course usually takes four days and a good part of the course constitutes role-plays. The test consists of a set of cross-cultural incidents and builds on five competencies: 1) Empathy, 2) Open-mindedness, 3) Social initiative, 4) Stability and 5) Flexibility. Competencies 1-3 are practical in nature and have a social component. The test scoring is based on most relevant answers to questions like: am I likely to react at a certain situation and if so what would I do. There is a feedback on each reaction. The test is given before and after the course to see if

the course has resulted in any immediate personal change (Herfst, van Oudenhoven and Timmerman 2008; and a personal interview 2008).

7. Conclusion

Employees in shipping companies, e.g. onboard ships, at MET institutions or in ports can not be allowed distancing from others. With current arguments on this statement it talks for a MET initiative to conduct diversity education. This initiative should be taken now because the authorities appear lacuna in the legality of these matters. The MET institutions should not wait for the lawmakers to tell them what to do and how to do. The industry believes that crew cultural awareness increases safety on ships that are manned with a multicultural crew complement and this is a good reason for MET to introduce such courses.

In an article on Maritime Resource Management in The Swedish Club's *training news* it is stated that "In a zero tolerance world, the shipping industry must do everything possible to reduce exposure to shortcomings in human performance" (Hernquist 2009 p.16). This statement from an insurer clearly demonstrates the urgency of the matter. Henceforth, it is a maritime educational challenge that can not be ignored.

In order to minimize confusion it is important that the MET institutions have a written policy on pedagogy and clearly explain what is expected by the students and the faculty. Also the ports and the shipowners should have a written policy on the human element and diversity management. A written policy would contribute to less misunderstandings and queries. The policy has to be in writing because then people can remember it and the management has an assurance that jobs are carried out as instructed.

Education and training, i.e. to attend a course, promotes clearer communication, establishes trust, open new horizons, strengthens relationships and generates substantial education and business results. Therefore, in order to avoid misunderstandings with accidents to follow, cultural awareness must be given a timeslot in the curricula of becoming seafarers and as an update course for active seafarers. The Captains should not have to be worried all day because of the risks of crew misunderstandings.

Notes:

(1) Researchers that conduct a *qualitative research* have to have a *theory* (similar to a hypothesis that is needed in a quantitative study) and a *strategy* (method). Normally both the theories and the strategies that are used in today's research are formulated by reputable well-known and well established researchers, scholars and philosophers. Simply to have an interview with the research sample is not justifying a research by the name of a *qualitative research*.

(2) This is the opinion of people with an constructionist view i.e. believing that culture and ethnicity is socially constructed and the result of historical processes. Contrary, people with an essentialist perspective of culture and ethnicity underline cultural difference and see it as static and unchangeable.

(3) The *just in time* (JIT) concept is a Japanese innovation and a very important quality survival factor in transportation and particularly in shipping. This observation just to communicate that in correct English the concept should be denominated just on time.

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THE IMPORTANCE OF THE MULTINATIONAL CREW IN THE CADETS' PRACTICE

Abstract

For today moment, the shipping industry is a multinational one. All the activities in this industry are based on interaction and collaboration between people from different counties and cultures. In an international company, these details are common, due to company necessity in having offices placed in different countries according to the business interests. But these aspects become more complex when we refer to onboard ship activities. For this reason, it is necessary to observe and study the kind of compatibilities or non-compatibilities that exist among seamen from different countries in order to create a proper working environment onboard the ship. These problems are even bigger when we talk about a person on its first experience onboard the ship and especially in a multinational and multicultural crew. This category includes cadets and young officers who made their practice stages onboard school ships or ships under native national flag.
The present paper intends to illustrate different elements encountered in the human resource management and their appliance in a multinational crew situation, to see how is to work inside of a multicultural crew as cadets or younger officer, through experiences of our university students during their onboard practice on different ships with different nationality crew members.

Key words: *cadets' practice, shipping industry, multinational company, multinational crew*

1. Introduction

Starting from the 90's, the concept of single nation crew had become less met on the world level. This situation was caused by the transfer of the ships from the public sector to the private one, especially in the eastern European countries and along with the ship flag changing under a more permissive one. These changes accelerated the implementation of the multinational crew onboard ships, the new owners wanted to put their own people in the ship's management positions covering the rest of the onboard positions with the possible cheapest hand work.
The new conditions do not represent a problem if the crew is prepared to face this change. Put in front of a new working environment, many seafarers had accommodation problems, difficulties in working relationships onboard and the biggest problem was generated by the use of a foreign language, mostly English, in the daily duties communication. Many of these first unpleasant conditions have been covered by the option of a most attractive payment, the salary onboard of these ships being higher than for the same position onboard of a national flag ship.

It was necessary a long period to accommodate seafarers to the present situation, but it was usefully, because the crew was familiarized with the ships and for the beginning they represented the basement of the safety crew. In time, the contact with other nationalities crew members permitted the knowledge transfer and option to replace them.
Beside these problems of nationality, culture and language differences, another problem that can exist onboard is raised by age differences between crew members, in many cases younger persons have to coordinate and control older and more experienced crew members, situations generated by position and rank. These problems are bigger when we talk about a person on first experience onboard ship and particular in a multinational and multicultural crew.
Due to these facts, it was compulsory for the maritime training institutions to reflect and change the training concepts in order to facilitate the accommodation inside of a multinational crew, mainly onboard ships with a various cultures crew. One of the solutions proposed included the possibility to cover the requested onboard practice to foreign or multinational shipping companies.
Trying to find how cadets and younger officers have felt their first contact with the actual onboard environment, a multicultural one, a group of lecturers from our University realized a study about, using for this reason the experiences of our students during their onboard practice.

2. A multinational crew – between concept and reality

The multinational crew appeared on the shipping market as result of different economical reasons. First of all is the necessity to reduce the costs with personnel, but also to keep the requested standards onboard.
In this way, owners changed their crew resource option to work force markets from Asia and Eastern Europe mainly. At beginning, they took position onboard as O/S or A/B in deck compartment and as motormen in engine department, after, the owners started to accept also deck and engine officers, even at managerial level, as Master, Chief Officer and Chief Engine.
The change from the single nation crew to multinational crew has not avoided by problems and difficulties, mostly due to different concepts applied by the owners onboard related to multiculturalism and working relationships. An ideal solution is to have seafarers from the same nationality in one department and if it is possible to assure the operational officers from the same nation. In order to satisfy owner's certitude that everything is alright onboard and his property is used in good condition, the ship management will be cover by owner’s people, same nationality with the owner or very confident owner's persons. In present, many companies apply this concept, even better, the onboard ship, the operational is covered by one nationality crew members and only the ship management is from other, in case of impossibility to be from the same nation.
In addition to different nationalities, multiculturalism can also involve different cultures for the different groups aboard, meaning that the different groups may have different ways of seeing things and different ideas about who is the most important aboard. They might, for example, be the people on the bridge rather than those in the engine room, or the young rather than the older people aboard.
Cultural differences represent the fundamental of communication and involve development of understanding skills amonmg different nationalities. These differences became visible when we

were in contact with other nationality persons, a frequent fact onboard of multination crew ship. People see, interpret and evaluate the things around them in very different ways. What seem to be right in one culture can be, for many times, inappropriate for other culture.

Misunderstandings due to cultural differences appear when a person of a nominated culture wants to impose own point of view to another person, from a different culture and with different principles. Wrong interpretation is the main element arised when we want to induce to other person our own concepts.

Without a good knowledge of others cultural characteristics, it is preferable to adopt a diplomatic approach for different aspects which keep by a particular culture. To became consciences by the own culture dynamics is a difficult task. From our first life days, we are learned to see and to do some things at an unconscious level. Own experiences, personal values and cultural bases are leading us to do things in a designated way. There are moments when must to pass over our cultural borders to realize the impact of other culture on us. It is very usefully to have answers from different nationalities colleagues and also from different cultures, in order to help us in development the own style regarding to cultural treatment applied to other peoples.

Even cultural similarities can create misunderstandings sometimes. When consider than other persons have a similar culture with ours, we take the risk of wrong interpretation of our actions, with result in a negative reply from the others.

There are many references levels which can help to express the cultural differences perception, as:

- Primary level or parochial, when peoples do not know to do different things other than personal way. At this level the impact of cultural differences is ignored.
- Second level or ethnocentric, peoples accept others thinking way, beside of their own, but still considers own style as the most indicated one. At this level the cultural differences are seen as a source of problems and peoples have tendency to ignore or reduce the importance of these.
- Third level or synergistic, person conscience own thinking way and others thing ways and choose the best solution for the present situation. At this level, peoples realize that cultural differences can lead to problems, also to benefits and they are interests to use the cultural diversity for creation of new and alternative solutions.
- Last level or cultural participation, is the stage when persons from different cultures belong together to create a common thinking culture. At this level peoples talking one each other, creates new understandings, new rules to help in solving of a particular situation.

Increasing of the cultural knowledge means to observe the positive and negative aspects possible to appear inside of cultural differences. The cultural diversity can be a source of problems, especially in the fields where is necessary to collaborate and work together. The diversity increases the complexity and confusion level and make more difficult to reach a common sense.

In order to manage well the cultural differences is important in the first time to know and understand them, not to be afraid of.

So long, each of us is the product of his own culture is necessary to increase the self and collateral knowledge. For this objective there is not a book to treat the cultural differences, not exists written rules to be followed in suck kind of situations.

When peoples achieve the necessary cultural knowledge, they realize than:

- we are not the same;
- similarities and differences are both important;
- there are unlimited ways to reach the same goals of living together;
- best solution depend by the particularities, each situation is different and may request different solutions.

A correct approach of the cultural differences can be done through some concepts acceptance, like:

- accept that you don't know
- judge before
- be sure to be understood
- become familiar with ambiguity
- accept diversity.

These are few concepts regarding the correct deal with cultural differences. Not all of these can be applied onboard ships, but ones can provide good results, mainly when make references to an environment which request a very good collaboration and work relation.

In many cases, the cultural differences exist inside of the same nationality and are passed very hardly. When put together more than two nationalities persons, these differences become extremely difficult to be passed and in this situation it is necessary to know to manage them and to try to find a middle way if the best solution cannot be found.

Also, the cultural behaviour is different from person to person and the approach modalities must to be adequate to each person. It is very important to know from the beginning how to deal with these cultural differences, especially if you want to perform a longer carrier inside of a multinational working environment.

3. Constanta Maritime University students' onboard practice

Until 2004 Constanta Maritime University students' practice has developed onboard of the scholarship "Neptun", but due to a lot of engine and hull problems this activity has been suspended.

After the suspension of this activity, the solution found was to sent our students in international voyages with different shipping companies, local or international, for this action been contacted the local crewing agencies or owners offices. This was the first step, when over half of our students covered their requested onboard training on ships of different owners, most of them, international shipping companies with a great rename on the world shipping market, as NYK Ship Management, Japan, Peter Dohle from Germany, Maersk, Denmark, CMA-CGM from France and many others, in totally, 22 shipping companies being part of the partnership.

Taking account of the present regulations regarding onboard training period as cadet, 12 months for deck cadet and 6 months for engine cadets, our university took decision to help and facilitate students' onboard practice. In this way, in the present there are agreements signed between shipping companies, their local representatives, and our university, where there are stipulated the requested training objectives, onboard live and work condition and schedule for students and the level of theoretical knowledge necessary to be acquired by our students before to proceed to the onboard practice.

Adopting this solution, in time, the number of the shipping companies interested to take cadets has increased and the number of students trained has also increased. During the year of 2008 through this protocol a number of 555 students covered their onboard practice on ship owned or under management of collaborative shipping companies.

Inside of this protocol, the companies have possibility to offer scholarships to our students during their study years and other facilitations in order to create the own group of future company's officers. In the present, there are ship owners which select students, through tests and interviews, from the first study years and include them inside of the future companies' personnel development program, offering to our students monthly scholarships, opportunity to cover the necessary onboard cadets' practice and to be sure on the end study, position inside company.

In the same direction, our University, as participant at European Erasmus Programme for the students mobility, in partnership with European shipping companies, has gotten the possibility to other 182 students to cover their onboard practice, including an Erasmus scholarship as Erasmus students. After the first months of this project development, an increased number of students have became interested in this possibility, the advantage being represented by the cumulative amount between scholarship and cadet monthly payment.

For the future, we are interested to increase the number of partner shipping companies and also to extend the Erasmus programme in order to offer to more students the possibility to have the necessary cadets period at the end of study years and to make possible participation to officer certification exams after their graduation.

4. Students' behaviour inside of a multinational crew

Starting from the present situation, when the world fleet is based on multinational and multicultural crews, and taking in consideration that our students make their onboard training on ships of international owners, a group of lecturers from our University had the initiative to realize a study about what are the students apprehensions and considerations regarding the first voyage or voyages onboard ships with multinational crews. This initiative has raised after a number of bad feedbacks from students, very disappointed by the first cadet voyage who intended to give up a maritime career after finishing their academic studies. To do the study, the questionnaire and direct discussions techniques have adopted, involving in this action student from different faculties, in connection with maritime carrier, just arrived home from a cadet voyage.

The questionnaire was based on a set of questions about company where they made the voyage, crew structure by nationalities, social life and working activities onboard, type of relationships developed onboard with the others crew members, what nationalities and cultures they consider to be closer to own culture, if they have difficulties to socialize onboard, how long period consider necessary to achieve skills in order to understand other cultures and what are the opinions about the direction of their future maritime careers.

Analyzing questionnaire answers we were able to open a free discussion with students and to try to find the motivations for different answers. During discussions, the highest difficulty

was to made students to speak freely about their experience during onboard stage or stages and to pass over the fact that they talked with a teacher.

The analysis of the answers allowed having a percentage view about students' opinions and the results showed that they are more compatible with the European countries' seafarers, have more possibilities to develop social and work relations with these ones and accept more easily orders and instructions from European officers and Masters. Part of them acknowledged that they interacted without problems with Asian seafarers also. Most difficult was to collaborate with superior officers or nominated onboard training officer when they are from an Asian culture. Some difficulties were noted in relations with the Eastern European officers, but these were produced due to different personal opinions, not professional.

A very important point found in almost all questionnaires studies was about difficulties in communication with other crew members, part because of poor English language knowledge, part because the English was talked with native language spelling influence and many words were difficult to be understood. Starting from the language problems, a part of the students avoided to socialize with some of the crew members and maintained a strictly professional relationship.

Period considered as minimum necessary to accommodate and start to interact with other nationalities crew members onboard has varied from one week to one month, more accessible on ships with a strong cadet training programme developed. Longer has considered being the accommodation period to daily duties and to the training schedule, some students taking the give up decision due to their forbearance about possibility to reach the conditions requested for duty onboard.

Many students had difficult to express an opinion or a point of view about cultural similarities or differences with other nationalities, they did not have enough knowledge about these matters, but talked about what they felt in relation with other nationality crew members considered as to be cultural correspondences or differences. They found many common aspects with persons from all over the world, especially about the free time spending or passions for sport activities and events, about musical preferences and in many cases these common activities represented the starting point in a future personal and friendly relationship. The differences were based, as expected, on religious problems or native social life characteristics, most of them in relation with Asian or African seafarers met onboard.

As a general opinion, the problems arisen from the nationality and cultural differences have considered possible to be passed if there is interest to develop a long and nice career in the maritime industry, especially onboard ships.

An interest opinion has obtained from a part of the questioned students, who considered that problems and misunderstandings can appear every time and in every working environment. They acknowledged that the onboard environment is a particular one, with restrictions imposed by the space and activity characteristics, but the attraction for this job, a not easy one, but with many satisfactions, can lead to a personal approach more open to understanding and acceptance of the other nationality cultures and particularities.

On the other way, the students who expressed their option to give up to an onboard career, wants to perform in a relative activity field, where they have possibility to put in practice the knowledge acquired during the study years.

5. Conclusion

We have to accept the presence of a multicultural crew onboard ship. Also, the idea of correspondences and differences among cultures has to be the acceptance and in this direction to know to understand and manage the cultural relations. From the beginning, it is better to understand that differences are more visible than similarities and to try to pass over the first and to reach the seconds. When we talk about multiculturalism, it is important to realize as obviously the differences between concepts and reality and to learn to treat correctly each culture, as a unique entity, not to apply the same format to all contacted cultures. The multicultural problems are harder to be managed at the first contact, especially by the younger maritime cadets and officers, persons who can be very affected by difficult relation with other nationality persons.

A solution can be represented by the involvement of the training institutions in preparing of the younger cadets for a multicultural work environment. Before their first experience onboard ships, a special training about multicultural concepts and social activities in a multicultural crew can be welcome in order to offer the necessary knowledge about and how to deal with problems coming from cultural differences. For this reason, it is absolutely necessary to know what deficiencies have met the previous students onboard and to create a training programme based on these.

Our University lecturers study represents the starting point for more other studies on the same or additional subjects, offering an image about the actual students' position regarding the training activity onboard of a multinational ship. The present study shows that more than half of students who made their first voyage are not afraid by the idea to work in a multicultural environment, considering more interesting the opportunity to know and interact with other cultures. The students who considered as almost impossible to perform onboard of a multinational ship, took into consideration the capacity to work with persons from other cultures in a different activity field.

Maybe, our study will not reduce the number of students who wants to give up to a maritime career, but helps us to understand better what problems are met onboard and in this way to be able to offer solutions to be passed over.

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THE PHONETIC PROFILE OF THE SPANISH SPEAKER

Abstract

When teaching foreign languages, especially at lower levels, we tend to draw a simplified picture of the language in order to make our students feel comfortable with the subject and convey the impression that the task of learning a language is possible and achievable.

This pervades all aspects of language teaching: grammar, productive and receptive skills, and pronunciation is no exception. Although students are increasingly exposed to a wider number of accents of English from native and non-native speakers, most materials are based on the widely recognized standards of English (mainly standard British English and General American) which, in the end, results in a large gap between teaching materials and real life.

It is a complex matter, however, to try and build up our students' basic language skills and at the same time provide them with the complex picture 'real' speech entails but something must be done to warn our students about the deviations from the rule they are going to find in their professional practice.

The aim of the present paper is to offer easy-to-follow information about some of the most prominent and problematic phonetic characteristics of the average Spanish speaker of English with a view to provide the hearer with some 'adjustment strategies' that may allow them to make out any spoken message no matter how broad the Spanish accent turns out to be.

Key words: Pronunciation instruction, Maritime English, contrastive phonetics English-Spanish.

1. Introduction

Pronunciation seems to be the last stage in language teaching. Grammatical issues usually take up most of the time and efforts of both lecturers and students but, paradoxically, the first contact the majority of learners will have with any language will be with its sounds. Nowadays, most language teaching materials incorporate explicit pronunciation sections so that the tendency to leave pronunciation for 'a better time' is, luckily, decreasing. Furthermore, as the boundaries of English teaching expand due to the specific demands of a wider and more diverse learning audience, some 'lesser' aspects of pronunciation are becoming more prominent. Such is the case of the needs posed by the shipping industry on the teaching of English due to the huge variety of situations, sectors, and professionals this trade entails. Thus, some matters 'peripheral' to the everyday English teaching practice, such as the description of the phonetic

characteristics of foreign accents of English, become relevant in a context where multilingual crews and shore personnel have to communicate in English. In this respect, I cannot but gladly accept the 'invitation' made by Professor Takagi in his contribution to last IMEC (22) and, in the following lines, I will try and draw a general picture of the most prominent phonetic features of the average Spanish speaker of English[25] In order to do it I will follow Professor Takagi's article structure so that anyone interested in the topic can make the most of an already 'familiar' organisation and needs only pay attention to the new data.

2. Suprasegmental characteristics

Rhythm

Rhythm is at the root of a language. It is a fundamental and, at the same time, complex feature implying an intricate interplay of factors that brings about the prosody of any given language. One major division of languages is based on the concept of rhythm, and the two broad categories into which languages fall are stress-timed languages and syllable-timed languages. English is a stress-timed language and Spanish is a syllable-timed language. The conflict arising from the overlapping of two opposed rhythmical patterns may seriously affect communication. A speaker of English with a strong Spanish accent will pronounce hundreds of syllables which are not supposed to be heard, and, possibly, some of them will contain the wrong vowel sound in them. The two main reasons for this are that, first, Spanish, as stated before, is a syllable-timed language and, second, that it is a 'phonetic' language. In other words, all our syllables are pronounced practically with the same length and intensity, and Spanish is pronounced almost exactly as it is written. If we apply these native, and consequently deeply rooted, principles to English, we face utterances with the typical "machine-gun" rhythm which, after a while, become almost impossible to decipher.

The resulting overabundance of syllables and incorrect vocalic sounds in the nucleus of syllables are due to a combination of both the total absence of weak forms in the speech, and the excessive zeal on the part of the speaker to pronounce everything that is written on the paper.

Word stress

It is generally accepted that English word stress is free, as far as its assignment is concerned. In that respect, there is little else to do but learn the stress patterns word for word, make some useful generalizations about linguistic phenomena sensitive to stress, and 'seriously' teach some pronunciation rules such as those for morphemic *-ed* and *-s* endings. The problems mentioned in the previous section about the lack of weak syllables and the phonetic nature of the Spanish writing system also apply to words, inasmuch as they are what utterances are made of. The non-realization of weak syllables -less prominent and with obscure vowels- together with the tendency to 'read out' everything written on paper, produces again too many extra syllables per word. One example that clearly illustrates this is the pronunciation of *–ed* endings. Pronunciation differences between final /t/ and /d/ are not important here but the presence or absence of a new syllable certainly is. Any listeners who await the past form of the verb *call* would have their expectations totally broken when receiving a two syllable word with almost equal stress on both syllables

[25] Peninsular Spanish and British English are the standards compared here.

English word	***English pronunciation***	***Spanish pronunciation***
call	/kɔ:l/	*['ka,liđ]
worked	/wɜ:kt/	*['ɣwor,kiđ]

Besides the unpredictability of English stress, and the 'limited' efforts we can make to overcome this difficulty, a further remark on English word stress must still be made in order to account for an extra problem encountered by the Spanish speaker of English when assigning word stress. Whereas English tends to place the main stress of a word as far left as possible, Spanish has the majority of its words stressed on the penultimate syllable, or else on the last one. This is due to the fact that each language comes from a different linguistic ancestor: English is a Germanic language while Spanish is a Romance one. By natural impulse, Spanish speakers will follow their inborn stress pattern and apply it to English[26]

Wrong stress placement usually causes more communication problems than segmental inaccuracies, but Spaniards find and extra conflict when they face 'familiar' words –words that resemble Spanish words- which do not have familiar pronunciations.

A large percentage of the English vocabulary is made up of Romance words[27]. Many of them were brought into the language in the Middle Ages and, with time, they adapted to the Germanic stress pattern with little or no change in their spelling. So they are easily 'recognised' by the Spanish learner and perceived as less unfamiliar than some other English words and, as a consequence, their pronunciation is approached in a 'confident and relaxed' way. Stress misplacement not only produces the incorrect positioning of stress but also a 'chain reaction' adjustment in syllable quality, which, together with well-meant but wrongly-applied analogy, accounts for some very erroneous pronunciations:

English word	***English pronunciation***	***Spanish pronunciation***
efficiently	/ɪ'fɪʃəntli/	*/ifi'saiəntli/
injured	/'ɪndʒəd/	*[in'dʒurđ] *[in'dʒuriđ]
engine	/'endʒɪn/	*/en'dʒain/
floodable	/'flʌdəbl/	*/flo'deibol/ */flu'deibol/

[26] I briefly address this topic in my presentation at IMEC 19 García Carrascal (2007)

[27] Some estimates start at 75%. It must be noted, though, that these figures are usually based on dictionary entries rather than on everyday language use.

Segmental characteristics

The suprasegmental features of English are, in my opinion, a harder nut to crack than segments themselves, since they impair communication more than the wrong realizations of individual phonemes. It must be also said that they are more difficult to teach and master than isolated sounds. At any rate, the repetition of mispronounced segments adds, in a substantially negative way, to the already faulty outcomes produced by poor rhythm and wrong accentuation. In the following sub-sections I will make some general descriptions of the typical problems shown by the Spanish speaker of English.

Vowels

The Spanish vocalic system consists of 5 vowels neatly distributed on the periphery of the vowel chart. This system compared with the traditional distribution of vowel sounds for Standard British English shows to what extent the two organisations differ. As a result of these differences, the Spanish speaker will adapt the English system to his/her native one by reducing all 12 British monophthongs to the 5 Spanish vowels producing a conversion table similar to the following one:

Spanish /i/ */ʃip/	English /i:/ /ɪ/ sheep /ʃi:p/, ship /ʃɪp/
Spanish /e/	English /e/
Spanish /a/ *[xat]	English /æ/ /ʌ/ /ɑ:/ hat /hæt/, hut /hʌt/, heart /hɑ:t/
Spanish /o/ */pot/	English /ɒ/ /ɔ:/ pot /pɒt/, port /pɔ:t/
Spanish /u/ */ful/	English /ʊ/ /u:/ full /fʊl /, fool /fu:l/

The English central vowels /ɜ:/ and /ə/ pose extra difficulties since we do not have any vowel sound articulated in the central part of the oral cavity. The general perception of these sounds is, with limitations, close to Spanish /e/ but no easy correlate can be found in the Spanish language. It is here that the strong bond between Spanish and its phonetic spelling system seriously affects English pronunciation. For this reason, English /ɜ:/ will be pronounced as any of the 5 Spanish vowels + /r/ depending on the spelling of the English term, as shown in the examples below.

English word	***English pronunciation***	***Spanish pronunciation***
turn	/tɜ:n/	*/turn/
confirm	/kənˈfɜ:m/	*/konˈfirm/
seaworthy	/ˈsi:ˌwɜ:ðɪ/	*/ˈsiˌɣworθi/

/ə/ besides being central is a non-accented/weak sound, which, as shown in previous sections, constitutes a pervasive problem for speakers of syllable-timed languages. As it happens in the case of /ɜ:/, /ə/ will be fully pronounced as any of the 5 Spanish vowels depending on the spelling of the English word. It will never sound as a neutral unstressed vowel phoneme.

English word	***English pronunciation***	***Spanish pronunciation***
about	/əˈbaʊt/	*[aˈðaʊt]
doctor	/ˈdɒktə/	*/ˈdoktor/
serious	/ˈsɪəriəs/	*/ˈsirius/
number	/ˈnʌmbə/	*/ˈnambar/
position	/pəˈzɪʃ(ə)n/	*/poˈsiʃon/ */poˈsision/

Consonants

A detailed account of the differences in articulation between Spanish and English consonant phonemes is out of the scope of this paper so, again, I will try to draw some useful generalizations about the pronunciation of English on the part of Spanish speakers from a perceptual perspective.

Plosives

The number of English and Spanish plosives is the same in both languages and their point of articulation, except for the /t/ /d/ pair, identical. However, when hearing English with a strong Spanish accent, a certain softness and general lack of articulatory tension is perceived. The reason for this is that our plosives are almost always realized as fricatives since they are only purely plosive in absolute initial position. This is especially noticeable in the case of final voiced English plosives. Due to the devoicing of final /b/, /d/ and /g/, these phonemes resemble closely

their voiceless counterparts and, therefore, a poor Spanish pronunciation will either produce them as [ƀ đ ɣ], which do not exist in English, or will directly dispose of them. This 'disposal' of final consonants is not only limited to final voiced plosives, but also to many other consonantal phonemes -isolated or in consonantal clusters- as a consequence of the restrictions of Spanish phonotactics: any word ending in a sound other than /d s n r l θ) is bound to be weakened if not entirely dropped.

English word	***English pronunciation***	***Spanish pronunciation***
flag	/flæg/	*[flaɣ]
command	/kəˈmɑ:nd/	*/koˈman/
ballast	/ˈbæləst/	*/ˈbalas/

A final remark on consonantal groups must be made on this section yet. It deals with another typical feature of the strong Spanish accent and concerns /s/+ C clusters. The syllabic structure of Spanish does not allow this type of combination in word initial position and Spanish speakers find their way around English /s/+ C groups by inserting an /e/ sound before them.. In general, the addition of new syllables is a major problem, in perceptual terms, and in some cases it may be even accompanied by a series of highly undesirable collateral effects such as the displacement of stress or the creation of a secondary stressed syllable.

English word	***English pronunciation***	***Spanish pronunciation***
speed	/spi:d/	*[esˈpiđ]
starboard	/ˈstɑ:bəd/	*/esˈtarˌbor/

Fricatives and affricates

The number or fricative and affricate consonants in English is higher (8+2) than in Spanish (4+1). The reason for this is that Spanish has no voiced counterparts for its fricatives and affricates. Therefore, a Spanish speaker will not produce minimal pairs such as *fan/van, seal/zeal, chin/gin*. However serious this may look, it is usually not so because in most occasions context will help in disambiguating possible misunderstandings.

/w/ /j/ /h/

The mispronunciation of these three phonemes [28]is one of the most conspicuous features of the Spanish speaker of English. Again, the adaptation of the foreign phonemes to the native sounds and the interference of spelling are the major reasons behind the problem. Spanish does not have an /h/ phoneme but we clearly perceive its friction and are willing to reproduce it. When trying

[28] Perhaps a note should also be made about the 'erratic use' of postvocalic *r* as a major Spanish pronunciation feature, but bearing in mind the existence or English rhotic accents, I have decided to leave it aside.

to do so, we bring it close to our naturally equivalent native phoneme /x/: a much harder velar fricative. The results would be something like

English word	***English pronunciation***	***Spanish pronunciation***
how	/haʊ/	*/xau/
have	/hæv/	*/xaf/
ahead	/əˈhed/	*[aˈxeđ]

The case of /w/ and /j/ is a curious one, since these phonemes exist in both languages. but Spanish phonotactics, however, prevents them from appearing on the margins of a syllable, which is possible for English /w/ and /j/. According to our perception they are not 'proper' syllable onsets but we make them into 'proper' ones by adapting them to the nearest Spanish consonant from our inventory, i.e. /ɣ/ and /ʎ/ respectively.

English word	***English pronunciation***	***Spanish pronunciation***
west	/west/	*[ɣwest]
watch	/wɒtʃ/	*[ɣwotʃ]
your	/jɔ:/	/ʎur/
yet	/jet/	/ʎet/

Conclusion

Traditionally, good pronunciation has not been a priority when teaching English, and articulatory perception was even less so, as long as the message was 'more or less' decoded by the hearer. But the demands imposed on the different professional fields establish new needs and concerns for the teaching practice. Maritime professionals have to speak English *and* understand a rather varied array of English accents efficiently and, often, with little time or room for error. A catalogue of simple phonetic information, such as the one sketched along the lines above, may prove helpful in order to raise awareness of pronunciation issues and systematise subjective perceptions about the different pronunciations of non-native speakers of English.

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PHONETIC CHARACTERISTICS OF FILIPINO MARINERS' ENGLISH

Abstract

This paper summarizes the phonetic characteristics of Filipino mariners' English based on the recordings of 13 Filipino mariners and 22 cadets made at the Maritime Academy of Asia and Pacific (MAAP) and introduces the Internet page presenting some of these Filipino English speech samples. These samples were analyzed by the authors, a native speaker of British English with a good working knowledge of English phonetics, and a Filipino English teacher. Interestingly, features that posed the largest perceptual difficulties differed from the authors (Japanese speakers) and the native British informant, suggesting that the perceptual impact of foreign accents may depend on the listener's first language background.

Key words: Filipino English, Foreign Accent, E-Learning

1. Introduction

As is well known, the Philippines is the world's top supplier of mariners, with approximately one in five seafarers on ocean-going vessels being Filipino. Thus, most non-Filipino mariners, at some point in their career, work with Filipinos onboard or communicate over the radio with them. Not only those who work at sea but also shore-side personnel such as VTS operators orally communicate with Filipinos.

Although the English language has become the lingua franca of the shipping industry, non-native speakers speak English with accents that reflect the sound structures of their native langauges, and these accents sometimes hinder successful communication at sea. This is also the case with Filipino mariners.

The purpose of the present paper, therefore, is to elucidate the phonetic characterisitcs of Filipino English with recorded samples offered through an internet site so that those who are not familiar with the Filipino accent (e.g. new VTS operators or young officers and crew members

who have never worked with Filipinos) may have an opportunity to familiarize themselves with the Filipino accent.

By the Filipino accent, the authors mean the accent that exist in the English speech by Filipino people. Given the fact that there are more than 100 langauges/dialects spoken in the island nation (MacFarland, 1993), it may well be the case that each individual's accent is influenced by his/her native language such as Taglog, Cebuano, Ilocano, etc. However, it is not practical to obtain English speech samples from speakers of each and every language spoken in the Philippines. Thus, the authors decided to record as many Filipino speakers and try to identify common patterns that may hinder communication.

To this end, the frist author, with the help of the Maritime Academy of Asia and Pacific (MAAP) located in Bataan in the Philippines, visited their campus and recorded 22 cadets and 13 instructors. These samples were analyzed by a native speaker of British English with a good working knowlege of English phonetics, by a native speaker of Tagalog, and by the authors who are native speakers of Japanese. The British listener provided his intuition on deviations from his British English pronunciation norm. The Filipino listener provided her intution why her fellow citizens spoke English the way they did. The authors, as native speakers of Japanese provided those features of Filipino English that are particularly problematic for native speakers of Japanese.

Method

Equipment

Recordings were made by using a 24 bit WAVE/MP3 recorder produced by Roland (Edirol R-09) and a SONY microphone (ECM-MS957). To maximize the number of speakers to be recorded during the first author's short stay at MAAP, recordings were made in quiet classrooms and office spaces where subjects were readily available.

Subjects and Recorded Words and Phrases

Subjects were 13 instructors and 22 cadets at MAAP. The instructors contributed their "sea stories" as samples of spontaneous speech, whereas the cadets recorded the International Alphabet (Alfa to Zulu), Numbers (0-25, 30, 40, 50, 60, 70, 80, 90), and the following SMCP phrases.

(1) This is Motor Vessel Sea Hawk, Sea Hawk, call sign JPAT, JPAT, Come in please.
(2) I read you loud and clear. How do you read me? Over.
(3) I suggest port to port passing. Do you agree?
(4) Port to port passing. I agree. I will alter course to starboard for port to port, red to red passing.

(5) Changing to Channel 14. Channel one four.
(6) Going back to Channel one six. Over and out.
(7) What are your intentions.
(8) My flag state is X. My last port of call was Y. My cargo is crude oil.
(X is the speaker's home country, Y is the nearest port.)

(9) Aft station, aft station, this is bridge. Make fast the tug on the starboard quarter.
(10) The pilot boat is approaching. Rig the pilot ladder 1 meter above water.

(11) My present course is 135 degrees. My speed is 15 knots.
(12) The CPA of the vessel 30 degrees on our port bow is 3 nautical miles, the TCPA is 13 minutes.
(13) We will use the starboard anchor and put 7 shackles in the water.
(14) Mayday, Mayday, Mayday.
This is motor vessel X, (followed by its spelling in alpha, bravo, etc.).

Our present position is 090 (zero nine zero) degrees from the Bravo Buoy,
distance 5 cables. I am on fire after explosion. I am sinking.
(Mother's name for X, and then spell it using Alpha, Bravo, etc.
For example, This is motor vessel Kunie, Kilo, Uniform, November, India, Echo.)

Phonetic Analyses

Tagalog Phonology

Since several features of the Filipino accent that were identified in the present study seem to reflect the phonology of Tagalog, the national language of the Philippines, a brief introduction of its phonology will be useful before detailed analyses of the phonetic characteristics found in the speech samples collected in the present study.

Obviously, not all subjects were speakers of Tagalog and ideally, one should study the phonology of other languages as well, but such descriptions were not readily available to the authors, and judging from the fact speaker of different languages exhibited similar accent patterns, these dialects seem to be fairly similar to Tagalog. Since our primary goal is not to study how one's native language sound structure affects one's English accent but to identify phonetic characteristics of English spoken by Filipino people in general, we believe the present approach is fully justified.

According to the description of Tagalog phonology that appears in Comrie (1990), Tagalog has five vowels and sixteen consonants:

Vowels: /i/, /e/, /a/, /o/, /u/ (Vowel length, i.e. short vs. long is phonemic.)

Stops: /p/, /t/, /k/, /b/, /d/, /g/, /ʔ/

Nasals: /m/, /n/, /ŋ/
Fricatives: /s/, /h/
Lateral: /l/
Tap/Trill: /r/
Glides: /y/, /w/

One should note that there is no voiced counterpart for /s/, and there is no /f/ or /v/ in this language. Tagalog /r/ is not an approximant as in English but is realized as a tap or trill.

Tagalog is a syllable-timed language and in this respect it is different from English, which is a stress-timed language.

Consonants

3.2.1 /p/ for /f/

This substitution, which is obviously due to the lack of /f/ sound, was quite common in the present speech samples. This feature has been pointed out to the first author by several Japanese mariners who had worked with Filipino people onboard commercial vessels as one of the most salient characteristics of Filipino English. Thus, "copy" can mean both "coffee" and "copy," "chief engineer" is pronounced as "cheap engineer," "different" becomes "diperent" and "foreigner" becomes "poreigner."

As the first author was listening to the VHF radio transmission from VTMS Corregidor at MAAP, the operator said, " Southbound vessel approaching San Nicholas, speed twelve point por knots, heading porty degrees." With the noise and the quick utterance, had he not known this /p/ for /f/ substitution, he would not have been able to understand the message.

To the Japanese ear of the first and second authors, this substitution, together with the strong trilled /r/ to be described in the next section, constitutes the most conspicuous features of Filipino accent. Quite intriguing was the fact that the British informant, who listened to all the 13 instructors, mentioned this substitution did not bother him much compared to deviations in terms of stress and overall rhythm.

3.2.2. Tap/Trilled /r/ for English approximant /r/

The majority of the subjects simply used their native language /r/, which is realized as a tap or trill, for English /r/. This, especially after a vowel as in "hard" and "anchor," gives rise to a very conspicuous impression for Japanese listeners. One Japanese officer once told me that he could not understand his Filipino helmsman's "harbor pilot," because of the trilled /r/ sounds in the first word. Since the English /r/ sound is an exception rather than a norm when we look at the way the letter "r" is pronounced in world languages, young cadets who are not familiar with the tap or trilled versions should at least be aware of this substitution.

3.2.3. Missing or glottalized /p/, /t/, and /k/

Voiceless stops /p/, /t/, and /k/ in word final positions or in word final clusters were often omitted or replaced with a glottal stop. This tendency was more apparent in the spontaneous speech samples from the instructors. This is perhaps because word final voiceless stops are often not released in spontaneous, fast speech in their native languages as well. This feature can be quite problematic for Japanese listeners because they are not good at identifying word-final unreleased stops in English.

3.2.4. /t/ for /θ/ and /d/ for /ð/

Apparently due to lack of labio-dental voiceless and voiced fricatives in Tagalog and other languages, /t/ and /d/ were often used for /θ/ and /ð/ respectively by Filipino speakers. Several examples were "ting" or "tink" for "thing" and "think", and "da" and "dis" for "the" and "this."

3.2.5. /s/ for /z/

This substitution was quite common in words such as "present," "position" and "zero." When the first author was allowed to attend a bridge simulator class, the instructor was emphasizing the importance of watching when deck officers stand watch. He said, " You must use your ice."

3.2.6. /b/ or /w/ for /v/

English /v/ sounds were quite often substituted by /b/ by Filipino speakers. For example, "every" and "vessel" were pronounced as "ebery" and "bessel." Incidentally, this substitution does not bother Japanese listeners at all because they also use /b/ for /v/. However, the British listener picked them up quite easily. In other cases, /w/ was also used for /v/, making the word "very" sound like "wery."

3.2.7. Word-final /ʧ/ and /ʤ/

Some older speakers had trouble pronouncing word-final /ʧ/ in "which" and /ʤ/ in "bridge, pronouncing the first as /ts/ or /ks/ and the second as /dz/. Young cadets did not show such problems.

3.2.8. Miscellaneous cases

In the pronunciation of the International Alphabet, almost all cadets had two problems: "India" was pronounced as /inʤə/, and "Sierra" was pronounced as /ʃierə/. According to the Filipino informant, these are the ways the word "India" and the personal name "Sierra" are pronounced in Tagalog.

Vowels

3.3.1. Spelling Pronunciation

Filipino speakers, presumably because their native languages are syllable-timed, tend to fail to pronounce reduced syllables with enough "reduction" in terms of duration and amplitude. Thus the final reduced syllables in "officer" and "anchor" are pronounced as /ser/ and /kor/ with a full vowel reflecting the spelling and a tap or trill at the end. The word "anchor" pronounced this way can be confusing for non-Filipino speakers. The first author heard from a Singaporean deck officer that he had had a hard time figuring out what an "ankore" meant when he worked with a Filipino crew member for the first time. Words such as "quarter," "color," and "motor" can also be problematic.

Words that end with "-ation" such as "communication", "situation", etc. Also need to be mentioned here. In these words, the primary stress falls on the penultimate syllable (i.e. /ei/) and the last syllable is reduced and pronounced as /ʃən/ or just /ʃn/ with the final /n/ being syllabic. By Filipino speakers, these words are often pronounced with a full /o/ quality vowel in the end, and this gives rise to an auditory impression that is highly characteristic of the Filipino accent.

3.3.2. Other features

Since there are only five vowels, i.e. /i/, /e/, /a/, /o/ and /u/ in Tagalog, they seem to substitute their /a/ for the English short "a" sound as in "man" and "bank." Some speakers show problems in producing English diphthongs such as /ei/ as in "main" and /ou/ as in "alone." It was also the case that some speakers pronounced English short /i/ as /i:/ in "river" and " dinner."

Rhythm

According to the native British listener who checked the speech samples, the syllable-timed nature of the Filipino accent "stood out" as one of the most salient characteristics of the Filipino accent. Word stress deviations from the norm also seemed to bother him, more so than segmental deviations. He also pointed out the fact the many of the speakers spoke English rather quickly with confidence. This unfortunately reduced the intelligibility when coupled with the staccato rhythm.

On the other hand, to the first author, who is a native speaker of Japanese, the syllable-timed rhythm of the Filipino accent does not loom so large compared to segmental deviations. We should obviously not generalize too much based on subjective observations of just a few individuals, but it is certainly possible that one's native language's predominant rhythm structure affects the way one perceives a certain foreign accent of English.

Conclusion

The present paper tried to explain the phonetic characteristics of the Filipino accent that were observed in the recordings of 35 Filipinos (22 cadets and 13 instructors at MAAP). In the international English communication at sea, foreign accents cannot be avoided. For onboard, ship-to-ship, or ship-to-shore communication to be successful, both parties concerned must cooperate. The authors hope that the readers will utilize our Maritime English Speech Corpus page on which the speech samples are posted in the education of their cadets. (http://www2.kaiyodai.ac.jp/~takagi/pweb/mesc.htm), Non-Filipino cadets can familiarize themselves with the way Filipino people speak English. Filipino cadets can, on the other hand, learn the nature of their own accent, and start improving their pronunciation if they find it necessary or advantageous. If the authors were allowed to give just one piece of unsolicited advice to Filipino cadets, that would be to slow down their speech speed to perhaps "half ahead" when they are talking to non-Filipino people. Among themselves, they would know each other's English speech patterns but with non-Filipino people, this is not the case. By slowing down, the intelligibility will be significantly improved. To conclude, the authors believe that the present paper and the speech samples posted on our web page, if utilized properly, will contribute to the safer and cleaner shipping.

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ON THE COGNITIVE PROBLEMS OF NAUTICAL STUDENTS' LISTENING COMPREHENSION

Abstract

To date, many researchers have attempted to suggest an optimal listening instruction for L2 learners in different conditions. Despite this interest, the characteristics of L2 listeners' real-time problems are not well understood. This paper investigated the frequency of listening comprehension problems that maritime students encounter in the early stages of learning English. Administrating the listening component of an IELTS exam, a group of nautical students with low level of listening ability was selected. In order to determine the frequency of L2 listeners' comprehension problems, all the subjects were asked to listen to a simple conversation, and write a summary. Following that, the transcription of the dialogue was exposed to the subjects. Finally, each subject was asked to fill out a closed questionnaire, comprised of eleven common listening problems found in a study by Goh (2000). The result revealed that recognition problems are the most experienced comprehension problems of low-ability L2 listeners. Parsing and utilization problems were closely the second and third groups of cognitive problems. The result further showed that the occurrence of recognition problems is in turn due to attentional failure, pronunciational difficulties, and unfamiliarity with the new words. Utilization problems were reported as the least experienced comprehension problems. Thus these findings point towards the idea that low-ability L2 listeners experience a lot of recognition difficulty that they hardly reach meaning building level of listening comprehension. Therefore, this work highlighted the role of word recognition training in listening instruction to low-ability FL listeners, especially beginning-level nautical students.

Keywords: *Word recognition, listening comprehension, bottom-up approach, top-down-approach, diagnostic approach, nautical students*

1 Introduction

Listening is believed to be the most used language skill of SL/FL learners in general, and seafarers in particular. However, this recognition has not yet saved listening skill from becoming the "Cinderella skill" in SL/FL teaching (Feyten, 1991; Nunan, 1999). Unfortunately, the maritime world has not been an exception, and its language classes have inherited this negligence. The problem is mostly attributed to the ephemeral nature of listening, which is not as susceptible to direct observation as the productive skills, and even reading skill. This principal characteristic of listening skill makes it the most difficult language skill to research (Vandergrift, 2004; O'Malley, Chamot & Kupper, 1989). The resultant limited data on the

listening processes has led to confusion about the efficiency of different methods in listening instruction to SL/FL learners with different levels of listening ability.

The current teaching methodology has been inconsistent with the nature of difficulties that prevail over low-level SL/FL listeners' performances. Thus, there is a need for a more problem-solving approach to listening instruction that directly tackles listeners' problems. To identify SL/FL listeners' needs, we should analyze the listening comprehension difficulties that learners experience while listening to a spoken text.

Broadly speaking, two major approaches to listening instruction have been proposed. One approach adopts a top-down view, which focuses on the high-level listening skills or the meaning building skills of listening comprehension. The other approach is bottom-up, which favors developing the lower-level skills of listening comprehension such as word recognition (Vandergrift, 2004). Recently there is a heavy emphasis on the top-down approach in teaching listening to different groups of SL/FL listeners. However, some scholars express reservations about the efficiency of the current approach in catering to low ability listeners.

A crucial issue of listening instruction is discerning which listening methodology is more efficient to foster low-level SL/FL learners' listening skill in general and seafarers with low level of listening ability in particular. This paper seeks to address the real-time listening comprehension problems of the seafarers who are at the beginning stages of learning English. To that end, having finished a listening task, the subjects of the study are asked to fill out a questionnaire on real-time listening comprehension problems suggested by Goh (2000). This shows how likely the beginning-level nautical students are to experience a certain kind of listening comprehension problems. In fact, it is believed that if the real listening problems of SL/FL learners become clear, a more sensible approach can be assumed in listening instruction.

The rest of this paper is structured as follows: in Section 2, an overview of the discussions on the proposed approaches to listening instruction is provided. Section 3 outlines our method for analyzing the subjects' real-time listening comprehension problems. In Section 4, the discussion of the results is presented and finally our conclusions are drawn in Section 5.

2 Review of the Literature

2.1 Recognition and Understanding

Various approaches have been suggested to address the challenges of listening instruction. During the heydays of the structuralism, the spirit of time was that listening difficulties lie in discrimination of segmental and supra-segmental features of a language. This view was on the premise that SL/FL listeners usually have problems in understanding the spoken form of the language that they have no problems when they see it. Thus, the listening classes were interspersed with mechanical activities like minimal pairs and minimal sets. However, this approach failed to prepare language learners in understanding the spoken language since it dealt with language elements in isolation (Brown, 1990).

The unsatisfactory results of the bottom-up approach and the emergence of comprehension approach called forth a movement away from bottom-up primacy to a more top-down approach in listening instruction. Many of the concerns of bottom-up approach became largely lost in the top-down approach. The new approach claimed that schemata activating and relying on guesswork is the best way to overcome the linguistic and segmentation problems (Brown, 1990). Under the influence of comprehension approach many writers and scholars belabored the point that context serves as a reliable cue to cover all the problems relevant to word recognition.

Along this line of argument, Chastain (1988) believes that listeners should practice listening activities similar to those of real-language situations, which mostly involve meaning comprehension. Osada (as cited in Vandergrift, 2004) decries focusing on the perception skills of listening. He claims that unsuccessful listening comprehension is the unfortunate result of focusing on the low-level skills of listening instead of focusing on the meaning building skill.

As a result, a conventional listening class featured a lengthy pre-listening phase, followed by a short listening task, and finally some post-listening questions (Brown, 1990). These "top-heavy" listening activities (Sheerin, 1987) became a commonplace in teaching listening skill for learners with varying levels of listening ability. Although listening instruction had a boost in comprehension approach, some healthy skepticism is voiced about the adequacy of this approach in bringing the attention to the real-time problems of listeners. Thus, the last two decades have witnessed a renewed importance in the notion of bottom-up primacy (eg., Wilson, 2003; Brown, 1990; Buck, 2001; Goh, 2000; Field, 2008). This line of thought believes that applying a top-down approach for low-ability listeners at the early stages of listening instruction is questionable. Wilson (2003) voices concern about neglecting the perception skills of listeners in favor of focusing on the higher-level skills and context to arrive at the meaning. Wilson (2003) further warns that problems in the perception of speech stream may seem "trivial" in meaning building. However, listening comprehension can be deteriorated by a cumulative effect of so many word recognition problems. Along the same line, Filed (1998) maintains that a significant proportion of meaning can be carried through a single phoneme. He points out that a mishearing of a phoneme may lead to confusion about the tense of the sentence and misinterpretation of the utterance. Field (2008) notes that focusing on comprehension as the product of listening skill, has made many scholars undervalue the process and the lower-level skills of listening. Field (2003) remarks pointedly that "writers on second-language listening have perhaps concentrated overmuch on higher-level understanding" (p 325). He further goes on to say:

> " It has led to a received view that difficulties in recognizing sounds and words in the input are of a lower order of importance, and that many of them can be resolved by the use of 'context'. This is demonstrably not the case. In fact, one could say that the opposite is true in that many problems of understanding have their origins in low-level mistakes of perception" (2008, p30).

To Field, some of the listener's problems exist in the text, so he argues for a more bottom-up primacy. Field (2008) points out listeners set up predictions about the message of the text based on impartial word recognition and they would cling obdurately to their hypotheses. If their predictions are made based on flawed word recognitions, their interpretation would also be wrong. Thus, we need to rectify the word recognition problems, which mostly impinge on meaning understanding at the higher levels. Fields (2008) also believes we can expect a kind of progress in listening comprehension as a result of practicing the perception skill of listening. Others such as Oxford (1993) state perception skill is the foundation of listening comprehension. Similarly, Byrnes (1984) says the first skill that listeners are challenged for, is segmenting the ongoing stream of sounds in different linguistic elements. In addition, many commentators see the differences between L1 and L2 listening in terms of word recognition. For example Buck (2001) states the processes involved in SL/FL listening resemble those of first-language listening. However, unlike L1 listeners, L2 listeners' problems root in either failure of understanding of the massage, weak word recognition or a combination of both. This characteristic of listening skill is also referred to as the distinguishing feature of listening and reading skills. Ridgway (2000), Buck (2001), and Vandergrift (2008) maintain that unlike reading, listening comprehension problems are mostly because of lack of space in the connected

speech streams and variability of phoneme in different situations and accents. Therefore, the first barrier that a SL/FL listener faces is chunking the streams of speech into meaningful units.

Another line of argument that supports focusing on the perception skill of listeners is the "automatisation hypothesis" put forward by Segalowitz and Segalowitz (1993). According to this hypothesis, word recognition is a crucial necessity of listening comprehension. As the word recognition skill becomes more automatic SL/FL listeners would experience less difficulty in the higher-level process, which is meaning building. The controversy over bottom-up approach was fueled by the findings of a study by Goh (2000). Goh found out that failure in listening comprehension of low-ability listeners is mostly because of weak word recognition. This inability of SL/FL listeners in word recognition makes the higher levels of listening comprehension processing, slowed down or even stalled.

Brown (1990) sees the root of comparative neglect of bottom-up processing in disillusionment that came about because of unsuccessful methodology used in the era of structuralism rather than wrong recognition of the problem. She points out that

> "It does not follow, however, that because the methodology was unsuccessful; the original diagnosis of the problem was at fault. There seems little doubt, as I have argued throughout, that students do indeed need help in learning to interpret the spoken form of the language and, in particular, the form of the phonetic signal"(1990, p146).

Therefore, Brown warns against losing sight from the earlier approaches to listening instruction. She believes that previous approaches rightly recognized the problem; however, because of the deficiency in their methodologies, they did not yield the result.

Call (1995) remarks that only recognizing linguistic elements is not sufficient for comprehension. She notes that when listeners become successful in segmenting the sounds in syntactic patterns such as words, the patterns are transferred into short-term memory. In order to interpret the utterance, listeners need to be able to hold the recognized elements in their short-term memory for a while. Thus, to Call, poor retaining of the information in the short-term memory could also be the cause of listening error.
The bottom-line of these arguments is the assumption that mishearing and non-recognition of words is one of the primary causes of low-ability listeners' errors. However, the point is missed in the current methodology of listening instruction (Brown, 1990; Wilson, 2003).

2.2 An Appropriate Approach to Listening Instruction for Low-level Listeners

Since the emergence of the process approach, SL/FL learners' problems in listening activities are considered as the best sign of what learners need to practice(e.g., Goh, 2000; Wilson, 2003). Along this line of thought, Brown (1986) states that only when teachers analyze listeners' errors in a "diagnostic" way, we can claim that we are teaching listening. Other commentators such as Tauroza (1997), Field (2008), and Sheerin (1987) argue that the current teaching methodology is a kind of "testing-style approach" to teaching listening skill. This approach does not check learners' real listening problems; instead, it prescribes a fixed listening procedure, for all SL/FL listeners. What is not taken on board in comprehension approach is the fact that a listening problem may occur due to errors in different processes of listening comprehension. Field (2003) proposes a cognitive framework for classifying listeners' problems of understanding attributed to different levels of listening comprehension. According to this framework, listening comprehension consists of several processing levels each of which could be the probable source

of message breakdown. These levels are “auditory-phonetic, phonemic, syllabic, lexical, syntactic, semantic, propositional, pragmatic, and interpretive” (p 326).
It is a truism that some of the problems students encounter while listening are not directly related to the external and internal characteristics of the listening text. Some problems are related to the difficulties that listeners experience during processing the text on the way of listening comprehension. In her seminal paper of 2000, Goh attempted to highlight listeners’ problems in a cognitive framework. She elicited listeners’ problems through the procedures of small group interviews, diaries and immediate retrospective verbalizations. Goh classifies the problems into a three-phase model suggested by Anderson; recognition phase, parsing phase, and utilization phase (as cited in Goh, 2000).

The current methodology of teaching listening comprehension does not locate the source of listeners' problems. Therefore, it just focuses on the utilization phase of listening comprehension and neglect the two other phases. However some believe that a better approach can be the one that teach listening on the base of SL/FL listeners’ problems (Sheerin, 1987). Similarly, Brown (1986) claims that a good approach to listening instruction need to be diagnostic to address the real problems of SL/FL learners. This diagnostic approach could be an analysis of listeners’ performance (e.g., Goh, 2000) which can provide learners with opportunities to talk about their difficulties in listening comprehension.

Having recognized the problems, teachers can capitalize on the advantages of “micro-listening exercise” to practice the subskills that listeners have difficulties in it (Field, 1998). Field (1998) believes that breaking listening into its subskills accords with the new oncoming “diagnostic approach” (Brown, 1986) “discovering learning” (Wilson, 2003) and “process approach” (Vandergifit, 2004) that scholars argue for. The micro-listening exercise can be used prognosticallly or diagnostically in listening courses. Field (2003, 2008) affirms that training in these subskills and combining them assures training in the skill as a whole. Therefore, teachers can devise a program based on subskill training relevant to the current level of the listeners. This can be developed in a point-by-point syllabus, which allows the teacher to test the amount of progress in each subskill as the program progresses. Field (1998) proposes dictation and transcription to confront listeners with problematic features of connected speech such as weak forms, elision, and assimilation. These exercises directly involve listeners’ focusing on sound and word recognition help learners to progress on listening comprehension as whole skill (Field, 1998, 2008).This is more of importance for low-level listeners whose listening comprehension problems are mostly due to weak word recognition. Accordingly, Wilson (2003) notes that we can focus on bottom-up primacy in a way compatible with the current learner-based methodology in teaching listening.

Overall, few studies have been published on analyzing and identifying the cognitive problems that SL/FL listeners encounter during carrying out a listening task in a FL context. These problems are universal among all SL/FL learners in different context of language learning. Thus, it is expected that nautical students with begging-level of English experience similar listening problems to those of other SL/FL learners.

3 Methodology

The subjects of this study were two natural intact classes of Chabahar Maritime University of Iran whose 48 students ranged in age from 18 to 20. The subjects were male nautical students with low level of listening ability. Prior to the study, the listening component of an IELTS exam

was administered to the subjects to ensure there is not a significant difference in their listening abilities.

This study is grounded in an earlier research by Goh (2000) which elicited SL/FL listeners' real-time difficulties. In fact the present study attempted to replicate and extend the previous investigation (see Goh, 2000) on nautical students in foreign language context of Iran. A questionnaire comprised of real-time listening problems found in the study by Goh (2000) was given to each subject(see appendix A). The items of the questionnaire were five real-time listening problems related to recognizing phase, two real-time problems linked to parsing phase, and four utilization problems. For each problem, there were five scores, indicative of the level of experiencing difficulty during listening comprehension. The scores ranged from one, the lowest level of experiencing listening difficulty, and five, the highest level. Given that the difficulties of listening comprehension were formulated into statements, the subjects only needed to select one score for each statement with regard to the level of experiencing that difficulty. The questionnaire was in students' mother tongue and to ensure the comprehensibility of the statements, there was a short talk on its items at the outset of the study. After giving the necessary instruction about the questionnaire, all the subjects were asked to listen to a 3-minute conversation, which was elementary. The listening text was extracted from Easy English textbook which was at the elementary level. The subjects wrote down a summary of what they heard. After that, the dialogue was replayed, this time all the sentences were transcribed on the board to expose listeners to the correct form of the spoken text. Then the questionnaires were administered to the subjects to fill out with respect to their difficulties during listening to the text. Finally, the frequency of each problem was tallied according to the scores that all subjects gave to that difficulty.

4 Result and Discussion

The data was analyzed through SPSS software to arrive at the frequency of experiencing each problem. Overall, the result presented below shows that the frequency of recognition problems was higher than that of parsing and utilization problems (Figure 1). However, the difference between recognition problems and parsing problems was slightly smaller than that of recognition and utilization problems (Graph 1).

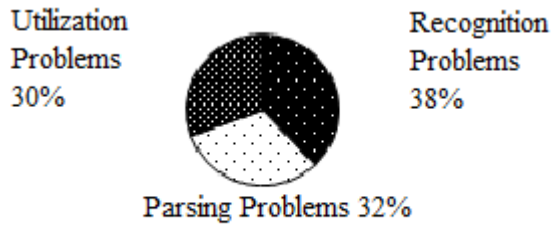

Figure 1

The result indicated that the major problem that beginning-level nautical students need to tackle is word recognition. This supports the conclusion drawn by Goh (2000) that low-level SL/FL listeners mostly become fixated in recognition phase of listening comprehension that they hardly reach the higher levels of listening problem to experience any problems.

4.1 Recognition Problems

Among the recognition problems, those with the attention difficulty were reported more frequently than the other ones (Table 1). The next factor effecting the perception of spoken language was unfamiliarity with the pronunciation of the words.

Table 1

Recognition Problems	**Score**
I recognize some of the words but I cannot remember their meanings.	2.48
I cannot recognize some of the words because I do not know their exact pronunciation.	3.48
I cannot recognize some of the words because they are new.	3.02
I cannot recognize some of the words because I am focusing on the previous words.	3.50
Hearing sounds of chairs, door, other classmates etc during listening is disturbing.	3.61

4.1.1 Attentional Problems

One of the two most reported difficulties of the listeners was learners' difficulty in following a forthcoming word when they are focusing on a word. This problem can be simply analyzed in the automaticity framework. According to the automaticity framework, at the early stages of SL/FL learning, word recognition costs listeners too much conscious effort (Field, 2004). Thus SL/FL learners are left with little or no spare processing capacity for other linguistic elements. In addition, due to the on-line nature of listening, there is no chance of going back to the previous words. Therefore, some of the forthcoming words are missed at the expense of recognizing a word whose recognition demands high level of working memory (Field, 2004). The more word recognition becomes automatic, the less demand would be upon the working memory. In this case, more memory capacity is free to spare for the higher-level units of meaning. Goh (2000) states that low-ability listeners' vocabulary is not developed yet, for that, they suffer from poor word-referent automatisation which overload their possessing capacity.

The next reason of poor word recognition was learners' distraction by peripheral disturbing sounds in the environment that simultaneously stroke their ears. One possibility can be learners' attentional overload that occurs as they hear other competing stimuli in the environment. Given that, the listening comprehension processes of low-ability SL/FL listeners are much more "controlled" (Field, 2004), the noise and background sounds tax their perceptual processing and increase the burden on attention. This cognitive processing is necessary for processing syntax, semantic and morphological structures of the utterance and segmentation of speech stream (Bradlow and Bent, 2002). Thus in comparison to the advanced SL/FL listeners whose cognitive processing are more automatic, elementary listeners are prone to experience more difficulty as the message is degraded by the background sounds. "Disruption of phoneme processing" is another hypothesis, which says phoneme categories of low-ability SL/FL listeners are much more different from those of a native speaker. According to this hypothesis, the perception of sounds becomes more aggravated in a noisy environment where the stimulus is mixed with other sounds (Cutler, Weber, Smits & Cooper, 2004).

Problems	Scores
When I am listening to the new words, I forget the meaning of the previous word or words.	2.83
I can identify the meaning of the words individually but I cannot connect them to each other in a sentence.	2.54

4.1.2 Pronunciational Problems

The third highly reported difficulty was students mishearing and non-recognition of words in connected speech stream. This problem can be due to two reasons; first students may not know the pronunciation of some words or they know a wrong pronunciation. Secondly, the sandhi phenomena of concatenated speeches such as elision and assimilation heightens the difficulty of recognition as locating word boundaries becomes more challenging for non-native listeners (Field, 2003). It seems that less experienced listeners need to practice the cadences of the target language to improve their ability in word segmentation.

4.2 Parsing Problems

The next group of highly experienced problems that elementary SL/FL learners faced during listening comprehension was parsing problems. However, the frequency of these problems was not that higher of those of utilization problems (Figure 1). The result of the study showed that the subject had more difficulty with holding the processed language elements in their short-term memories than making a connection among the words (Table 2).

Unlike a reader who can go back and read, a listener cannot go backward so he has to hold the recognized words in his limited short-term processing as much as possible (Goh, 2000). Therefore, beginning-level listeners forget the processed words when they focus on the new words. The next problem that learners experience during listening comprehension is connecting the meaning of recognized words to each other. These two problems show the limitation of parsing process for holding a meaning-based representation of words in the short-term memory for foreign language learners (Call, 1985) and in particular for elementary students. Broadly speaking, Anderson (as cited in O'Malley et al., 1989) states that segmenting input as meaningful representations in short-term memory is done through using syntactic, phonological , or semantic clues. Thus, the less a SL/FL leaner is familiar with linguistic properties of a language, the more he experience parsing difficulties.

4.3 Utilization Problems

Utilization problems are those problems, which are due to the inability of listeners in understanding the whole meaning of an utterance rather than the individual words. This problem would happen due to failure in relating the mental representation of the oncoming input to the related knowledge in the mind (Anderson as cited in Goh, 2000). Interestingly, the result of the study showed that low ability listeners experience less difficulty in this phase (Figure 1). The result confirmed the finding of the study by Goh (2000) which revealed that higher-ability listeners experience more difficulties in utilization phase in comparison to the lower-level listeners. This paradoxical result could be due to the fact that low-ability listeners are caught in recognition and parsing phases, which takes up so much of their processing capacity that little cognitive capacity remains for utilization phase. Therefore, as for low-ability SL/FL listeners, the low rate of utilization problems is sign of not reaching this phase rather than not having any problems.

Further analysis showed that the most of reported utilization problems was because of students' extended attention on the individual words that prevented them from comprehending the text as a whole (Table 3). The result revealed that learners' unfamiliarity to the target culture is the second main reason of failure in listening comprehension.

Table 3

Utilization Problems	**Scores**
I know the meaning of the words but I do not know their exact meaning in the context.	2.48
When I am listening to the speech, I look for the meaning of the words so I cannot get the meaning of the text.	2.93
I cannot get the meaning of the text because I am not familiar with the culture of target language.	2.61
I cannot understand the general idea of the text.	2.33

Although this is a small study on the nautical students, the result can be generalized to all foreign language students who are at the elementary level of listening ability. A larger sample and a greater understanding of the findings could lead to a theoretical improvement in the listening instruction to nautical students and to all other groups of FL learners. To identify the optimal way of teaching listening, this study only addressed the real-time listening comprehension problems of low-level FL learners. However, it is still not clear that whether in effect, practicing recognition skill leads to a better listening progress. A more comprehensive questionnaire is also recommended to improve the validity of future studies and to include more effecting factors in the study.

5 Conclusion

The results of this article add up to the conclusion that the first source of the real-time processing difficulties of low- ability SL/FL listeners pertains to the recognition phase. Low frequency of utilization difficulties reveals that since most of less experienced listeners are stuck in recognition and parsing phases, they hardly reach the deeper level of processing. In fact, low-ability SL/FL listener experiences many problems prior to the utilization phase. This study raises serious doubts about the current methodology of listening instruction that prescribes a top-down approach for beginning-level SL/FL listeners. The bottom-line is that since most of low-level SL/FL listeners' difficulties are because of weak word recognition, practicing perception skill is of priority in listening instruction to the elementary learners. This study suggests incorporation of more word recognition exercises into listening instruction of nautical students at the early stages SL/FL learning. As the learners progress in the low-level skills of listening, addition of more top-down exercises is recommended.

This study has gone some way towards enhancing our understanding of the cognitive listening comprehension problems of nautical students. However, it has not yet been established whether practicing the lower skills leads to improvement in meaning understanding. Therefore, it seems that a firm conclusion on the value of an approach, featuring more bottom-up practices over top-down ones, calls for great deal of penetrating and analytical investigations in this area.

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Appendix A

Problems	**Very little 1**	**Little 2**	**Moderate 3**	**Much 4**	**Very much 5**
1 Recognition					
I recognize some of the words but I cannot remember their meanings.					
I cannot recognize some of the words because I do not know their exact pronunciation.					
I cannot recognize some of the words because they are new.					
I cannot recognize some of the words because I am focusing on the previous words.					
Hearing sounds of chairs, door, other classmates etc during listening is disturbing.					
2 Parsing					
When I am listening to the new words, I forget the meaning of the previous word or words.					
I can identify the meaning of the words individually but I cannot connect them to each other in a sentence.					
3 Utilization					
I know the meaning of the words but I do not know their exact meaning in the context.					
When I am listening to the speech I seek for the meaning of the words so I cannot get the meaning of the text.					
I cannot get the meaning of the text because I am not familiar with the culture of target language.					
I cannot understand the general idea of the text.					

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NEW TOOLS FOR NEW SEAFARERS: PRESENTING THE CAPTAIN'S PLATFORM FOR MARITIME ENGLISH

Abstract

Maritime Education is at present at crossroads: the ability to identify new competencies in demand, translate them to specific vocational learning schemes and locate the appropriate tools and resources to make them available and teachable will shape the future of the industry for the years to come.

In this perspective we will present and analyze "Captains" (Communication and Practical Training Applied in Nautical Studies) a project undertaken in the Leonardo da Vinci European framework, leaded by the University of the Aegean and carried out by an international consortium involving a wide range of institutions. The common thread is the partners' involvement in the maritime industry at a variety of levels and sectors which reflects the tendency to take into account all relevant stakeholders needs when building learning schemes for the future seafarers. "Captain's" differences from similar endeavors include the integration of new methods such as the latest IT tools (simulations, scenarios based on real life accidents or near misses, 3d and 2d online learning experiences) in a New Learning Approach and the pronounced participation of the community of practice (seafarers cadets, language instructors and other industry stakeholders) in the formation of the Syllabus via a rigorous Learning Needs Analysis, the organization of workshops, interviews and consultations. In the resulting learning scheme, the goals of the language activities will be drawn from the analysis of real-life situations where miscommunication led to accidents or near misses

We will detail the initial choices that formed and informed our decision-making processes, the subsequent elaboration thereof and the interactions between linguistic content, subject matter topical knowledge and new technology availabilities.

Keywords: *Maritime English, e-learning, educational platforms, ESP, virtual reality tool*

1. Introduction

State of the Art: Safety, Accidents, the Human Factor and Communication Problems

It is more than obvious to the field specialists that in the maritime industry a constant mobilisation is underway to improve the level of overall proficiency and competency of all its members, with special emphasis on ship safety and security as key context. In a document detailing the strategic goals for the European Union's maritime transport policy until 2018, it is explicitly stated that one of the priorities *is to foster and support research addressing the human*

element factor, which is a complex multi-dimensional issue affecting the well being of people at sea, often with direct implications for maritime safety (Communication from the Commission, 2009). In addition to the obvious demands of STCW '95, there is the shift in accident analysis from the mechanical to the human factor; an increase in multinational maritime crews; and a public focus on maritime accidents that increasingly jeopardize human lives and the environment (Yerkan, 2005) Even if the 80% rate of accidents at sea caused by human error (over half of which is attributed to poor communication) reported by some seems exaggerated, it is still vital to ensure that seafarers have the ability to communicate with one another and carry out their duties effectively, { Ziarati *et al* (2009), Loginovsky, (2002), the Marcom Project Report (1998), Maritime Safety, (2001)}. The recent IMO recommendation (STCW 41, 2010) to make the national authorities tighten up their procedures so that their merchant navy officers communicate effectively in Maritime English is another significant move pointing towards the importance of linguistic proficiency. The target language where such instruction is bound to take place can be no other than the universally acknowledged language of the sea, i.e. English {(Methar Final Report (2000)}. Cole and Trenkner (2007), Horck (2004), Pyne and Koester (2005), Prasad (2008) and Winbow (2002) to name but a few, join their voices in an effort to underline the importance of effective communication on board, if not for any other reason then for safety alone. The number of educational schemes, programs, course designs and such is in constant rise (indicatively cf. the IMEC 21 and IMEC 22 Proceedings) and yet, communication failures still plague the profession resulting in accidents some of which incur loss of lives.

It is our opinion that at the root of such discrepancies between resources, effort and results can be found other discrepancies, namely the mismatches between the way English is taught in the Maritime Educational World and the uses to which this language is subsequently put to (Iakovaki and Progoulaki 2010). Indeed the typical career path of a Seafarer form traditional seafaring countries, places him/her today at the crossroads, since he/she has undergone two symmetric and inverse transformations. On the one hand he/she has been promoted, thanks to his/her superior know-how, to the higher ranks of the hierarchical ladder, on the other, because of changing employment patterns, he/she finds himself/herself at the head of multi-cultural crew compositions. The status of dominant figure combined to that of ex-native speaker (at the time of monolingual crews), instead of facilitating communication, hinders it. Therefore English from the simple workplace tool it used to be, becomes a sort of habitat, or immersion suit to these professionals from which they cannot, as other multilingual professionals "step out" at the end of their shift. They have to live in it, day-in, day-out, for days, weeks, sometimes months. Thus, and without the corresponding apprenticeage, seafarers become "coerced bilinguals". Under these circumstances, the limits imposed by what was once taught to them as ESL (English as a Second Language), both too generic and too specific to be of much use, become stifling, whereas the lacunas make communication on board a hazardous matter. Their very first experience of exclusion is born out of language, or rather the lack of it, in the sense of *parole*[29].

[29] In what can be considered the lowest common denominator of linguistic simplicity we quote Wikipedia on the difference between *langue* et *parole* according to the famous Ferdinand de Saussure distinction: *Saussure focuses on what he calls* language, *that is "a system of signs that express ideas," and suggests that it may be divided into two*

As if these difficulties were not enough, additional obstacles are piled up by the peculiar nature of what is commonly known as the *Seaspeak* jargon. The Maritime English idiolect is a quasi-uncharted corpus consisting of borrowed words, lexical loans, translated terms, metonymic transformations, and other hybrid forms; it signifies strong professional identity and group belonging, is rarely open to laymen and takes a while to catch on, or worse, is in a transitional stage. The older formations no longer understood on board by the newcomers in the profession who feel excluded, adding another gate-keeping process in a profession full of such schemes {cf. indicatively Sampson and Zhao (2003), Iakovaki and Progoulaki (2010)}. In stating as much, we must also underline the fact that rather than disparaging this idiolect, the Project Partners choose to legitimize it, thus granting the community of practice a voice, and that as early the CAPTAIN"S inception. Back to the seafaring community, the situation is also aggravated by the eventual lack of soft skills and their linguistically matching tools such as, for example, a lexical arsenal to resolve culturally originated conflicts and manage conversations, or a casual lexical repertoire of giving orders without offending subordinates. In other terms, Officers who *nolens-volens* saw themselves evolving to Managers of Human Resources lack what Applied Linguists call pragmatic competency. Many of these linguistic gaps and infelicities are culturally and/or linguistically originated or heightened, but paradoxically, it is up to the only common language on board, that is English, to provide for their resolution.

Several scholars associated with the maritime domain were quick to spot and address all these issues, and they have made apparent the various aspects of linguistic miscommunication which sometimes lead to accidents {in no particular order: Logie (2011), Cox (2008), Horck (2006), the Philippine National Maritime Polytechnic Centre Report (2002), Østreng (2001 and 2007), Vangehuchten, Van Parys and Noble (2010), Wang & Gu (2005), Wu (2004), the list is far from being exhaustive}. Suggesting robust methods to counterbalance it as part and parcel of an actual language learning curriculum though, is however another kettle of fish.

Section one of the present paper features the Project's mission, partners, initial task breakdown and timeline. Section two present the results of the Needs Analysis under several enlightening headings such as *Whom will we teach, what will we teach them and How*. Section three details what would normally be the Conclusions, but in the present state are rather suggestions for future elaboration and a call for contributions.

The CAPTAINS project: Partners, Mission, Timeline.

Partners, Mission

The CAPTAINS *(Communication and Practical Training Applied in Nautical Studies)* project is funded by the European Union and carried out by a transnational project team composed of 8 Partners from 5 European countries, active in different economic and social sectors. Greek Partners come from the Department of Shipping, Trade and Transport of the University of the Aegean, the Athens Information Technology Institute, the 1st Evening Vocational Senior School of Egaleo, and the Bureau of Vocational Training. Turkey is represented by the TUDEV

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components: langue, *referring to the abstract system of language that is internalized by a given speech community, and* parole, *the individual acts of speech and the "putting into practice of language"* Source: http://en.wikipedia.org/wiki/Course_in_General_Linguistics

Institute, England by the Centre for Factories of the Future, Poland by the Centre for Development Works and Spain by the Faculty of Nautical Sciences, a Maritime Training Institution of the University of Cádiz. In fact, the spectrum of expertise offered was quite broad in level (higher, vocational, tertiary and MET-type education institutes some in the maritime and some in other sectors), scope (Nautical Studies, deck and engine experts, e-learning and distant learning specialists, professors of Maritime and Transportation sector-related subjects, Human Resources professors specializing in Intercultural issues, Language Instructors, active and retired seafarers), and status (public and private institutions). One must also count with the synergies between the Partners and their extended network with links such as the Association of Greek Shipowners, the Mediterranean Cargo Vessels Shipowners' Union, the Passenger Vessel Shipowners' Union etc.

During the kick-off meeting, the author, somewhat jokingly, introduced the following terms to qualify the distinct field specialists with: *Marinati*, for the Sea Specialists, *Literati* for the Language Instructors and *Technorati* for the technological wizards, specifying that the competencies of certain partners could be overlapping. The fact that the distinction caught on became obvious when the groups started designating themselves by using the terms in question, and in a way, this was proof that all three specialties recognized themselves in them. It was also an indication of awareness that all specialty fields should be consulted in a horizontal rather than vertical form of organization in order to maximize the Partnership synergies.

And yet, such diversity does not always go unchallenged. The composition of the partners' team at the beginning gave rise to a feeling of *aporia*, the scientific equivalent of perplexity. Rarely, to our limited knowledge, have such a happy motley crew collaborated with one particular goal in mind, to wit

To work towards the creation of a new framework of learning principles by combining the input of various stakeholders and field specialists with technological breakthroughs in the domain of education.

Eventually diversity became one of the competitive advantages of the project, but it entailed clear and unambiguous guidelines at every stage, statements of goals and aims clearly and unambiguously put, and more importantly still, flexibility and the ability to adapt, adopt and adapt again before adopting in a definitive manner.

Timeline, Initial Task Breakdown

The CAPTAINS project stage one involved the project management, an ongoing process as it is customary in this sort of project. Stages 2 and 3 respectively hosted activities of investigation and user needs analysis in continuous contact with stakeholders and target user groups in the maritime sector, to which, as stated above, a significant number of partners had links. Of this, more later.

Concerning the design of the Course Syllabus, an initial task breakdown, settled upon during the Consortium's kick off meeting consisted of:

- A review of state of the art literature in ESP and in competence-based and vocational learning.
- A consultation with stakeholders and field specialists to identify needs and deficiencies in existing training. (Stakeholders and specialists in the present case are Cadets, Language Learners and Users at all levels, Instructors in Maritime Academies of various nationalities, Professors in Technical and Vocational Institutions, Active Seafarers, Ship Owners, Crew Managers and Professionals involved in the field such as Coastguards and Shore-based Personnel).
- The articulation of a method dealing with said deficiencies and destined to cover the special needs of the target group of the end users.
- The provision of guidelines for the integration of input in any form (content, methods, technology) that will maximise the synergy of the partnership.

When these lines are written the project is near the completion of the stage described as Work Package 4, where activities include the design and development of courses for a notional-functional syllabus from scenarios based on real-life accidents following the principles of communicative approach. The scenarios are hand-picked out of an accident knowledge base, already compiled. Here lies one of the Consortium resolutions, to use authentic materials and chunks of original interactions as often as possible to build activities out of. The final course content will consist of rich media interactive presentations and simulations of original material such as dialogues among the crew in virtual collaboration spaces. It will include videos, sounds, graphics, text in various formats, group activity assignments, rich media quizzes, and it will be designed bearing in mind accreditation and certification.

Regrettably, in what can be considered indeed as unfortunate timing, none of these components are ready to be showcased for now. So, eventually we will content ourselves with a short description of the decision processes that led to the relevant choices and to the tools employed. We do so in the hope that, in the future, when the content of the project will become obsolete, as is its fate, the frameworks and guidelines could eventually be used in projects of similar nature.

As to the projects' concluding stages, these will be running throughout its duration, since they concern the dissemination of the results to stakeholders and user communities and ways to exploit and sustain project outcomes beyond the project end.

The CAPTAINS Project's Results: Needs Analysis: whom will we teach, what will we teach them and how.

Needs Analysis

The results of the needs analysis (hence: NA) are discussed in some detail here. NA allows a realistic understanding of the problem at hand, i.e. ineffective communication in English and human error instigated accidents at sea. It also brings to light causes beyond a purely linguistic horizon, e.g. cultural diversities and the way they affect real-life scenarios featuring critical situations. The results of the survey and their interpretation acted on one hand as philters in the compilation of a knowledge base of appropriate real-life scenarios and on the other as a compass to orient the implementation of novel learning approaches in the context of the chosen scenarios, the main goal being the design and development of respective courses and course material for communicative English learning

During the early stages of the Project took place the design, distribution and analysis of the obtained results of two types of Questionnaires searching to identify the learners perceived and real needs. NA began with the production of an initial pilot questionnaire for cadets, a collaboration between TUDEV and AEGEAN. The questionnaire was completed by around TUDEV 100 cadets and a full analysis of the results was performed.

Subsequently, two questionnaires were developed for Maritime English Instructors and Cadets and seafarers respectively. The latter included a section on accidents related to communication failure. They were both circulated throughout the partnership for additional comments and improvements. Changes were reviewed and the questionnaires were once more edited and distributed widely by all partners to the aforementioned target groups.

The next step involved a number of workshops aiming to detect correlations between the results and "real-life", "sector-specific", "industry-targeted" language needs. According to the majority of frameworks for course design, such triangulation eventually points out the elements (or target rhetorical events) which should constitute the backbone of the future course.

It was also decided that the questionnaire would remain open for the duration of the project in order to collect additional data. [30]

We will present here only the results with major implications for the course design, followed by a short interpretation in this context. For simplicity's sake we resume them as answers to the three core questions of course design: *whom will we teach, what will we teach them and how.*

Whom we will teach

Profile of the Respondents

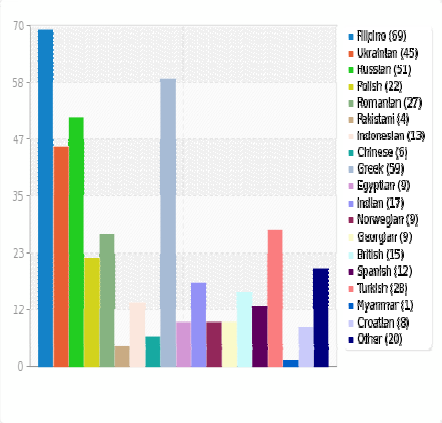
Individuals of the sample group range from 15 years old cadets to 40 years old active seafarers. The group includes students of vocational institutions, Maritime Universities and Academies, active seafarers and others. There is a wide age dispersion and variety of educational backgrounds which accurately reflect the real extended target group.

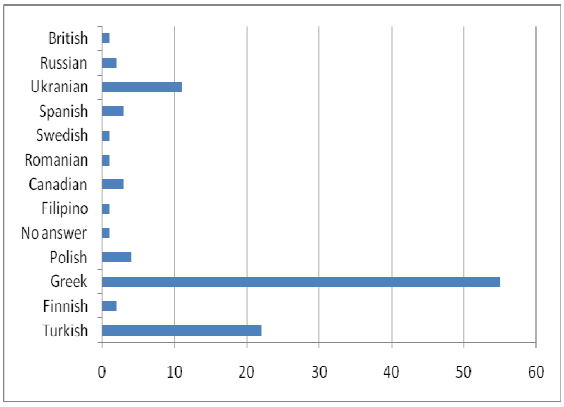
As to nationality, the sample consists of two dominant ones which, combined, represented 75% (N1=50%, N2=25%). All other nationalities involved were represented almost at equal percentages. The sample would have been unbalanced (or biased towards nationality), if triangulation with workshops with a wide range of stakeholders all over Europe did not make up for this homogeneity. That could not be achieved for the sector-specific gender homogeneity (91% males). We posit that since the second trait, unlike the first, accurately reflects a real situation, it cannot be considered a distortion.

The project's core assumption, in course design terms is the conception of a course based on English as a Lingua Franca for a Specific Workplace, aiming for Intercultural Competence rather than near-native one. About these issues more in the next section and cf. Iakovaki (2011). As an immediate consequence, the current Interlocutors of the community of Practice (non-native speakers in their vast majority, nationals of a wide range of countries and ethnicities) will

[30] The two types of Survey Questionnaires are available online at http://www.captains.pro/Survey.aspx.

be in the spotlight. In this perspective, it would have been advisable to have a corresponding wide range of nationalities as respondents so as to obtain reliable and valid data.





Tables 1 and 2: A Comparative view of the Nationalities Spectrum Respondents have worked with during their seagoing experience, and the Nationality breakdown of the Respondent's Sample.

In what was examined in detail elsewhere (Iakovaki 2011), but for now we just label an "intercultural paradigm shift" effort, the Partners agreed to adapt all variables of the course to this multicultural perspective. The responses should therefore come from the same scope of nationalities and ethnic affiliations the users will be exposed to and asked to interact with in order to mirror culturally originated variations, as to e.g. preferred methods of learning. Such a perfect match was not achieved but it must be noted that the first step was taken towards intercultural competence in what promises to be a long, long path.

As to the sample's overall level of linguistic proficiency, it must be noted here that answers to the Questionnaire reflect the respondents' own assessments as a language audit was considered beyond the scope of the project. And yet, triangulation with Maritime English Instructors confirmed what was anecdotally known all along, namely that learners tend to overestimate their linguistic competency. 75% of the students covered by the survey reported their proficiency as either B1 or B2 (intermediate), whereas Maritime English teachers reported that 41% of their students were at B1 level, and 34% at B2. According to the same source, 24% of the sample was reported as A1/A2 level (beginner), and only 1% as C1. Very few of the respondents admitted to being absolute Beginners: again this accurately reflects the situation in the real world.

The implications of this area of results were significant as they point out the direction to which learning tools and Maritime English should aim in order to make a significant impact and address user needs. The question of levels in particular and their conformity with the various frameworks [Common European Framework of Refernece for Languages (CEFR), STCW95, IMO model course 3.17 etc.] was of great importance to the course conception. Following triangulation with workshops in Greece, Spain and Turkey, and deliberations in the Partner's Second Meeting in Tuzla, it was decided that the optimum as to future impact level for ordinary seamen would be B1-B2 according to the Common European Framework. In the same perspective, it was decided that C1/C2 would be appropriate for officers. It was claimed that as to their Speaking Skills, Ratings in general are level A2, cadets B1, officers B2, masters B2-C1, and pilots B1-C1. Mention was made to the fact that absolute beginners (A1) do not have an adequate mastery of General English to be able to command maritime English, not least because

technical vocabulary is often best learned through CLIL (Content Language Integrated Learning). A shared observation was that the English language level among Ratings is very low.

To summarize, our sample consists of a variety of people with different educational and language training backgrounds. Most of them have long, long years of language instruction under their belt (59% responded positively to *"four years and more")* to be able to do what appears to be rather little in real life situations.

Potential Target Groups

During the second partners meeting in Tuzla, hosted by TUDEV, a fruitful discussion took place where Cadets was chosen as the main target group of potential users, without excluding Officers who would wish to use the project's standalone (CD) version. It was pointed out that although active Officers are in dire need of immediate help, especially in the intercultural competency front, Cadets would in all probability be more willing to "play ship" (i.e. to accept the VRT constraints) than real Officers with real onboard duties, and that being associated with formal educational schemes, the latter are easier to contact and assess, so feedback on their progress is more easily obtained. In the same perspective, it was also stated that the projects' VRT resources would look more impressive to Cadets, whereas the Officers sketchy availabilities internet-wise would make the online version impossible to access. And yet Officers are not to be excluded as target group while the course design takes place, provided of course that they match the learners' profile as determined by the project.

Throughout the whole designing project a constant reminder was posted to all parties involved as to the importance of compliance and compatibility with the Common European Framework of Reference. Admittedly, the descriptors of the Framework do not match the Specific Nature of the ESP Maritime English course, but adequate and intelligent adaptation is certainly called for, for many reasons, not least of all on the grounds of appealing to the European Union, the patron of such standardization schemes as well as of the CAPTAINS project. If future integration in accreditation and assessment schemes is a priority (and in the CAPTAINS case it certainly is) a larger scale of linguistic order has to reign, otherwise, every educational effort made will remain just that: a fragmented and remote effort.

What will we teach them

Compiling a New Syllabus

Although certain partners were working on the existing literature review and analysis of course design methodologies since the project began, the formal "novel learning approaches" stage began as soon as the Needs Analysis results were processed. The result was a review of state of the art literature in ESP and in competence-based and vocational learning along with what Yalden (1987) defines as a "protosyllabus". The latter was designed and circulated within the partnership. The diversity of the Partner's composition made the clarification of certain points and the clear determination of the input expected from each partner a necessity. A new round of consultation followed with various stakeholders and field specialists such as foreign instructors in maritime academies, professors in technical and vocational institutions, active seafarers, ship owners, crew managers, and professionals involved in the field. Workshops were also organized to that effect in which, in addition to the stakeholders initially involved, outside experts

conferred their know-how regarding the smooth integration of the various learning components detailed in the protosyllabus.

The results of all these deliberations, a comprehensive snapshot of what learners wish to be taught combined to what stakeholders think the former need to learn presented in novel course design terms (i.e. interlocutors, settings, micro and macro skills, etc) are to be found in the following tables:

Skills	**ME Teachers**	**Seafarers**
Speaking	Describe / locate safety equipment Interacting with the pilot	Giving orders Answering questions for clarification
Listening	VHF exchange procedures Obtain VTS (vessel traffic service) data or any other external source data	VHF exchange procedures Receiving orders
Reading	Consulting operation manuals and ship's documentation Vocabulary acquisition: SMCP for VHF communications	Consulting operation manuals and ship's documentation Vocabulary acquisition: SMCP for VHF communications

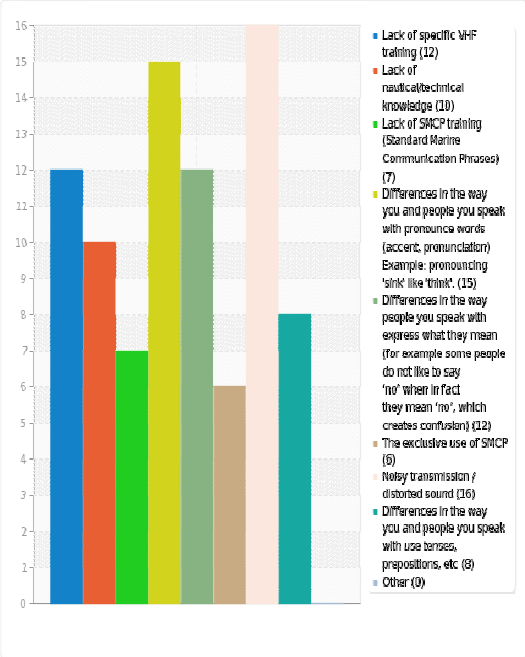
Table 3 Combined top results of the macro-micro skills for accident avoidance (Instructors and Learners responses).

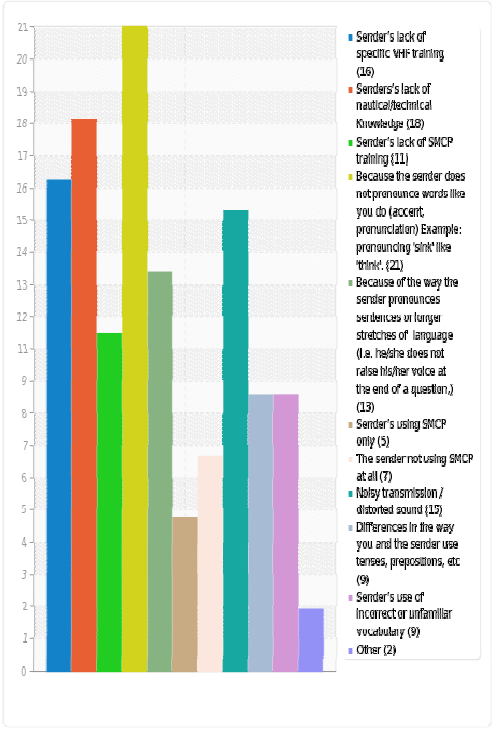
Interlocutors and Settings	**Skills**	**Grammar Vocabulary**	**Functions Notions**
Ship to Ship Communication	**<u>Speaking</u>**	SMCP for VHF communication	How to Address Ratings
Ship to Shore Communication	*Pronunciation Phonetics Phonology*	*Technical-Engineering*	How to Address Officers
VHF Communication	*Nuclear Stress*	*Technical-Navigational*	*How to Engage in social talk*
Safety/Security Settings	*Intonation* *Pitch* *Accents*	*Semitechnical*	*Conversation Management* *(Opening Gambits, Turn-taking etc.)*

	Volume Specific VHF training		*Referentials*
Communication in Emergency Situations	**Listening**	Helm Commands	*Directives*
Conversation management in Safety Meetings	*Recognising:* *Pronunciation Phonetics Phonology* *Nuclear Stress* *Intonation*	Practice VHF Exchange Procedures	*What they mean when they say "yes", "no", or remain silent, etc. (General Explicit Pragmatic and Metapragmatic Awareness)*
Interacting with the Pilot	*Pitch*	Internal Auditing	*Politeness Strategies*
Machine Failure Emergencies	*Accents* *Volume*	Damage Control Activities	Giving Orders
Collective Life on Board	Specific VHF training	Cargo Measurements	Receiving Orders
Psychology		Calculations	*Commissives*
Health Issues		Numbers, Numericals	Providing Feedback
Search and Rescue Routines		Standard English Vocabulary	Answering Questions for Clarification
Passenger Mustering and Crowd Management		ISM ISPS	*Refusals* *Discourse Markers*
Cargo Operations		Codes (Alphabet SMCP etc.)	Giving Accounts of Accidents

Table 4 Needs Analysis Results: the Protosyllabus Grid. (Items in Italics are suggestions by the author).

Given the importance that both the Sample group and the various stakeholders attached to the Speaking and Listening skills, it is perhaps not entirely unjustified to present here another snapshot summarizing the difficulties in comprehension both from the emitting and the receiving ends in ship-to-ship and ship-to-shore communication, always according to the Survey results:





Tables 5 and 6: Factors Affecting the Emission and Reception of Oral Messages in instances such as *Communication over VHF*. (Respondents as Senders and Receivers respectively.)

The interesting point lies in the fact that despite the fluctuation in rate when passing from Sender to Receiver, the key trouble in understanding is coherently identified with accent, pronunciation, and suprasegmental mismatches (intonation, stress, pitch etc.) between sender and receiver (second only to noisy transmission). And yet such items seem to be rarely if ever, part of any standard curriculum of Maritime English, and are even more conspicuously absent from the multimedia workbench, where available tools make teaching them a more manageable task, to say the least.

Grammar is systematically a low priority concern, and lack of SMCP or its exclusive use are not in the top list either. Naturally, the necessary distinction between real and perceived needs does not allow for the abolition of the Grammar component, but a reconsideration of its role and the categories it covers is certainly in order. Concerning SMCP, deliberations about which took quite an extended place in the Partners' meetings, it must be noted here, that it is a necessary and valuable tool in the seafaring profession and as such it should be taught, promoted and validated in Maritime Education. But it is not a language and cannot be mistaken for one. It is a code. It is obvious that in emergency situations and especially in ship-to-ship or ship-to-shore communication the exclusive use of SMCP saves lives, but in everyday life onboard, seafarers armed only with the conversational opening gambit of "I am under attack by Pirates" are hardly expected to make friends.

Another project landmark where matters relating to the design of the course in terms of the content language level and approaches to IT were also discussed, was a session chaired by the

University of the Aegean and involving maritime English teachers and specialists in applied linguistics. The discussion was held online via Skype on 2nd April 2011 and hosted participants from Bulgaria, Belgium, Greece, Turkey and the UK. The session agenda included what was meant to be a tool of an initially controversial reputation, i.e. the Grid. The Grid's point was that by superposing its different layers, and by providing slots for every useful sort of information concerning the new course design Partners could obtain the closest thing to a 3D representation of constraints, Perceived Needs and formal instructional categories that could be had at this stage and with the given resources. The Model, like Frankenstein's creation, initially scared the Partners with its complexity. Feedback from more experienced outside Specialists (Alison Noble, from the Antwerp Maritime Academy, objective enough to put things to perspective) reassured us that the Grid could be a useful tool in course design but that greater simplicity and flexibility would not harm it.

Eventually it was decided that the Grid should be open to the Partners to modify, adapt or arrange as they saw fit. To this day the results have been encouraging.

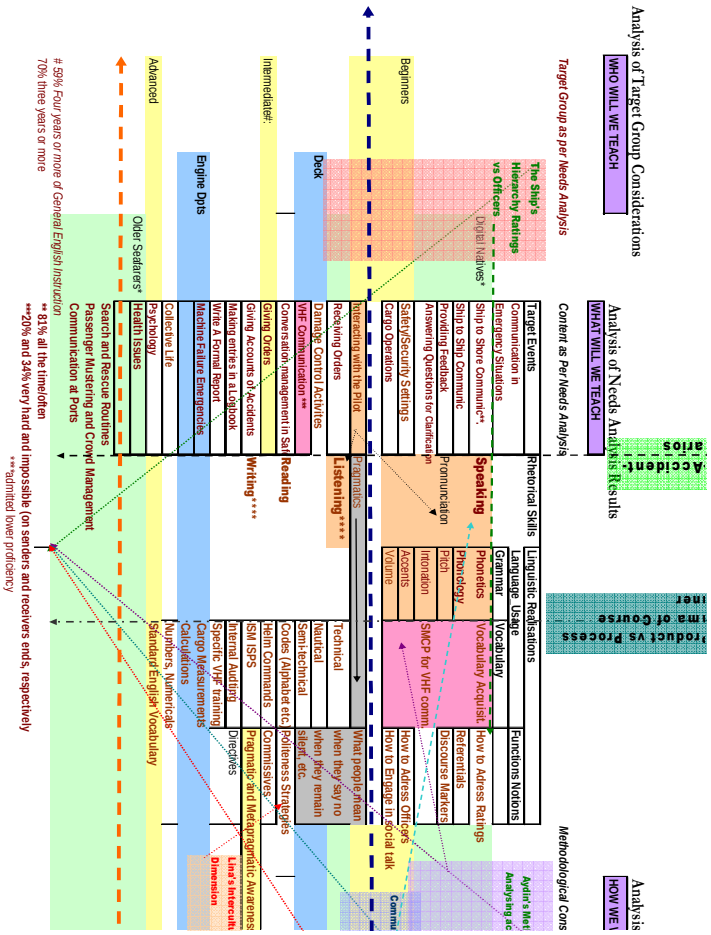


Table 7: The Grid (as of May 2011, an extract)

More detailed results of these useful deliberations are to be found in the Projects' Final Report; for a short version cf. Iakovaki (2011). For now, let's just state that both the diversity of the Consortium and the extended range of external experts who were kind enough to offer their help were initially (when documents were compiled only to be taken apart and guidelines were written and re-written) considered by some, and the author is not an exception, as a hindrance. Eventually they became a strong driving force, forcing the Language experts to clarify their points, re-focus their priorities and sharpen their tools.

A Knowledge Base out of Real Accident Reports

Among the project priorities was *also the creation of a knowledge base of real-life scenarios of maritime accidents caused by linguistic and cultural diversities generating communication failures among seafarers on ships and ashore*. The CAPTAINS team developed a series of case based on accidents and near accidents. Both MAIB of UK (one of the world leading institution on Maritime Safety) and DTO (a major organization in Transportation) agreed to help extract the appropriate knowledge from accident analyses to be used to develop the simulation based training programs. Eventually the knowledge base was compiled by C4FF with support from AEGEAN while all partners contributed their case studies and accident reports.

The scenarios optimally define proper learning approaches, the development of virtual collaboration and learning spaces as a medium of novel learning paradigms and the incorporation of relative educational content, all bundled as online learning services deploying the technological partners' learning platform. A future inclusion of the training program in existing MET programs is under consideration.

How will we teach them? Introducing New Tools and New Dimensions

At the initial stages of the project and mainly in the *Marinati* and *Literati* quarters, considerations about the way courses were to be taught were limited to a general feeling of awe when considering the IT possibilities. Later, when the Guidelines were produced, an effort was made, if not to provide the right answers at least to be able to ask the right questions.

The above was taken into account when the original Grid was designed, so provisions were made for theoretical slots to host

- the degrees of freedom allowed by CALL (Computer assisted language learning) and the Communicative Approach to Language Teaching and Learning
- the Intercultural dimension, a dimension which early enough the Consortium decided would be the backbone of the future educational scheme rather than just a category of primary content
- the Specific Purpose of the Language and the ensuing constraints, methods and borders of competency suggested by frameworks such as the Common European Framework (CEFR) or the occupational English corresponding descriptors (IMO model courses, STCW etc.)

However a more realistic approach was achieved lately, when the three groups started working together. In anticipation of the final product which in all probability will speak for itself, here are a number of tools employed in the decision making process.

New wine, new bottles? CALL (Computer Assisted Language Learning) and Blended Environments

Having defined the novel learning methods, these are applied in designing and developing respective courses and course material. Courses, when they will finally see the light, will be of two sorts: online courses packaged in standardized forms and a standalone cd version for individual study. It was agreed that although the digital courses will be offered online through the use of an advanced Web-based learning platform (LMS/LCMS), a blended learning environment, i.e. one that could combine online and offline-conventional-classroom lecture types of learning would be the optimum solution for maximizing the learning impact. The platform integrates an e-learning Web portal, a learning management/content management system with support for interoperable learning formats, and its added value is that it can combine synchronous and asynchronous modes of learning and collaboration, communication tools, assessment and evaluation. It also allows for learning communities formation and self-evaluation of acquired skills. The use of relevant software tools for e-learning and assessment in the design, delivery and assessment of other learning units is also provided for.

Subsequent Strategic Changes: Adaptation of the Original Framework

Unfortunately, the initial (and rather unrealistic) Literati expectations concerning rich multimedia content could not be met. In what is probably a very common fallacy, language Instructors raised their hopes into thinking that a Second Life type of learning environment will be offered to them to furnish it with whatever content they saw fit, when time and resources could barely cover a much simpler version of the project. Be that as it may, the constraints make place for invention: new interesting ideas on how to adapt the original framework are expected to rise. In the meantime, the statement according to which *any designed online learning infrastructure must be able to evolve and work in a context of constant and accelerating change,* is posted as an initial, indirect statement of purpose [Anderson and Elloumi (2004) p.xx]. According to the same source *the development of effective online learning materials should be based on proven and sound learning theories; the delivery medium is not the determining factor in the quality of learning, rather it is the design of the course which determines the effectiveness of the learning.*

The Communicative Approach to Language Teaching

The Communicative Approach to Language Teaching dictated a number of decisions concerning the choice of original material to produce authentic exercises out of. In this respect, the distinction between *genuine* and authentic, as established by Dudley-Evans and Saint John (1998, p. 28) was a valuable instrument. In fact a text is only authentic if it is exploited in ways which reflect real world use. Authenticity lies in the nature of the interaction between the reader or hearer and the text. So, a key question is whether the activities based on the text reflect ways in which the text would actually be used by students in their work. Part of the process of the Needs Analysis is finding out exactly how learners use the different sources so that activities in an ESP model class can reflect what happens in real life.

Another question that seemed to reflect the Partners' preoccupation was that of methodology. The methodology suggested was the communicative differentiated process one, based on

communicative functions which users need to know. The syllabus must integrate both grammatical and socio-linguistic competence emphasizing on the ways in which certain grammatical patterns facilitate the desirable functions {Canale and Swain (1980)}. As a result, a combination of emphasis on grammatical accuracy and emphasis on meaningful communication was suggested. Also, the learners' competence process should be differentiated depending on their rate of learning, the activities they attempt, the way they choose to use their abilities. Different learners need different routes to accomplish their goals. The e-platform gives the opportunity to have e-classrooms, self-study versions etc.

The Intercultural Dimension and English for Specific Purposes

The intercultural dimension of the Project, what we termed earlier "the intercultural paradigm shift", somehow was put down in more concrete terms with the admission that the course should be considered Teaching English as a Lingua Franca (ELF) rather than teaching English as a Second Language. The new democracy of intercultural identities allows for new standards which include concepts that today are commonly known as "Englishes", EFL (English as a Lingua Franca), codes of community of practices etc. If one is prepared to go beyond a strict definition of the concept of language, the project eventually permits the integration of heretofore non-standard variations, idiolects and codes (such as the nautical community of practice code) to authentic tasks and their completion in emergency situations, thus legitimizing a future standardization and assessment which will empower communities of practice and encourage integration and professional mobility, vertical as well as horizontal.The key assumption is that learners, who will subsequently employ their English in a multicultural environment, should aim for Intercultural Competency rather than near-native one. Indeed it was clear from the start that when safety is at stake, all the conditions of infelicitous verbal interaction are aggravated. The problems arising are not always purely language related; often they are combined with intercultural communication ones. It is the projects' purpose, aim and goal to address as accurately as it is possible the two categories, providing tools to the seafarers who wish to overcome them. Details about the Intercultural Dimension and a new Syllabus which mirrors it can be found in Iakovaki (2011).

Also, among the Partners' resolutions can be counted the constant research for new ways to define the borders of Specific English with the help of glossaries, corpora {Chi-Tang Sun, Jean, (2010)} and sector specific input.

Conclusions

Since it is admittedly hard to draw conclusions from a *work in process* like CAPTAINS at the present state of things, rather than concluding we would like to suggest a number of points for future consideration and at the same time launch an invitation for informal contributions. We are at present deliberating along the following lines and welcome any suggestions as to how to do it optimally from whichever party of stakeholders they happen to come.

Key issues include per group of interest:

- pedagogically, the modern tendencies that call for an intercultural competence and the communicative approach to language learning

- at the professional and human resources management level, the focus on communities of practice and their need to have their discourses understood and legitimized as learning material in the hope to guarantee transfer of organizational knowledge (especially tacit one) and to lessen the learning curve
- finally, in the maritime sector and concerning all professionals, the need to integrate safety in the working culture thereof.

"Apply learning to the real world and integration happens by default" is still a motto that matches best our work philosophy.

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COLLOCATIONAL COMPETENCE IN MARITIME ENGLISH FOR BETTER COMMUNICATION ON BOARD

Abstract

Collocations appear to be a widespread phenomenon in English and their importance for teaching has been increasingly recognized. However, it seems that maritime collocations have not been generally integrated into the teaching material and as a consequence, not been given serious importance in the maritime English classroom. Terminological units constitute the most frequent component of maritime spoken and written discourse, being also expressed in nominal and verbal combinations such as collocations. We consider that such word combinations are of utmost importance to the teaching of Maritime English, this paper being an attempt to examine some students' knowledge of maritime English verb + noun, noun + noun and adjective + noun collocations in terms of their ability to accurately produce some examples of these particular types of collocation.

The other aim of the study is to test the participants' receptive knowledge of the same types of collocatiosn, verb + noun, noun + noun and adjective + noun collocations. The study used two data collection instruments. The instruments designed and used to collect the data of the present study were a 'blank-filling test of maritime English collocations' (Test 1 in Appendix 1) and a 'multiple-choice test of maritime English collocations' (Test 2 in Appendix 2). The results showed that the participants performed better at the receptive level than at the productive level with concerning English verb + noun, noun + verb, noun + noun and adjective + noun collocations. Also, the study, based on the test results, suggested a number of implications related to collocations in non-native speakers of English.

Collocational competence is an essential prerequisite for the overall mastery of Maritime English, perhaps one of the highest levels of linguistic proficiency that future maritime officers can attain.

1. Purpose of the Study

From the language teaching point of view, collocations are extremely important both in general language and in the languages for specific purposes. Such word combinations are the first to reflect the specificity of language. That is why non-natives are always 'caught' with collocations and contextual restraints. Thus, learners of English need to get familiar to them, from simple word combinations to patterns of idiomacity, i.e. among them, idiomatic collocations. Hence, to follow "the collocational conventions of a foreign language means to contribute to one's idiomacity and nativelikeness, whereas not doing so, signals one's foreignness" (Vişan & Croitoru 2009: 132). We have noticed that maritime English learners make a lot of mistakes in producing both nominal and verbal collocations[31]. The interest for this research springs from these empirically-drawn L2 problems — the constant problems for Romanian students and not only to match the appropriate nouns with the appropriate verbs, the appropriate verbs with the appropriate nouns, the appropriate nouns with the appropriate nouns, and so on. As collocations play an important role in the coherence and cohesion of a foreign language which lead to overall mastery of L2, we consider that there is a strong need to look deeper into the problem of collocations in Maritime English teaching and learning.

However, despite their important role in Maritime English learning, collocations have not received much attention to date. There is no research done on how they are used by maritime English learners. For this reason, this study attempts to investigate some Maritime English learners' knowledge of collocations, more specifically to examine the performance of maritime university students studying English with regard to the production and reception of *verb + noun, noun + noun , adjective + noun, adverb + verb* collocations. The results of the study would have implications for the way collocations are perceived in Maritime English learning and teaching, for example in terms of incorporating them into the language curriculum as part of developing collocational competence among maritime students.

We share Hill's opinion that the use of collocations in listening, speaking, reading or writing can help a learner "think more quickly and communicate more efficiently" (Hill 2000: 54). Collocations were chosen as special objects for scrutiny in this study because of a number of reasons. First, as linguists have shown (Hill 2000), collocations are very frequent in the English language. Second, they are probably the most common and most representatives of English multi-word expressions (Lewis 2000). Then, collocations fall between lexis and syntax, which is in line with the current view that maritime English competence is to be described as an interactional process between lexis and syntax and finally, collocations occur in languages with varying degrees of restrictedness which are evident in most text types.

2. Why Maritime Collocations?

The notion of collocation has achieved importance because many linguists have surmised that there are fixed forms of expression in each language that are stored in the minds or memories of native speakers as whole chunks of language forms and not as single words.

[31] For a detailed discussion on verbal collocations in Maritime English see Vişan & Croitoru (2009)

These fixed expressions are used in speech and writing as such. Among these fixed expressions are collocations.

In order to situate collocations within the area of maritime vocabulary teaching, we will take the concept of *word* as a point of departure (see Carter & McCarthy 1988). What exactly does it mean to know a word? Nation (1990:31) suggests a list of different aspects of knowledge needed, that is, *receptive* and *productive* knowledge.

Receptive knowledge involves listening and reading skills, whereas productive knowledge presupposes listening, reading, speaking and writing knowledge. All these aspects are included in the table below:

Table 1. What is involved in the acquisition of a word (adapted from Nation 1990: 31)

FORM	**Spoken form**	**R**	What does the word sound like?
		P	How is the word pronounced?
	Written form	**R**	What does the word look like?
		P	How is the word written and spelled?
POSITION	**Grammatical Patterns**	**R**	In what patterns does the word occur?
		P	In what patterns must students use the word?
	Collocations	**R**	What words or types of words can be expected before or after the word?
		P	What words or types of words must students use within this word?
FUNCTION	**Frequency**	**R**	How common is the word?
		P	How often should the word be used?
	Appropriateness	**R**	Where would students expect to meet this word?
		P	Where can this word be used?
MEANING	**Concept**	**R**	What does the word mean?
		P	What words should be used to express this meaning?
	Associations	**R**	What other words make students think of?
		P	What other words could students use instead of this one?

As illustrated in Table 1 above, Nation (1990) uses the four general classification criteria drawing from George (1983): *form, position, function* and *meaning*.

Unfortunately, some of these aspects tend to be given more prominence in the Maritime English classroom, like *form* and *meaning*, while others are hardly ever mentioned, which seems to be the case of *position* (grammatical patterns and collocations).

Nattinger (1988: 70) holds the idea that the meaning of a word is closely related to the word's associations and argues that "the whole notion of collocations is extremely important for acquiring vocabulary and has yet to be exploited to its full potential".

As Table 1 above indicates, maritime collocations, as well as all other aspects of a word or term, can be taught in relation to both receptive and productive knowledge, the difference between the two being the type of activity dealt with in the Maritime English classroom. Therefore, as we have already mentioned, the main reason why the present paper lays emphasis on collocational competence of Maritime English, is that even though the importance of collocations is to a great extent acknowledged (Sinclair 1991, Cowie 1998a), not much attention has been given to them within the maritime teaching context.

According to Richards & Rodgers (2001:132), the lexical approach to language teaching is "derived from the belief that the building blocks of language learning and communication are not grammar, functions, notions, or some other unit of planning and teaching but lexis, that is, words and word combinations"[32].

As far as the classification of collocations is concerned, Hausmann (1989: 1010 qtd. in Nesselhauf 2005: 22) distinguished the following types[33]:

→ ***adjective + noun*** (*even keel; foul anchor*; *sharp lookout; smooth sea; heavy swell; uncharted rock; hazardous mine*),

→ ***(subject-) noun + verb*** (*the vessel proceeds)*

→ ***noun + noun*** (*chain locker; monkey island; air draft; head line; stern line; oil spill; muster list*),

→ ***adverb + adjective*** (*bitterly disappointed*),

→ ***verb + adverb*** (*handle carefully; rolling heavily; sheer rankly*), and

→ ***verb + (object-) noun*** (*have a list; jettison cargo; stop listing; stop spillage; require assistance; carry out search; keep a lookout; dredge anchor; set sail*).

In addition, as suggested by Benson et al. (1997: ix), lexical words plus a preposition also constitute collocations, so that the other four categories would be:

→ ***verb + preposition*** (*stand by; proceed with*),

→ ***noun + preposition*** (*danger to*; *damage to; deformation to; direction at; use of*)

→ ***preposition + noun*** (*by accident; for rescue; under control; under observation*),

→ ***adjective + preposition*** (*available for; requested to*).

The first six categories are usually called *lexical collocations* and the four others *grammatical collocations* (Fontenelle 1998: 192), the latter are sometimes also called *colligations* (Bartsch 2004: 24).

In the present paper we will lay emphasis only on *adjective + noun; noun + noun; verb + (object-) noun* collocations which we consider of paramount importance to a proper acquisition of maritime vocabulary (see Appendix 1 and 2 below).

3. On the Acquisition of Maritime English Collocations

The acquisition of maritime collocations is not as simple for non native speakers of English as it might be for native ones. Crystal (1992: 105) stated that "collocations [...] provide a major difficulty in mastering foreign languages. The more fixed a collocation is, the more we

[32] Some of the attempts to integrate this view into teaching can be seen in *The lexical syllabus* (Willis 1990), *Lexical phrases and language teaching* (Nattinger & DeCarrico 1992), and *The lexical approach* (Michael Lewis 1993).

[33] For the classification of collocations as set by Hausmann (1989: 1010) we have provided our own examples.

think of it as an 'idiom' — a pattern to be learned as a whole, and not as the 'sum of its parts". In that case, idioms do not mean what the individual words in them mean.

Halliday and Hasan (1976: 288) referred to the concept of collocation as "the most problematic part of lexical cohesion". Maritime English collocations are very often language-specific and, therefore, will cause frequent language production mistakes and communication breakdowns. That is, they may present a problem to the non-native speakers of English when the native language meaning equivalent uses different collocations.

Concerning the way in which new words are acquired, Hatch & Brown (1995:374) explain the five steps in the vocabulary acquisition process: (1) encountering new words, (2) getting the word form, (3) getting the word meaning, (4) consolidating word form and meaning in memory, and (5) using the word.

In view of all these aspects, we can state that it is not single words and terms that are always difficult for seafarers coming from different cultural backgrounds other than English, but multi-word units such as collocations. Therefore, maritime English lecturers should teach common combinations of words and terms, not just the individual words and terms.

For instance, maritime students can be taught new words and terms through common collocations, that is, when a new word is introduced to them, it may be very helpful to also introduce the most common collocates of that word.

However, we shall argue that some teachers are not aware of the importance of collocations in Maritime English teaching and learning and, as a result, may not be drawing their students' attention to these word combinations in their class work. For example, Howarth (1996: 162) considers that "[L]earners are, understandably, generally unaware of the large number of clusters of partially overlapping collocational relationships. It is, of course, not only learners who are unaware of this category; it is an area unrecognized in language pedagogy and little understood in lexicography".

It has to be pointed out that even some of the best language learners may make mistakes in producing collocations. Failing to produce the correct ones in English may result in a language that does not sound native-like or 'natural'.

3.1. Methodology

The general question addressed in this study is concerned with the knowledge of English *verb + noun, noun + noun* and *adjective + noun* collocations among a group of Maritime English learners. This study attempts to answer the following research question:

• What is the difference between the Maritime English learners' productive and receptive knowledge of English *verb + noun, noun + noun* and *adjective + noun* collocations?

The aim of the study is to examine some maritime students 'knowledge of English *verb + noun, noun + noun* and *adjective + noun* collocations in terms of their capability to produce some examples of this specific type of collocation correctly. The other aim of the study is to examine the participants' receptive knowledge of the same types of collocation.

Therefore, the aim of the study is twofold: to examine the Maritime English learners' ability to understand the meanings of collocations by recognizing them, and to examine their ability to use them accurately. That is because it is equally important for maritime English learners to recognize (in reading and listening) and produce (in speaking and writing) collocations accurately.

3.1.1. Participants in the Study

This study was conducted at the English Language Department in Constanta Maritime University, Romania. The participants in this study were fifty undergraduate students who performed their onboard training. These students were in their fourth year of study (final year). The participation in the study was voluntary.

First, I together with my colleague Mircea Georgescu explained to the students the intended goal. After explaining to them the tasks they would be required to perform, we asked whether they wanted to participate in the study, assuring them that confidentiality would be maintained. Each student was then given an Information Sheet and a Consent Form to sign and bring back to us along with the blank-filling test of English collocations (see Appendix 1). The students were given one hour for Test 1. On the same day of the following week, the students were given the 'multiple-choice test of English collocations' (see Appendix 2). Test 2 took only thirty minutes.

3.1.2. Data Collection Instruments

This study used two data collection means. The means designed and used to collect the data of the present study were a 'blank-filling test of maritime collocations' (Test 1) and a 'multiple-choice test of maritime collocations' (Test 2). In designing the 'blank-filling test of maritime English collocations' for the present study, we relied on examples drawn from the *Standard Marine Communication Phrases* (IMO SMCP) and *The International Maritime Language Programme (IMLP)* whose author is Peter van Kluijven (2002), as well as our own examples.

In Test 1, the *blank-filling test of English collocations*, the participants were given twenty items. Each item consisted of an English sentence with a blank + a noun. The participants were asked to fill in each blank with the most suitable verb, adjective or noun that can possibly collocate with the head noun in the sentence (see Appendix 1). The aim of this test was to determine the respondents' production knowledge of English *verb + noun noun + noun* and *adjective + noun* collocations.

The other instrument used in this study was a *'multiple-choice test of English collocations'*. Again, the participants were given twenty items. This second test included the same examples of English collocations that were in Test 1 given to the same participants, but this time they were provided with four options to choose from. The participants were asked to choose the most suitable verb, noun or adjective that can possibly collocate with the head noun in the sentence (see Appendix 2). The aim of the 'multiple-choice test of English collocations' was to test the participants' receptive knowledge of English *noun + noun, noun + verb* and *adjective + noun* collocations.

3.2. Dissemination Results and Discussion

This section will deal with the participants' response to the 'blank-filling test of English collocations' and the 'multiple-choice test of English collocations'. As previously mentioned, the 'blank-filling test of maritime English collocations' aimed to examine the participants' knowledge of the English *verb + noun; noun + verb* and *adjective + noun* collocations in terms

of their ability to produce these particular types of collocation accurately. The analysis was basically based on judging whether the respondents provided a proper collocation or not.

When we scored the 'blank-filling test of English collocations' the names of participants were then not disclosed. Their answers were counted as correct if they provided an English collocation that matched a collocation mentioned in one of the references stated above. Spelling and grammar mistakes were not regarded as incorrect responses. Data from this test (see Table 2) show an overall significant problem in producing acceptable *verb + noun, noun + verb* and *adjective + noun* collocations in English.

Table 2. Results of the Blank Filling Test on Maritime English Collocations

Item. No	Proper Collocations	Improper Collocations
1	18/50 (36%)	32/50(64%)
2	16/50 (32%)	34/50(68%)
3	10/50 (20%)	40/50(80%)
4	9/50 (18%)	41/50(82%)
5	4/50 (8%)	46/50(92%)
6	29/50 (58%)	21/50(42%)
7	25/50 (50%)	25/50(50%)
8	5/50 (10%)	45/50(90%)
9	30/50 (60%)	20/50(40%)
10	40/50 (80%)	10/50(20%)
11	22/50 (44%)	28/50(56%)
12	34/50 (68%)	16/50(32%)
13	27/50 (54%)	23/50(46%)
14	8/50 (16%)	42/50(84%)
15	26/50 (52%)	24/50(48%)
16	21/50 (42%)	29/50(58%)
17	28/50 (56%)	22/50(44%)
18	32/50 (64%)	18/50(36%)
19	34/50 (68%)	16/50(32%)
20	45/50 (90%)	5/50(10%)
Total	**46,3%**	**53,7%**

As illustrated in Table 2. above, the results suggest that the participants essentially lack collocational competence at the production level. Around fifty four percent (54%) of their responses are incorrect, while only 46% are correct.

On the other hand, the 'multiple-choice test of English collocations' aimed to test the participants' receptive knowledge of English *verb + noun, noun + verb* and *adjective + noun* collocations. Similarly, we scored the 'multiple-choice test of English collocations'. The participants' responses were counted as correct if they chose the correct *verb, adjective* and *noun* that collocate with the head noun in the sentence. Data from this test (see Appendix 2)

show better results in the participants' ability to recognize (as opposed to produce) accurate *verb + noun noun + noun* and *adjective + noun* collocations in English. To put it in another way, the data suggest that the participants perform better at the receptive, rather than productive, level. Around 65% of the participants' responses are correct, while only 35% are incorrect.

Table 3. Results of the Multiple Choice Test on Maritime English Collocations

Item. No	Proper Collocations	Improper Collocations
1	28/50 (56%)	22/50 (44%)
2	25/50 (50%)	25/50(50%)
3	16/50 (32%)	34/50(68%)
4	18/50 (36%)	32/50(64%)
5	22/50 (44%)	28/50(56%)
6	38/50 (76%)	12/50(24%)
7	32/50 (64%)	18/50 36%)
8	14/50 (28%)	36/50(72%)
9	40/50 (80%)	10/50(20%)
10	48/50 (96%)	2/50 (4%)
11	39/50 (78%)	11/50(22%)
12	43/50 (86%)	7/50(14%)
13	45/50 (90%)	5/50(10%)
14	26/50 (52%)	24/50(48%)
15	30/50 (60%)	20/50(40%)
16	29/50 (58%)	21/50(42%)
17	33/50 (66%)	17/50(34%)
18	37/50 (74%)	13/50(26%)
19	35/50 (70%)	15/50(30%)
20	49/50 (98%)	1/50 (2%)
Total	**64,8%**	**35,2%**

Taken together, the data reveal that indeed maritime students with different levels of proficiency face difficulties in combining words together, resulting in a language that does not sound 'natural' and that could lead to miscommunication on board. This phenomenon is mainly due in part to a lack of knowledge of native-like English collocations and also to differences between the collocational patterns of Romanian (the students' native language) and English.

This fact reiterates what has been reported in the literature by different linguists (Bahns & Eldaw 1993). The misunderstanding of the meaning of the collocation could possibly be another reason for not being able to produce acceptable collocations. The administration of the

'blank-filling test of maritime English collocations' took only sixty minutes, whereas the administration of the 'multiple-choice test of maritime English collocations' took only thirty minutes and fatigue was not taken into account.

4. Some Pedagogical Implications

The present paper suggests a number of pedagogical implications with regard to collocations. These can be applied as a generic model for teaching collocations to maritime students. For example, maritime English lecturers could make their students do the following:

a) Identify collocations in L2 texts at the same time as they identify difficult words or terms;

b) Make them aware of the fact that the production of collocations in L2 can be influenced by L1 collocations;

c) Be aware of the limitations of general-purpose dictionaries in terms of dealing with collocations and, therefore, use specialized collocational dictionaries as well;

d) Understand that it is not always the case that there is a word-for-word equivalent between L1 and L2;

e) Understand that when an L2 collocation exists, there might not be much room for creativity. Therefore, creating new collocations can be risky and may result in unacceptable word associations which can lead to miscommunication;

f) Make their own lists of all the collocations they encounter in L2; and,

g) Try to expand their collocational repertoire in L2. One way to achieve this is probably through reading from and listening to a wide variety of L2 texts.

What makes non-native speakers of English perform appropriately with regard to collocations is their overall *collocational competence*. Near-perfect knowledge of Maritime English collocations is a basic requirement for what we may call *collocational competence* of maritime students. This is because collocational competence of Maritime English is part and parcel of the overall Maritime English competence and one way to judge language competence is through the learners' collocational performance.

Effective collocational performance demands effective collocational competence. Non-native speakers of English may have a receptive knowledge of a wider range of collocations, which means that they can recognise maritime English collocations and recognise their meanings when they listen and read (i.e. the two receptive skills: *listening* and *reading*). However, their productive use of a wide range of collocations could be generally limited (i.e. the two productive skills: *speaking* and *writing*) (Hill 2000; Lewis 2000). This is why we consider it to be one of the areas that need more attention in Maritime English research and teaching. The main concern is, therefore, not simply the learners' understanding of the meanings of collocations, but also their ability to use them appropriately in speaking and writing.

Conclusion

The conclusion can be drawn that the findings of our research cannot be generalized to all maritime students as non-native speakers of English. Nevertheless, these remarks suggest future directions in research. What specific problems do L2 learners have in producing English

verb + noun, *noun + noun* and *adjective + noun* collocations? While some problems could be attributed to the influence of L1, that is Romanian do these problems really lead to misunderstandings on board? We consider that Maritime English learning requires a whole group of competences and one of these is *collocational competence*.

We hope that this study has raised an interest in collocations for those researchers working in the field of Maritime English teaching and applied linguistics.

Of special interest to Maritime English language teaching is how to apply the observations of this particular study in order to improve the teaching of collocations. This study, therefore, recommends trying out the possibility of teaching maritime collocations explicitly to future maritime officers. This could be possibly a useful teaching practice. In addition, and most importantly, more attention should be given to collocations in developing and enhancing language learners' performance in general.

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APPENDIX 1

Fill in the blanks with a suitable word (one word only):

1. I will .....cargo to stop listing.
2. MV Christina .....tug assistance.
3. Keep .....lookout and report to the Master.
4. They are ..... radar search.
5. What is the result of the search? The result of search is positive. .....vessel in position 018 degr.21 min. N, 23 degr. 12 min. S.
6. I will proceed to pick up the survivors. ..... lifeboats.
7. In smooth water and when sailing straight ahead the ship is usually at ..... keel.
8. …….ground is reported in the anchorage.
9. By ..... draft is understood the distance from the water line to the highest point of the vessel.
10. Please check the **.....**gear before commencing cargo operations.
11. The surface of the cargo is constantly made equal by special pumps in ……circumstances.
12. The pilot will ……. the ship that has requested pilotage.
13. The pilot …….is waiting for the incoming vessel.
14. M V Ulysses ……sail last week.
15. During the voyage they met with ……..swell.

16. Sailing in …….waters requires avoiding crossing vessels.
17. The ship was deviated from the course by the …….currents.
18. The master asked the bosun to ……..the chain.
19. The shore …..are prepared to load the ship.
20. Five minutes ago we received a gale …….. .

APPENDIX 2

Choose the most appropriate word:

1. I will .....cargo to stop listing.
   a. throw b. pack c. jettison d. stow
2. MV Christina .....tug assistance.
   a. needs b. requests c. wants d. requires
3. Keep .....lookout and report to the Master.
   a. closer b. careful c. sharp d. exact
4. They are ..... radar search.
   a. carrying out b. accomplishing c. fulfilling d. realizing
5. What is the result of the search? The result of search is positive. .....vessel in position 018 degr.21 min. N, 23 degr. 12 min. S.
   a. hampered b. constrained c. sighted d. loaded
6. I will proceed to pick up the survivors. ..... lifeboats.
   a. stand by b. proceed c. watch d. unship
7. In smooth water and when sailing straight ahead the ship is usually at ..... keel.
   a. constant b. stable c. upright d. even
8. …….ground is reported in the anchorage.
   a. dangerous b. unfavourable c. foul d. bad
9. By ..... draft is understood the distance from the water line to the highest point of the vessel.
   a. water b. sea c. ship d. air
10. Please check the **.....** gear before commencing cargo operations.
    a. launching b. steering c. slipping d. lifting
11. The surface of the cargo is constantly made equal by special pumps in ……circumstances.
    a. rolling b. loading c. proper d. adverse
12. The pilot will ……. the ship that has requested pilotage.
    a. board b. climb c. contact d. leave

13. The pilot …….is waiting for the incoming vessel.

    a. station b. ladder c. card d. boat

14. MV Ulysses ……sail last week.
    a. began b. set c. lost d. raised
15. During the voyage they met with ……..swell.
    a. high b. strong c. heavy d. smooth

16. Sailing in …….waters requires avoiding crossing vessels.

    a. shallow b. low c. crowded d. congested

17. The ship was deviated from the course by the …….currents.

    a. powerful b. fast c. strong d. tidal

18. The master asked the bosun to ……..the chain.

    a. check b. pay out c. clean c. pay off

19. The shore ….. are prepared to load the ship.

    a. equipment b. lines c. crew d. gang

20. Five minutes ago we received a gale …… .

    a. signal b. warning c. information d. new

Authors' Bio-Note

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Workshops

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EVALUATING THE MarTEL PLUS RATINGS TEST

Summary:

MarTEL (Maritime Test of English Language) is an European Leonardo Da Vinci project which aims to establish standards for Maritime English. The project ended in 2009; evolving into a multi-layered structure with a thorough approach to the project objectives and creating standards in testing Maritime English of three groups of seafarers, namely; the would-be cadets of maritime academies, graduates of these academies and the officers of junior rank and the seafarers of senior level who are captains and chief engineers.

MarTEL Plus, a new Leonardo da Vinci project which commenced in October 2010, intends to complement and extend the concluded MarTEL project by way of transferring gained knowledge into new areas of testing and teaching materials while utilizing innovative media features.

The workshop intends to focus on one of the testing elements of MarTEL Plus which aims to establish standards of maritime English for ratings *(Phase R)*. This is a complementary aspect of MarTEL Plus as no standards were established in the concluded MarTEL project.

Phase R Test is intended to become the international benchmark for the certification of ratings working on board ships worldwide. Phase R is being developed in TUDEV-Turkey, in cooperation with maritime academies and universities of Bulgaria, Finland, and Poland. In

developing the test, the partners have looked at content and structure from a 'user needs' point of view. The topics and the linguistic elements to be included in the test were the product of research which considered primarily the requirements of STCW 95/2010 conventions, Common European Framework of Reference for Languages (CEFR), maritime vocational training syllabi, IMO 3.17 model course and the projected duties of ratings on board ships.

The structure of the test is modeled on a BTEC unit submission, and is divided into three sections: one 'general' section for all ratings, one 'deck' section, and one 'engineering' section.

In this workshop; a sample test, extracted from an actual MarTEL Plus Ratings Test will be conducted with the interested participants after a short demonstration of Phase R Standards.

After the sample test, the results of the participants' work will be evaluated. The participants will be invited to give their opinions on; question types, tasks, time allocation and finally on the overall test itself. Participants' further inputs will also be noted.

Program: *(Running Time: 1 hour)*

00:00 – 00:10 minutes: **Introduction**
Aims and objectives of the workshop. Introduction to the MarTEL Phase R Test.

00:10 – 00:30 minutes: **Group Study**
Application of MarTEL Phase R 'Sample Test' to participants on individual/group basis.

00:30 – 00:40 minutes: **Evaluation of the Mini Test**
Explanation of the correct answers in terms of purpose and methodology to the participants.

00:40 – 00:55 minutes: **Open Discussion and General Remarks**
The participants will be invited to give their views on the 'Sample Test' as well as the answers to the questions below.

1. Which topics of maritime and social issues are expected to be in the range of ordinary seamen that should/can be expressed in English?

2. Which language skills and grammatical elements soundly address these issues?

3. How much computer literacy can be expected from an ordinary seaman to undertake a computer-based test?

4. Does the sample test cover and adequately address the above issues? If not, how can it be improved?

00:55 – 00:60 minutes: **Conclusions and End statement**

Authors' closing statement briefly summarizing the workshop conclusions and thanking the participants for their involvement.

Requested Equipment:

1. One computer connected to a projector and loud speakers.
2. Sufficient amount of blank sheets and writing utensils for participants.
3. A wireless microphone for the participants to voice their comments and views.

Authors' Bio-Note

Aydin Sihmantepe born in 1964 Istanbul/Turkey started his maritime career by entering Naval High School/Istanbul in 1978. After graduating from Naval Academy in 1986, he served in the Turkish Navy for 22 years, retiring in 2008. He is holding a master's degree in International relations. He lectures on Maritime English in TUDEV and is involved with MarTEL, MarTEL Plus and CAPTAINS projects.

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THE MarTEL PLUS ENHANCED SPEAKING TEST AS A MEANS OF MEASURING ENGLISH LANGUAGE PROFICIENCY – DEVELOPING ASSESSMENT CRITERIA

Summary

One of the goals of the MarTEL Plus project is to enhance the speaking part of the MarTEL test of Maritime English language proficiency. The Bulgarian Naval Academy in Varna joined the project in October 2010 with the task to develop the new Speaking Test. This turned out to be a very challenging and quite responsible task to complete. The team consisted of three members who combined their efforts in two main areas – Maritime English and language testing.

In order to develop the two tests (deck and engine) the following steps have been taken:

- Research into existing test formats and task types
- Research into assessment criteria
- Development of the test documentation according to sound language testing theory and principles (test specifications- for test developers and for public use, sample tasks, list of topics, assessment criteria, examiner's guide, guidelines for training examiners, guidelines for developing speaking tasks).

General Assumptions

1. The Speaking Test Specifications are designed in accordance with the CEFR levels (A1 – C1) incorporating content relevant to the maritime context.
2. The MarTEL Speaking Test is a multi-level test. The final score places the test-taker at a level which may or may not correspond to the level required for the job position s/he has or is applying for. However, regardless of the outcome it is the employer who should make the final decision of how to interpret the score.
3. A test-taker rated at a given level on the scale MarTEL A1 – C1 of the Speaking Test has the communicative competence and skills associated with lower levels on the scale, e.g. a B2 candidate is assumed to have all the language skills of B1, A2 and A1 candidate.

Types of Tasks

The types of tasks have been designed specifically for the test to measure different sub-skills. They will be used by fully trained examiners. One and the same task may also be used to elicit sub-skills for different levels. Tasks are included in the lowest level at which they generally become appropriate. Test-takers should be familiar with the task types described as Sample Tasks in the Test Specifications for Public Use.

1. Description / comparison – the test-taker is asked to describe a person, an object or a place (visual prompts are used).
2. Unstructured conversation – the examiner engages the test-taker in a conversation on some work-related and general topics.
3. Role-play (using a cue card) with/without prompts to give instructions, solve problems, suggest solutions, etc.
4. IGT (Information Gathering Task) used for eliciting information, reporting, hypothesizing, etc.
5. Interpreting a diagram.
6. Problem-solving situation.
7. Supported opinion.

Description of the Test

- *Channel of communication* - face-to-face involving a test-taker and three examiners (two language specialists and one subject matter specialist).
- *Duration* – 15 to30 minutes depending on the linguistic ability of the test-taker.

All interviews are recorded for quality control purposes.

Purpose and Structure of the Workshop

The purpose of the workshop is to demonstrate (using video materials) how some of the task types elicit different linguistic abilities at different levels and whether they can be assessed by means of the analytic Rating Scale developed especially for this test. The video material was recorded during the piloting stage of the sample tasks. Moreover, the team hopes to benefit from the most valuable expertise of the IMEC participants in providing useful feedback to the Rating Scales.

Workshop Stages

1. Participants are divided into six groups based on the number of the assessment criteria.
2. The workshop facilitator assigns the task to each group – to follow each performance on the video and discuss within the group whether evidence of the assigned criteria, e.g. grammar is observed and to what extent it can be assessed within the task.
3. Each group selects a speaker to present the group comment.
4. All other groups discuss the comments.
5. All groups discuss the same criteria as developed in the Rating Scale to find out whether it is suitable for assessment purposes.
6. Each group speaker summarizes the group comments and submits written conclusions and recommendations.

Workshop timing:

1. Introduction – 10 min.

2. Giving instructions to the groups – 5 min.
3. Video materials and group work – 30 min.
4. Discussion and conclusions – 15 min.

Authors' Bio-Note

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PRACTICAL MARITIME ENGLISH DICTIONARY FOR BEGINNERS AS A SOURCE OF LANGUAGE SKILLS DEVELOPMENT

Abstract

The workshop purposes to exchange opinions on the methodology of language classroom activities using a ME dictionary. The type of the Maritime English dictionary for beginners is of utmost importance. The approaches to the methods of arranging and presenting special terms may vary depending on teaching goals. Even in a bilingual dictionary translation isn't the only way to explain the meaning and functioning of nautical and marine engineering terms. Other techniques exist to illustrate the meaning of professional words. The materials for the round-table discussion and a Questionnaire are suggested.

Key words: ME Dictionary, classroom activity, semantisation, skills development, usage

Introduction

Complexity of university ME curricula, availability or absence of appropriate teaching/learning materials; importance of linguistic analysis in the development of ME teaching materials, methods of explaining terms, methodology in the process of teaching terminology are the most significant problems which require special attention of ME instructors. It's well known that the ME course for non-native learners is usually extended in time and includes the substantial General English content which forms the foundation for the subsequent ME teaching/learning activities. The special terms are introduced at the very beginning of the academic course, and this evidently requires the development of two curricula: General English and Maritime English. Thus, the English language training becomes a time-consuming work meaning both the English language basics and ME training. It entails the selection (or design) of supplementary materials and the development of methodological strategy purposing the faster and more efficient work

for non-native English speakers, in particular. The linguistic analysis, which presumes the Maritime English language assessment being in current use, remains the principal criterion in order to select adequate materials for the 1st and 2nd year students. The teacher's goals in this case focus on increasing the student's motivation and individual level of language proficiency by suggesting authentic, up-to-date, professionally correct terms and texts, functional patterns and real-life situations being in common use. Instead of being attached to artificial and out-of-date textbooks, series of tasks, exercises and tests, a ME teacher would introduce the assignments aiming communicative skills development rather than words lists, topics or grammar rules. These factors well known to ME teachers are sometimes rejected or ignored for some reason which creates the obstacle on the way to efficient language teaching. The methods and techniques of using lexicographic or terminographic sources require some special methodology as well, not mentioning the fact that the students must be aware of great variety of dictionaries, vocabularies, thesauruses, word stock descriptions, etc and must be taught how to develop their language skills when using them in language classroom activities.

1. Lexicographic and terminographic sources used for educational purposes

In this research a *dictionary* implies a book about a particular subject that gives an alphabetical list of words, phrases or names with information about them. *A vocabulary* is understood as a list of words and their meanings especially in a book for learning a foreign language. *A thesaurus* is a book that contains lists of words that have similar meanings. All these books are referred to lexicographic sources mostly used as reference for the meaning, spelling, pronunciation, structural peculiarities, origin. *Bilingual and multilingual* dictionaries involve the parallel use of a language /languages serving as a means of explaining a foreign word or expression. Translation is meant as the shortest way of a foreign word's semantisation. Monolingual dictionaries (for example. English-English explanatory or encyclopaedic dictionary) are considered to be quite difficult for foreigners and are not widely used. The three major types of lexicographic products existing nowadays are: a dictionary, an encyclopaedia, an encyclopaedic dictionary. They differ a lot in methods of arranging and presenting the entries – words and expressions. The latest researches (Bergenholtz H.& Kaufmann U., 1997) prove the difference between lexicography and terminography: lexicography is mostly descriptive, terminography is primarily prescriptive. Terminography deals with concepts and terms but not with words and their description as in case of lexicography. *Terminography* is qualified as a synchronic research, uses only experts as informants and is entirely based on systematic classification in one subject field, which is not the case with lexicography. In connection with this several questions arise: Can a language teacher design a terminographic work or is it a prerogative of a specialist in Navigation or Marine Engineering? What are the limits of his/her qualification in developing a Maritime Dictionary, for instance? What are the methods of language classroom activities based on a specialized dictionary? The discussion on the problem may be carried out using a Questionnaire (See Supplement 1).

2. Maritime English vocabulary: etymology and history of words

Being one of the most ancient fields of the human life the seafaring has been well recorded in the written texts and patterns of communication of different languages, mostly, Latin, Greek, Spanish, Portuguese, Chinese. Germanic languages took their advantage in the 16th and 17th centuries. Today Maritime English is dominating at sea successfully proving its international, global nature. The British Empire was a maritime empire, and the influence of nautical terms on the English language has been great. Phrases like *three sheets to the wind* have their origins onboard ships. The Maritime history of the United Kingdom involves events including shipping, ports, navigation, and seamen, as well as marine sciences, exploration, trade, and maritime themes in the arts from the creation of the kingdom of Great Britain as a unified sovereign state on 1 May 1707 in accordance with the Treaty of Union, signed on 22 July 1706. One of the most remarkable aspects of the spread of English around the world has been the extent to which Europeans are adopting it as their internal lingua franca. English is spreading from northern Europe to the south and to the east and is now firmly entrenched as a second language in different European countries. Influenced by Latin, French, German, the contemporary Maritime English is sharing its vocabulary with the whole world. The history of core elements of the Maritime related word stock easily prove it: "M*arine* Date of Origin 15th c. The Latin word for 'sea' was *mare* (borrowed into English in the 19th century as a term for any of the sea-like dark areas on the moon). It goes back to Indo-European **mori-*, **mari-*, which also produced Russian *more* 'sea', Welsh *mor* 'sea', and English *mere* 'lake' (the *mer-* of *mermaid*). The Romance-language terms for 'sea' (French *mer*, Italian and Romanian *mare*, and Spanish *mar*) are descended from it. And its derived adjective, *marīnus*, has given English *marine* (and *mariner* (13th c.)). *Maritime* (16th c.) is another derivative. *Marina* (19th c.) was borrowed from Italian. "*Navy*" Date of Origin 14th c. Latin *nāvis* 'ship' is the ultimate source of *navy*. In post-classical times it spawned an offspring *nāvia* 'fleet', which passed into English via Old French *navie*. Other Latin derivatives of *nāvis* were *nāvālis*, source of English *naval* (16th c.), and the verb *nāvigāre* 'manage a ship', from which English gets *navigate* (16th c.) (*navvy* (19th c.) originated as a colloquial abbreviation for *navigator*, a term applied to someone who dug 'navigation canals'). In medieval Latin *nāvis* was applied to the central part of a church, from the passing resemblance in shape to a ship, and the word was anglicized as *nave* (17th c.). *Nāvis* was related to Greek *naus* 'ship', whose contributions to English include *nautical* (16th c.), *nautilus* (17th c.), *nausea* (16th c.) (etymologically 'seasickness'), and, somewhat surprisingly, *noise*. "*Sea*" Date of Origin Old English [OE]. *Sea* is a widespread Germanic word, related to German *see*, Dutch *zee*, Swedish *sjö*, and Danish *sø* (the Scandinavian words are now more usually used for 'lake' than 'sea'). These all point back to a prehistoric Germanic **saiwiz*, but it is not known where that came from. "*Ship*" Date of Origin Old English [OE]. *Ship* comes from a prehistoric Germanic **skipam*, which also produced German *schiff*, Dutch *schip*, Swedish *skepp*, and Danish *skib*. It is not known for certain where this came from, although a link has been suggested with Latvian *shkibīt* 'cut, hew', in which case the underlying meaning of *ship* could be 'hollowed-out log' – a 'dugout', in other words. The Old High German form *schif* was borrowed into Italian as *schifo*, and this made its way via French *esquif* into English as *skiff* (16th c.). The Middle Dutch form *schip* had a derivative *schipper* 'captain of a small ship', which has

given English *skipper* (14th c.). And *equip* too comes from a relative of English *ship*. "*Engine*" Date of Origin 13th c. The underlying etymological meaning of *engine* is 'natural talent'. It comes ultimately from Latin *ingenium* (source also of English *ingenious*) which was formed from the base **gen-* (as in *genetic*) denoting 'reproduction' and meant literally 'skill or aptitude one was born with'. Abstract meanings related to this (such as 'ingenuity' and 'genius') have now died out in English (which acquired the word via Old French *engin*), but what remains is a more specific strand of meaning in the Latin word – 'clever device, contrivance'. Originally this was an abstract concept (often used in a bad sense 'trick, cunning ruse'), but as early as about 1300 there is evidence of a more concrete application in English to a 'mechanical device'. The word's modern use for 'machine producing motion' originates in its early 19th-century application to the steam engine. *Engineer* (14th c.) comes via Old French *engigneor* from medieval Latin *ingeniātōr*, a derivative of the verb *ingeniāre* 'contrive', which in turn came from *ingenium*. "*Vessel*" Date of Origin 13th c. Latin *vascellum* meant 'small dish or utensil'. It was a diminutive form of *vas* 'dish, vessel' (source of English *vase*). It passed into English via Old French *vaissel* and Anglo-Norman *vessel*, on the way acquiring the additional meaning 'ship'.

Etymology of a word defines its origin, a word's history describes its development. The examples given above are helpful in one's profound research of different linguistic aspects such as a term's spreading and development resulting in specific cases of usage, forms of derivatives, possible shift of its meaning, collocations, structural peculiarities, etc. Diachronic analysis is seldom taken into consideration by Maritime English researchers; still it seems crucial in many situations of vocabulary designing experiments carried out on the synchronous level of investigation. The main purpose of a synchronic terminographic study is mostly practical which means facilitating the teaching/learning process and leading to more efficient classroom activities.

3. Practical Maritime English-Russian Encyclopaedic Dictionary for Beginners

As it comes from the title, this is a bilingual dictionary which is rather convenient to deliver references in spelling and meaning for non-native English speakers. The Maritime English-Russian Dictionary for beginners comprises 10.000 terms and terminological expressions. The sources of research material are multiple: Mass Media samples, IMO documents (Conventions and Regulations), the Internet information on the subjects involved, spesialists lecture notes, text books, etc. reflecting the synchronous state and major characteristics of Maritime English in use. Part 2 of the Dictionary provides the information on abbreviations mostly often used in professional texts including maritime issues, technical symbols and acronyms, etc. Appendix suggests General English basics: rules of spelling, main grammar rules, list of affixes common for ME terms, list of Latin and Greek words being the source of contemporary maritime and technical terminology. According to IMO requirements the following topics (both for future deck officers and marine engineers) are included into terminographic research: 1) Introducing Oneself. Filling up personal documents. Types of documents. Interviews. 2) Letters, numbers, colours. Maritime code words. Times at sea and at shore. Languages, nationalities, flags. 3)

Maritime jobs and professions. Functions and duties. 4) Places and locations. Countries, water bodies. Other geographical names. Maps and charts. Longitude, latitude. 5) A ship: dimensions, particulars, parts, structure, functional zones. 6) Types of vessels. 7) Motion and directions: navigation, propulsion. 8) Engineering: types of a vessel's equipment. Engines 9) Running the vessel. The bridge. The engine room. 10) Watches and watch keeping. 11) SMCP: on-board, external. Orders and commands. VHF radio. 12 Daily routines of the crew members. 13) Weather and climate, weather forecast; natural disasters. 14) Emergency situations. 15) Safety equipment and its location. 16) Steering, mooring, anchoring. Piloting. 17) Ports and port infrastructure. Administration, customs, sanitary inspection, etc. 18) Navigational aids: buoys and lighthouses. 19) Cargoes: types; loading/discharging operations. Deck equipment. 20) Bunkering operations. 21) Shipping documents (basics). 22) Checking supplies. 23) Incidents and accidents. Injuries. First aid. The vast subject coverage requires efficient supplementary materials in the format of a dictionary, in particular. Its type, the scope of entries, the way of a term's presentation were of great importance in order to obtain the final results according to teaching goals – language skills development. Here are some samples demonstrating the methods of arranging and presenting terms in the Dictionary.

Sample 1. Presenting a standard word which becomes a Maritime term in combination with other words:

room, n (1. A space that is or may be occupied: **2. a.** An area separated by walls or partitions from other similar parts of the structure or building in which it is located: the first room on the left. **3. rooms** Living quarters; lodgings). [Middle English roum, from Old English]. **Room:** *Chart***room** *Cook***room** *Fish***room** *Mess***room** *Navigation* **room** *Night* **room** *Pump***room** *Power* **room** *Radio***room** *Store***room** *Tool* **room** *Ward***room** *Wash***room**

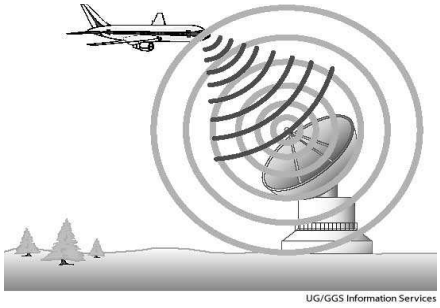
Sample 2. Presenting Maritime related words with the focus on particular meaningful structural elements:

Ways of expressing opposite meanings*:* **Un-** to load –to unload; loading –unloading, done – undone. **De-** announce – denounce; freeze – defreeze. **Dis-** to charge – to discharge; charging – discharging; to mount –to dismount. **Out-** onboard – outboard; inlet – outlet. **Mis-** to lead – to mislead. **Ab-** normal – abnormal. **In-** complete – incomplete; convenience – inconvenience; combustable – incombustible. **Im-** possible – impossible; flammable – imflammable; pure – impure. **Non-** working – non-working; operating –non-operating; freezing – nonfreezing. **Mal-** adjustment – maladjustment; function – malfunction. **Off-** grounded – offgrounded. **Counter-** measure – countermeasure; weight – counterweight. **Contra-** rotation – contrarotation; propeller – contrapropeller. **-less** powerful – powerless; wire – wireless

Sample 3. Presenting a term with the definition, explanation of its origin, word combinations, illustrations:

radar, n (1. A method of detecting distant objects and determining their position, velocity, or other characteristics by analysis of very high frequency radio waves reflected from their

surfaces. **2.** The equipment used in such detection. *An acronym for* ***RAdio Detecting And Ranging).***



Radar is an object-detection system which uses electromagnetic waves—specifically radio waves—to determine the range, altitude, direction, or speed of both moving and fixed objects such as aircraft, ships, spacecraft, guided missiles, motor vehicles, weather formations, and terrain. The radar dish, or antenna, transmits pulses of radio waves or microwaves which bounce off any object in their path. The object returns a tiny part of the wave's energy to a dish or antenna which is usually located at the same site as the transmitter.

-radar *antenna* **-radar** *beacon* **-radar** *board* **-radar** *calibration* **-radar** *chart* **-radar** *compartment* **-radar** *direction finder* **-radar** *display* **-radar** *echo* **radar** *horizon* **-radar** *house* **-radar** *installation* **-radar** *interference* **-radar** *map* **-radar** *navigation* **-radar** *navigation trainer* **-radar** *observations* **-radar** *operator* **-radar** *range* **-radar** *receiver* **-radar** *reflection* **-radar** *station* **- radar** *target* **-radar** *target indicator* **-radar** *view* **-radar** *visibility*

Sample 4. Presenting a term, its word group and materials for revision in the format of "Consolidation" insertion*:*

-bunker, v; bunker, n *(* **-bunker** *capacity,* **-bunker** *clause,* **-bunker** *fuel,* **-bunker** *oil,* **-bunker** *oil tank,* **-bunker** *tank);*
bunkering, n **(**The act or process of supplying a ship with fuel): **-bunkering** *tanker,* **-bunkering** *operation*

CONSOLIDATION: - **Bunkering operations**: *Nouns*: products, fuel, gasoline, fuel oil**,** lub oil**,** fuel consumption**,** a flow, fluid**,** a tank, ship tanks**,** day tanks**,** a petrol bunk**,** a bunker, a bunker tank, a bunker barge, a bunker manifold, a bunker station, bunkering, bunkering operations, bunkering procedure, a pump, transfer pumps, pumping rate, a fluid nozzle, a hose, connections, manifold connections, valves, couplings, flexible, a pipe-pipes, pipeline(s), a pipeline network; quality, quantity, volume, lab analysis, fuel samples, sounding (of a tank); *Verbs*: to supply, to store, to fuel, to fill with fuel, to run out of fuel, to pump, to consume, to refuel, to deliver, to receive, to start, to commence, to stop, to connect, to design, to locate, to check, to order (a product), to secure a vessel, to agree (signals), to calculate, to be available, to distribute, to open, to close, to show; *Terms and collocations*: pollution, oil pollution, adjacent waters, emergency, emergency shut down procedure, SOPEP plan, a foam fire extinguisher, Bravo flag, red light, Alfa Laval, warning signs, stop/start signals, specification sheet, check up list, pre-bunkering procedure, required standards.

Sample 5. Presenting irregular plural forms of originally Latin and Greek nouns: **analysis – analyses; apparatus – apparatus, apparatuses; basis – bases; criterion – criteria; datum –**

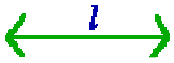
data; formula – formulas, formulae; hypothesis – hypotheses; index – indexes, indices; medium – media, mediums; nucleus – nuclei, nucleuses; radius – radii, radiuses; phenomenon – phenomena; stimulus – stimuli

Sample 6. Presenting terms –names of the subjects or branches of technology studied by the 1st and 2nd year students: *astronomy, astronavigation, electronics, engineering, geography, hydrodynamics, hydraulics, mathematics, mechanics, meteorology, oceanography, thermodynamics, physics*, for example*:*

geometry, n Geometry (Ancient Greek: *γεωμετρία*; *geo-* "earth", *-metri* "measurement") "Earth-measuring" is a branch of mathematics concerned with questions of shape, size, relative position of figures, and the properties of space. Key concepts and corresponding terms:

A **point** has no dimensions - no length, no width, no height.

A **line** has one dimension - length. It has no width and no height, but infinite length.



A **plane** has two dimensions - length and width, no depth.

Space, a huge empty box, has three dimensions, length, width, and depth, extending to infinity in all three directions.

Sample 7. Presenting information about outstanding people and their achievements:

Hertz , **Heinrich Rudolf** (February 22, 1857 – January 1, 1894) was a German physicist who clarified and expanded the electromagnetic theory of light that had been put forth by Maxwell. He was the first to satisfactorily demonstrate the existence of electromagnetic waves by building an apparatus to produce and detect VHF or UHF radio waves.

Hertzian wave is an electromagnetic wave, usually of radio frequency, produced by the oscillation of electricity in a conductor.

The **hertz** (symbol: **Hz**) is the SI unit of frequency defined as the number of cycles per second of a periodic phenomenon.

Sample 8. Presenting a prefabricated material for classroom activities:

particulars, n (pl)

ship's **particulars**

SHIP'S PARTICULARS
1 Name of ship:
2 Owner or operator:
3 Distinctive number or letters:
4 IMO Number :
5 Gross tonnage:
6 Port of registry:
7 Flag State :
8 Type of ship:
Oil tanker Chemical tanker Bulk carrier Other cargo ship Passenger ship Other (specify**)**

Conclusion

Terminographic materials designed for educational purposes serve not only as a storage system of special terms. According to the specific teaching goals they may be used as an important part of language classroom activities to increase students' motivation, to expand their professional vocabulary, to create simple patterns for revision, to turn students' receptive vocabulary into the productive one, to facilitate language production suggesting the appropriate tools being the key to fluency, to develop communicative skills aiming further application of special terms in the professional environment. For ME teachers this sphere of methodology suggests the consideration of the following problems:

a) type of a terminographic material (a dictionary, a vocabulary, a word group/groups, a thesaurus, terms corpus, etc.);
b) implementation of vocabulary teaching into the syllabus making it an obligatory routine task for students;
c) constant experimentation with terminology in order to avoid traditional translation and to provide all possible supports in the process of learning the terms;

d) creation of series of prefabricated materials on the basis of authentic language usage;
e) development of instructions for recording special terms aiming their better memorisation; f) preparation of tests and assessment materials for evaluation of ME terms acquisition;
g) formation of maritime terms database at ESP department;
h) arrangement of access to online dictionaries in the Internet during the classroom activities; i) creation of methodological concept of ME vocabulary teaching based on contextual, situational, communicative factors;
j) introduction of the professional expertise through coordination with specialists of Navigation and Marine Engineering departments.

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Supplement 1

Questionnaire for ME teachers:

As far as the ME training of the 1st and 2nd year students is concerned, please, answer the questions choosing the most suitable variant or add information on the problem:

1) What kind of a dictionary do your students use?

a) a bilingual dictionary

b) an ecyclopaedia

c) an encyclopaedic dictionary

d) different _____

2) In case of computerised language laboratory what do your students use?

a) an on-line dictionary from the Internet

b) an electronic version of one of the well known dictionaries, for example, Macmillan English Dictionary, Oxford English Dictionary, etc

c) an electronic version of a Maritime English Dictionary

d) different _____

3) Do you teach your students how to use a dictionary?

a) No, it was done at school

b) Yes, because the students' language proficiency is on the low level

c) Yes, because there are different types of dictionaries and some explanation is required for each of them

d) different _____

4) Does your English Language department carry out some theoretical or practical work on terminography?

a) No, it's not necessary

b) No, but it looks like such work is necessary for the reason of

_____

c) Yes, it's connected with _____

d) Yes, it's the routine work for the different topics

5) What's the purpose of your terminographic work?

a) to translate the term

b) to explain the term

c) to demonstrate the term's use in the context

d) different _____

6) Do your colleagues from the specialists department take part in terminographic work?

a) Yes, because they are experts in the field

b) Yes, because they create all terminographic sources for students

c) Yes, this work is done in cooperation with them

d) No, this kind of work is purely a language issue

7) Do you have special assignments with a dictionary for students purposing the efficient work with ME terms?

a) Yes,

b) No

c) different_____

8) Which methods of arranging and presenting terms do you prefer?

a) alphabetical order

b) order of appearance in the text

c) word groups based on some criterion

d) different _____

9) When presenting a term what do you prefer

a) translation only

b) explanation (using a dictionary)

c) explanation (using your own knowledge)

d) different _____

10) Do you think the field of Maritime English terminography is well developed for educational purposes?

a) Definitely, it is

b) No, not at all

c) It's an artificial problem

d) different _____

Author's Bio-Note

Nadiya Demydenko holds a PhD in English language. She took a post-graduate course and defended the thesis in the Academy of Sciences of the USSR (Institute of Linguistics in Leningrad). She is currently the lecturer at ESP Department of Kyiv State Maritime Academy. Former experience: Director of Kyiv State Courses of Foreign Languages and Head of several ESP departments of higher educational institutions in Ukraine. She is the author of course books for Medical students, students of Law, Economics, Sociology and foreign students. She is a researcher in the sphere of Applied and Structural Linguistics, Functional Grammar, Lexicology, Lexicography and has published more than 40 articles on methods of teaching foreign languages.

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USING MICROSOFT'S PHOTO STORY 3 (PS3) SOFTWARE AS A TOOL IN TEACHING ME

(VOICE AND PICTRES INSTEAD OF WRITING)

Aim

1. To give the participant the practical skills to use PS3 for producing movie-like presentations that can be published e.g. on YouTube (see e.g. http://www.youtube.com/watch?v=EPIEQfJYUSg)
2. To brainstorm for ideas on how the usage of PS3 can be developed further

Background

This workshop tries to address the following challenges that ME-teachers can face:

1. Students are not very excited about writing papers. This may be especially true about boys aged 16 or so.
2. Students are not very excited about giving presentations for an audience.
3. Oral skills are hard to train/grade/assess/encourage
4. Students do not always show up to class
5. Teachers are encouraged to use methods that are not restricted by time and space limits

Knowing how to use PS3 gives the teacher e.g. the following possibilities:

1. She can have the students create PS3 stories instead of writing papers. One must know how to use PS3 to ask students to use the program - It is not a good idea to ask students to do something you do not know how to do yourself.
2. Gives the teacher an alternative to writing. Maritime students, mostly male, are not that fond of writing – they do not perceive themselves as writers. They seem to like making a movie better, at least for a change. By making PS3 movies the students demonstrate their knowledge of the language without having to write papers.
3. The teacher can watch the presentation several times. PS3 stories enables giving presentations, without having to stand in front of a group and talk. It also frees time for other purposes.

4. PS 3 trains oral skills. Oral skills are important, maybe more so than written, for maritime students. PS3 forces the students to talk.
5. Easier grading: Oral skills are harder to assess/grade – if the talk is recorded, it is easier to listen to the same student several times.
6. The teacher can post a lecture on e.g. YouTube and students can watch them in their own time, outside class.

Whether the options mentioned above are threats or opportunities can of course be discussed..

Outline of workshop

Step	Time used	Workshop leader activity	Participant activity
1.	10 mins	Introduction and showing a PS3 movie	-
2.	5 mins	Short introduction of PS3 program, and kick-off for participants	Open the PS3 program on own computers, save their project and begin working (in pairs or groups of 3)
3.	10 mins	Create 2 ppt-slides with text. Show uploading of 3 photos + 2 powerpoint-slides, saved as jpegs	Following instructions and performing (photos: either own, distributed or from the web) the powerpoint slides can be for example an ”intro-slide” and a ”the end-slide”.
4.	5 minutes	Short demonstration of other features of PS3	-
5.	10 minutes	Recording of voice	Participants describe their photos – recordings in the program
6.	5 minutes	Saving the file	Saving the movie
7.	15 minutes	Looking at the results of a few groups, examples, discussion.	Participation

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NEW EXPLORATION OF OLD METHODS:

THE DEBATE AS AN APPROACH TO IMPROVE COMMUNICATION SKILLS

Abstract

Among the oral techniques permitting the learners to practice real-life spoken language in the classroom, the DEBATE is a challenge for both trainer and trainees: essential skills ranging from abstract and analytical thinking to ethics, teamwork and presentation capabilities are tried and improved.
My objective is to analyse the DEBATE role in the learning process and discover whether this approach may add "spice" to and combat routine from a series of classroom sessions. I chose to experiment the DEBATE since we are not very familiar with it, yet feel interested in the freedom of expression and the taste for competition it encourages, and equally, in the linguistic performances it sustains.
The first chapters are based on a series of research results covering the formal and informal DEBATE, key ideas being illustrated afterwards with sequences of famous debate formats, such as "Lincoln-Douglas".
An ample part of the material deals with the preparation efforts and the brainstorming style of two topics of much concern nowadays in the shipping world, experimented through the above-mentioned approach with intermediate and upper-intermediate trainees.
General rules, plans, strategies came from the trainer, and topic lists and even resources were proposed and provided by the participants. Our lessons were arranged and re-arranged, items added or excluded, techniques revised or improved throughout, and such a new "brick in the wall" represented a step forward for the ME training at CERONAV.
The author is ready to share her experience with other colleagues in order to discover different possible ways by which a DEBATE can creatively be applied to teaching and learning ME

Key words, abbreviations and definitions: Real life, exploration, adaptability, standpoint, controvert, constructive speech, issues

ME: Maritime English
Debate or **debating** is a formal method of interactive and representational argument. (Wikipedia, the free Encyclopedia
Debate: Argument or discussion expressing different opinions. (Oxford advanced learners dictionary)

Introduction

It is a well-known reality that merchant marine officers have to be able to read technical and safety instructions, understand verbal instructions and interact with their counterparts. They have also to perform well, for example, in an extended interview, in front of the authorities, legal representatives or in any other formally required circumstance.

Realizing that communication is of primary importance in their career, the Romanian officers can be heard saying: "It is more advantageous and lucrative to communicate than to worry about having perfect grammar". It is my duty then to explain why such statement is not always true. Legal documents, for example, are notorious for the importance that they place on exact interpretation, the accident reports and formal complaints may also fall into the same category.

Practice has shown that the major part of our trainees has realistic and solid expectations from us and we cannot, therefore, avoid answering them accordingly. The syllabus we follow should not ignore their learning needs and on this ground we work systematically to create a wide variety of opportunities for them to use the language they need.

I. Making learning experience more efficient and enjoyable

I.1. "Ars poetica"* of a ME trainer

Since linguistics progresses, we face new and relevant problems and challenges in the areas we work: teachers, course developers and adapters of materials. We interact with the new branch called "applied linguistics"** and some of us are already making use of its theories, methods and findings.

In a more and more demanding training environment, a way of providing relevant syllabuses is to bring the learners in the "decision-making" process: always a needs' analysis step will be relevant. We take note of their wishes and, if sensible, we incorporate them into the course plan. As the course progresses, we make changes and little tweaks to keep it all on target. For a successful, satisfying course all round, equal attention should be paid both to the starting point and the on-going of it.

I.2 Ability-> mobility -> adaptability: three signs of a ME trainer professionalism

Essentially, the learning/teaching situations develop and are influenced by a series of factors: the type of trainees, their level of English, the resources and the conditions the teachers work in. Here, we refer to the "**mobility**" or "**flexibility**" of the trainer's quality to be realistic about the

problems and challenges they face on a daily basis: e.g. changes in methodology, approaches or developments in technology.

Ability aims at handling frequent changes of materials: every 2-3 years at least. It also means taking advantage of IT in the classroom.: Internet, videos, CD-ROMs but the most powerfully it is expressed in such terms as: teaching communication skills, multicultural awareness, management skills, team formation and work skills.

According to my experience, I daresay that **adaptability** has a key role in teaching and learning ME as long as we take into account trainees' needs and interests, select and match the materials to course aims and methodology (expected to be authentic and/or semi-authentic), that is, we are constantly **adapting, supplementing** and **prioritizing.**

* It refers to devices of metalanguage and is widely used as a literary device to enhance imagery, understanding or profundity – from Wikipedia, the free encyclopedia.

**** "**An interdisciplinary field of study that identifies, investigates and offers solutions to language-related real-life problems" – from Wikipedia, the free encyclopedia.

II. Introduction to Debate

FAQ:

What is Debate ?

Why Debate ?

What types of Debate ?

How to get started in Debate ?

General rules for Debate

What is good for in English classes ?

What skills ?

II.1 Basic Terms

- **Debate:** a game in which two opposing teams make speeches to support their arguments and disagree with those of the other team.
- **Resolution:** the opinion about which two teams argue.
- **Affirmative team:** agrees with the resolution.
- **Negative team:** disagrees with the resolution.
- **Rebuttal:** explains why one team disagrees with the other team.
- **Judges:** decide the winner

II.2 Opinions and Reasons (Daniel Krieger): http://iteslj.org/Techniques/Krieger-Debate.html)

- A resolution is an opinion about which there can be valid disagreement. The students either agree or disagree with the resolution regardless of what they personally believe. An opinion can be introduced by an **opinion indicator:**

  "**I think/believe that** smoking should be banned in public places..."

- A reason explains why that opinion is held and can be introduced by **a reason indicator:**

"**...because/since** secondhand smoke is harmful for nonsmokers."

II.3 Strong reasons vs. weak reasons

- According to LeBeau, Harrington, Lubetsky (2000), a strong reason has the following qualities:

  - it logically supports the opinion.
  - it is specific and states the idea clearly.
  - it is convincing to a majority of people.

- To give examples of strong reasons versus weak reasons, the teacher can develop a multiple-choice exercise such as the following:

  Smoking should be banned in public places because:

  - it is bad.
  - it gives people bad breath and makes their teeth yellow.
  - secondhand smoke is harmful for nonsmokers.

- The students ought to explain why some reasons are strong and others are weak based on the above criteria.

II.4 Four types of debate (www.paulnoll.com/China/Teach/English-debate.html)

1. **Parliamentary Debate**. This is the debating that goes on in colleges and universities.
2. **Lincoln-Douglas Debate („value debate")** is modelled after the name sake for the activity. In an Illinois election of the mid-1800s, Abraham Lincoln and Stephen Douglas debated the slavery issue before audiences in different towns around the state. In LD debate two contestants will debate topics about moral issues or propositions of value or preference.
3. **Cross Examination Debate** (also called **„policy debate or team debate"**). In this type of debate two teams (two students each), one representing the affirmative position and one representing the negative position, will debate topics of public or government policy.
4. **Academic Debate**. These are debates of a purely academic nature. An example of this type of debate would be creation/evolution debates.

III. Debate in the classroom: a lesson alive

III.1 Classroom debate model : Internate Craze

According to Kenneth Beare's model (Http**://**esl.about.com/bio/Kenneth-Beare-2205.htm)

Other debate themes proposals were the following:

-Seaman career: past and present.

-Single-nation or multi-national crews ?

-Artificial intelligence

Aim: Improve conversational skills when supporting a point of view .
Activity: Debate concerning the present and future impact of the Internet on daily life.
Level: (Upper)-intermediate.
Outline: A revision of language used when expressing opinions, disagreeing, making comments on other person's point of view. Statements as the following ones were taken into consideration and longly and extensively debated upon:

„The Internet has forever changed the way we live. Its importance will continue to grow. By the year 2015 most of the world will be conducting its business, receiving its media (TV, films, music), and staying in touch solely via the Internet. "
„The Internet will change our lives in every aspect."
„The Internet is just a new form of communication, but will not change everything in our lives."

In order to create arguments for the speakers' points of view and to display creatively issues related to the controversies, different markers as those below were reminded to the students:

Opinions, Preferences: I think..., In my opinion..., I'd like to..., I'd rather..., I'd prefer..., The way I see it..., As far as I'm concerned..., If it were up to me..., I suppose..., I suspect that..., I'm pretty sure that..., It is fairly certain that..., I'm convinced that..., I honestly feel that, I strongly believe that..., Without a doubt,...

Disagreeing: I don't think that..., Don't you think it would be better..., I don't agree, I'd prefer..., Shouldn't we consider..., But what about..., I'm afraid I don't agree..., Frankly, I doubt if..., Let's face it, The truth of the matter is..., The problem with your point of view is that...
Giving Reasons and offering explanations: To start with, The reason why..., That's why..., For this reason..., That's the reason why..., Many people think...., Considering..., Allowing for the fact that..., When you consider that...
The dynamic of the session was achieved since plenty of evidence was used to back up claims and the teamwork was so creative that even a „psyching out" of opponents was tried.
At the end of debate we had **a short focus on common mistakes**. This is important, as students should not be involved emotionally and therefore are quite capable of recognizing language problems, as opposed to problems in beliefs.

III.2 Advice on debating with others. Rules and suggestions.

1. **Avoid the use of *Never.***
2. **Avoid the use of *Always.***
3. **Refrain from saying *you* are wrong.**
4. **You can say *your* idea is mistaken.**
5. **Don't disagree with *obvious* truths.**
6. **Attack the *idea* not the person.**
7. **Use *many* rather than *most.***
8. **Avoid *exaggeration.***
9. **Use *some* rather than *many.***
10. **The use of *often* allows for exceptions.**
11. **The use of *generally* allows for exceptions.**
12. ***Quote* sources and numbers.**
13. **If it is just an *opinion,* admit it.**
14. **Do not present *opinion* as facts.**
15. ***Smile* when disagreeing.**
16. **Stress the *positive.***
17. **You do not need to *win* every battle to win the war.**
18. ***Concede* minor or trivial points.**
19. **Avoid *bickering, quarreling, and wrangling.***
20. **Watch your *tone* of voice.**
21. **Don't win a debate and *lose* a friend.**
22. **Keep your perspective. You're just *debating***

IT IS IMPORTANT THAT THE DEBATE SESSION ENDS IN AN ENLIGHTENED KEYNOTE PROPERLY !

III.3 Conclusions: The debate in the classroom was really a lesson alive.

Summarizing what happened during these experiences, I confess that the whole work has left me a feeling of accomplishment and satisfaction. Once more, classroom hardworking was rewarding, matching the philosophy of Kolb's experiential learning: *"Learning is best conceived as a process, not in terms of outcomes"*. My students enjoyed a lot the running of the "Debate", as they simulated real debates where knowledge and opinions were meaningfully and energetically exchanged and expressed. Starting from theory and some exemplifications, we tried to find out in practice whether „debate really teaches many essential skills" (Internet TESL Journal, Vol. XI, No. 2, February 2005). Therefore, what was practiced in the classroom helped trainees grasp many essential critical thinking and presentation skills. Among the skills classroom debates can foster are:abstract thinking, analytical thinking, citizenship/ethics/etiquette, clarity, cross-examination/questioning, point of view, language usage, public speaking, team cooperation and... many more!
I additionally can mention that this sort of training was a pleasant one, overcoming inherent linguistic difficulties and preconceived ideas about everybody's own capabilities and reactions. There is a variety of ways to successfully teach a foreign language these days. We live in a world of instant communication and globalization and I think it is a tremendous advantage to come to meeting the trainees' needs and interests, being aware of what is going on in front of us in the classroom. Remembering that teaching/studying English is nevertheless a long-term

process, both the partners involved should be patient and practice, imagine and innovate together. Albert Einstein, when speaking about the new world, invited people to imagine. He said " ***Imagination is more important than knowledge. For knowledge is limited to all we now know and understand, while imagination embraces the entire world."***

IV. Practical application during an IMEC workshop session:

"4 Corner Debate in a Maritime English Class".

IV.1 Workshop proposal

It is to present to IMEC colleagues a new approach to teaching, to explore together a flexible and rewarding activity, an-adapted-to-training-needs Debate.

Topic: "VTS/ISPS Conflicts"

Objectives, tips, strategies and **resources** will be shown to the participants.

This is a special format debate, more convenient for intermediate and advanced speakers, is creative, flexible, much more than obtaining "pros" and "cons", "winners" and "losers". Students listen to each other and have the chance to change their opinions in the run, moving to another "corner" if they are persuaded by another "corner's" argument.

Workshop development:

- Teams organization, jobs assignment
- Statements of general interest or about an issue of importance to people in the maritime sector will be presented.
- Following a reading, a controversial statement, or even more, based on the text, will be subject to our debate.

IV.2 Conclusions, evaluation

The present workshop is a huge challenge even for an experienced ME teacher for a series of reasons:
Pragmatically, conversation lessons and exercises are meant to improve speaking skills. I am on the opinion that, for intermediate and advanced students at least, it is helpful to try to eliminate some barriers in the way of production. When students are assigned roles, opinions and points of view, they do not necessarily share, they are freed from having to express their own opinion or feeling. They often focus on expressing themselves well in English, being more concentrated on production skills and less on factual content. Once confident in their production skills – conversation– the students can obviously argue the point they truly believe in.
After all, let us be proud when students and teacher step together in a more "real" training world, where **the best investment is when a student wants to say what he means !** I therefore hope that we will legitimize together this approach and will discover a variety of ways in which Debate can be creatively applied to teaching and introduced in our ME syllabuses.

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INTERACTIVE ACTIVITIES IN THE LANGUAGE CLASS

Abstract

The aim of this work shop is to share a few interactive activities that would bring the classroom to life. I strongly believe in motivating the students in Language class and warm up Activities play a prominent role in the Language Class room.

The geographical setup of my Institute creates an ideal back drop for outdoor activities which makes the students more interactive and interested in learning the language, where more physical movements are involved.

The activities introduced demand less teacher preparation with regard to material preparation and they do not depend on technology. I found my students were very shy to speak in English. And I tried many techniques to motivate them. My experience as a Teacher with Seafarers made me to understand that the students enjoy more physical involvement and I believe people learn through all their senses .The best way to teach a class is to create activities that give opportunity to use multi sensors. Especially with the students who have an inhibition to speak up. This approach has its advantage in the language class room than being a slave to technology to motivate the students always.

The activities introduced in this work shop are related to General English / Maritime English Communication and Multicultural understanding. They also provide opportunity in developing the FOUR main Skills in language learning, Listening Speaking Reading and Writing. These skills are integrated as they cannot be taught in water tight compartments

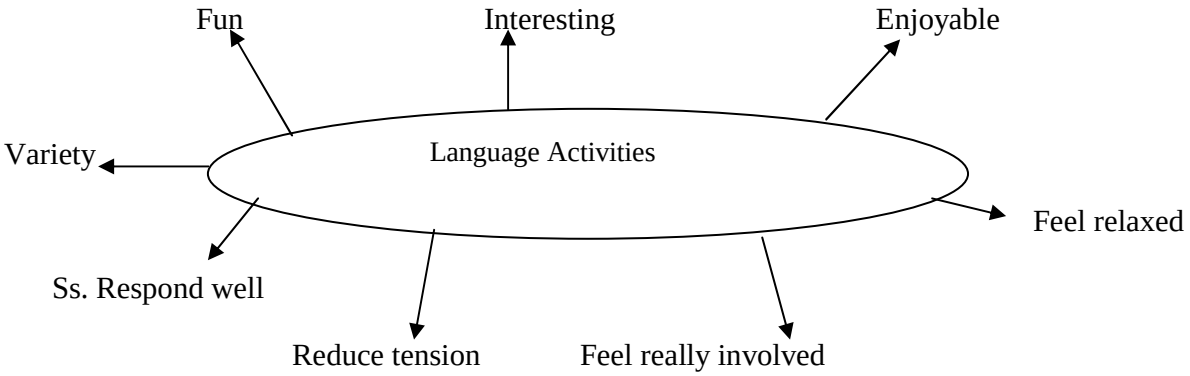
Key words ; Interactive outdoor activities ; motivation ; physical movements ; multi sensors; communication ; integrate

1.Introduction:

This work shop is specifically designed with activities suitable to students with less or no motivation at all in speaking a foreign language. It has been a very difficult task for me to get such students with inhibition to speak. The activities and techniques are mainly adapted from different

The six activities designed here are for such students and Play Way method it adapted to motivate the students. Though Play way method is ideal for beginners it is very effective when working with mixed ability groups in tertiary levels as well . And it has the power of bringing life to the lesson.

The activities focus mainly on giving practice on SMCP – VOCABULARY AND PHRASES.



During the work shop opportunity will be provided to participants to try these games out in small groups, followed by a group and plenary discussion

3 ACTIVITY

3.1

Topic	;	LOOKING BACKWARD AND FORWARD
Type of Activity	:	Small groups/ whole class
Lexical Area	:	Standard Marine Communication Phrases (SMCP)
Materials	:	None
Objective	:	Further practice and be familiar with SMCP
Note	:	

Provides opportunity to by heart (memorize) and learn SMCP in a fun way. It also focuses on moving around independently rather than being conscious about the spoken language. This is good for students with inhibition in speaking English.
How to use the activity:
The game may be played with any number of students. If you have a large class it would be better to get in two small groups in turn so that one group could be the observers for a while.
Get students to an open space in order to move around. Select SMCP you have taught in class.
Ask students to walk freely around (FORWARD)
Teacher says 'FREEZE'
The students FREEZE and repeat the SMCP teacher uttered.
Students walk backwards without knocking each other.
The teacher says 'FREEZE < SPEAK SADLY'.
Students say the SMCP sadly.
Students walk forward
Teacher says 'FREEZE……..WISPER' (Students WISPER to the friends nearby.

Thus continue with the rest of the selected SMCPs.

ACTIVITY

3.2

Topic	:	BUILDING STORIES

Type of Activity : whole class
Lexical Area : General English
Materials : A Soft Ball
Objective : Build a story collaboratively
How to use the activity:
Get Students to an open space
Stand with your students in a circle.
Shout out an opening sentence an opening sentence and throw the ball a student.
One who catches the ball adds a coherent sentence to the first sentence so that it has a continuation.
Then the student passes the ball to another colleague who catches and adds another coherent sentence so that it has a continuation of a story.
Thus the ball is been passed to any student in the circle.
Continue until many students have had the opportunity to speak up and add a sentence providing the opportunity to build a story collaboratively.
Start a new round, with a new opening sentence to build a different story.

Extended activity :
Students write the story – Encourage the students to elaborate the story and be more creative.
Suggestions: This could be a group or pair work according to the standard of the students .

ACTIVITY

3.3
Topic : ASK THE RIGHT QUESTION TO GUESS THE WORD.
Type of Activity : Whole Class
Lexical Area : SMCP – Maritime Vocabulary
Materials : Set of word cards 30 – 50 which you can make quickly
Each card has a word or phrase written on it. (Recently taught)

Objective : To encourage speaking , emphasizing more on giving practice on asking questions
How to use the activity:
Put the cards face down on the floor (if the game is played out doors)
or on a table . Get the students to an open place and make them to stand in a circle. Group students as ‘A’ and ‘B’. One student from group ’A’ picks a card. He/she cannot show it to the rest of the class. Others in Group ‘A’ must guess the word on the card. There can be a dialogue (spoken loud for whole to hear) between the Student and his group, in order to facilitate in guessing the right word.
Thus the groups take turns in picking a card and guess. Correct guessing adds a point to Group.
Notes:
The teacher can select SMCP, to make the game more challenging for advance students.

ACTIVITY

3.4

Topic : VOCABULARY GAME
Type of Activity : Groups
Lexical Area : Vocabulary in SMCP
Materials : Letter cards written on A4 (one set for each group)
Objective : Give Practice in Spelling
How to use the activity:

Write letters on A4 paper. Write one letter on each card. You May need 03 from each consonant and more of vowels. Make two Groups of Students. Give one set of letter cards to each group. Let them place it on a table / chair.
When teacher shouts out a word, students pick relevant letters and make word standing in a row placing the card in front of them. The quickest team with the correct word wins a point. Thus continue the game with more SMCP words.
Note : this activity can be extended to test / teach the phonetic alphabet

ACTIVITY

3.5

Topic : PICK IT
Type of Activity : Whole class in two groups
Lexical Area : lexical items related to shapes of objects .
Lexical items related to geometric figures.
Materials : objects with different shapes eg. Toys / fruit / flowers / tools etc
2 from each object
Objective : To describe shapes of objects using Geometric figures
How to use the activity:
Put the class in two groups A and B
Make two student from group A to sit on either side of the table blind folded. Select two identical objects and give one student an object and give the other student the identical object with a few other similar distracters
Get the 1st Student to feel the object and describe the features of the object to the other seated on the opposite side of the table to pick the identical object that is been described.
If correctly picked in one minute the group gets a point.
Next turn goes to group B.
Two Students from Group B sit on either side of a table
Teacher gives different objects with different distracters
Let one help the other to pick correct object in given time. If fail no points counted
Thus continue the game.
Note : Encourage students to use Language, related to geometric figures and shapes when describing the object.

ACTIVITY

3.6

Topic : INFORMATION GAP

Type of Activity : Two groups

Lexical Area : lexical items related to shapes of objects .
Lexical items related to geometric figures.

Materials : simple diagrams eg. – Flags, lifebuoy, Special mark buoys, funnel, beam bracket, shackle, plates, tray and etc.

Objective : To describe shapes of objects using Geometric figures

How to use the activity:

Get two students from group A . Get one student to go to the board and the other to select an objects picture which he describes for the one to draws on board. The picture can be shown to the whole class except the student at the board.

If correctly drawn the group gets a point.

Thus continue the game .

Note : Encourage students to use Language related to geometric figures and shapes when describing the object.

4 Task Sheet.

Activity	Exponent/Lexical area	Suitability/Relevance	Extended Activities

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Academically, Constanta Maritime University is a higher education institution and research entity. As a lifelong source of professional training, updating and recycling, Constanta Maritime University systematically takes into account trends in the world of work and in the scientific, technological and economic sectors. In order to respond to the maritime work requirements, CMU jointly develops and assesses learning processes, bridging programmes and prior learning assessment and recognition programmes, which integrate theory and training on the job. CMU gives the opportunity to students to fully develop their own abilities in accordance with the international standards, educating them to become full participants in today knowledge-based society.

*Socially***,** Constanta Maritime University is concerned with the young people education and it creates favourable conditions for their scientific evolution and professional promotion so as to integrate themselves in the labour market.

*Nationally***,** Constanta Maritime University is developing partnerships with other universities for the improvement of some common specializations and the performance of some graduate and post-graduate academic education programs. In the local community Constanta Maritime University represents a source of highly qualified labour force within the maritime domain and a capable partner for performing activities related to scientific research or to technical and economic analyses. Constanta Maritime University partners with the local entities in order to use the facilities they provide for students' better or complementary training.

Internationally, Constanta Maritime University is affiliated to different international organizations in the maritime field such as:

IAMU – International Association of Maritime Faculties
IMLA – International Maritime Lecturers' Association
IMSF – International Maritime Simulation Forum
BSUN - Black Sea Universities Network
IAU – International Association of Universities

Constanta Maritime University has implemented ERASMUS and LEONARDO da VINCI programmes in order to promote education and research in conformity with the requirements of a competitive society by lifelong training.

Constanta Maritime University hosted the ***23rd International Maritime English Conference***. The sessions of IMEC 23 witnessed highly scholarly and informative deliberations on the theme "***Maritime English-Improving Communication and Cultural Awareness***". The conclusions reached at IMEC 23 would certainly be very useful in understanding our duties and the expectations from us. We hope that the IMEC 23 will make the members of MET family feel even closer.

Dr. ***Carmen Chirea-Ungureanu***
Head of IMEC23 Local Organizing Committee

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